MIDLAND COLLEGE

GENERAL CATALOG

2004-2005

VOLUME XXXII

ACCREDITATION

Midland College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award associate degrees and certificates.

Midland College meets all guidelines and standards as set forth by the Texas Higher Education Coordinating Board.

Midland College is accredited by the following:

American Health Information Management Association
American Veterinary Medical Association
Board of Nurse Examiners for the State of Texas
Commission on Accreditation of Allied Health Educational Programs
Committee on Accreditation for Respiratory Care
Federal Aviation Administration
Joint Review Committee on Education in Radiologic Technology
National Association for the Education of Young Children
National League for Nursing Accrediting Commission
Texas Certification Board of Alcoholism and Drug Abuse Counselors
Texas Commission on Alcohol and Drug Abuse
Texas Department of Health
Texas Commission on Fire Protection

Documentation may be viewed in the President's office at:

Address:	**Telephones:**
Midland College	(432) 685-4500
3600 North Garfield	(432) 570-8805
Midland, Texas 79705	(432) 570-8875

www.midland.edu

This institution is in compliance with the Title VII, Civil Rights Act of 1964.

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EQUAL OPPORTUNITY STATEMENT

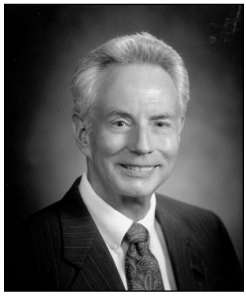
No person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under any program or activity sponsored or conducted by Midland College, on any basis prohibited by applicable law, including, but not limited to race, color, age, marital status, national origin, religion, gender, disability or status as a qualified disabled veteran or Vietnam era veteran.

YOUR COLLEGE

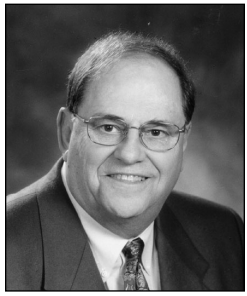
ADMINISTRATION

The policy making and supervisory functions of the administration of the college, as provided by state law, are vested in a nine-person Board of Trustees. The Board delegates the professional responsibility to the President of the college, who is assisted by other administrative officers.

BOARD OF TRUSTEES



Will R. Green
President



Neil M. Florer
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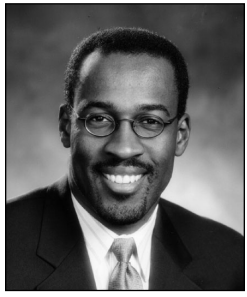

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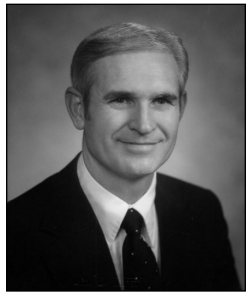
Board Member

Steven C. Kiser
Board Member

William D. Kleine
Board Member

Charlene R. McBride
Board Member



Kenneth A. Peeler
Board Member

OFFICERS OF ADMINISTRATION

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Stan Jacobs . . . . . *Associate Vice President of Instruction - Transfer*

Deana Savage . . . . *Associate Vice President of Instruction - Technical*

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Becky Hammack . . . . . *Dean of Health Sciences*

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William Morris . *Dean of Social & Behavioral Sciences/Education Studies*

Curt Pervier . . . . . *Dean of Technical Studies*

Margaret Wade . . . . . *Dean of Mathematics & Sciences*

Phil Ebensberger . . . . . *Registrar*

A MESSAGE FROM THE PRESIDENT

Welcome to Midland College! All of us who are employed here are united in extending our best efforts on your behalf. We like to think of our college as student-centered. That is, we try diligently to meet your needs whether they relate to academics or the many other facets of student life. If you have questions, all you need to do is ask. We will respond. We want your experience here to be fulfilling, and we want you to meet the goals you have set for yourself.

You will immediately be impressed with the quality and dedication of the Midland College faculty. They are well prepared for their tasks. They believe in the community college philosophy: given the opportunity and motivation, people of all ages and stations in life can achieve their aspirations. Each and every member of the faculty is available to facilitate the learning process through personal contact with our most important product, you the student.

The Midland College campus is alive with a stimulating dynamic environment. You will find dozens of ways to supplement your experience with athletics, journalism, student government, music, interest groups, and a myriad of activities. We desire that you participate in campus life to the fullest extent possible. We recognize that most of you work at least part-time and that family responsibilities often take priority. Whatever your participation, the college family will be enriched by your presence.

This is your college. It exists solely for you, our students. Together we can work miracles and remove those obstacles which hold us back. Opportunity is all about us. Sharing the Midland College experience will heighten our abilities to live productively and happily. We're glad you're here!

David E. Daniel

ADMINISTRATIVE STAFF/ PROFESSIONAL STAFF

(Year indicates beginning of affiliation with Midland College)

Daniel, David E., *President;* B.A., Furman University; M.Div., Colgate Rochester; Ed.D., North Carolina State University (1991)

Allen, Forrest L., *Sports Information Director/Assistant Athletic Director;* B.B.A., University of Texas of the Permian Basin; M.B.A. Texas Tech University (1995)

Anders, Terrance, *Intramurals Coordinator;* A.G.S., Midland College (1998)

Baulch, Byron R., *Director of Institutional Research and Effectiveness;* B.A., M.A., University of Texas of the Permian Basin (2000)

Beikirch, Dale W., *Dean of Distance Learning and Continuing Education;* B.S., M.S., Kent State University (1999)

Bell, Rebecca, *Director of the Advanced Technology Center;* B.B.A., Texas Tech University; M.A., Webster University (1990)

Bender, Richard, *Vice President of Administrative Services;* CPA; B.B.A., M.B.A., New Mexico State University (1992)

Beversdorf, Connie, *Assistant Project Manager, Permian Basin Energy Education Project***;** B.B.A., Eastern New Mexico University (2003)

Blakeney, Mary Lou, *Executive Director of Human Resources/Payroll,* PHR; B.B.A., University of Texas of the Permian Basin (1974)

Buckley, Daniel, *Webmaster;* B.F.A., Washington University; M.F.A., Southern Methodist University (1986)

Burdette-Turland, Cynthia I., *Director of Adult Basic Education;* B.S., Texas A&I; M.A., University of Texas of the Permian Basin (1986)

Campos, Monica, *Distance Learning Coordinator;* B.S. Lubbock Christian University (1982)

Chaparro, Alfredo, *Director of Community Services;* B.B.A., M.S., Texas Tech University (2001)

Chavez, Isidro, *Computer Systems Administrator;* B.B.A., Eastern New Mexico University; M.L.S., Indiana University (1993)

Clemmer, Terry, *Dean of Student Services/Special Populations;* B.A., University of Texas at Austin; M.A., University of Texas Permian Basin (1989)

Collins, Jo Aline, *Librarian;* B.A., Baylor University; M.L.S., University of Texas at Austin (1976)

Coombes, Elise, *Director of Public Relations;* B.A., M.A., University of Texas-Permian Basin; A.G.S., Midland College (1981)

Curnutt, Cindy, *Purchasing Agent* (1998)

Daniel, Sandra, *Assistant to Director of Human Resources/Payroll Coordinator* (1986)

Deats, John W., *Director of Learning Resource Center;* B.S., University of Houston; M.L.S., North Texas State University (1990)

Deering, Dana, *HSI-Title V Curriculum/Technology Specialist;* B.A. University of Texas of the Permian Basin (2001)

DeLaO, Frank V., *Academic Advisor;* B.A., Texas A&M University; M.A., University of Texas Permian Basin (2001)

Diffie, Rita Nell, *Vice President Student Services;* B.S., M.Ed., Texas Tech University (1991)
Dominguez, Sonia, *Student Support Services Academic Advisor,* B.A., University of Texas at Austin (2002)
Ebensberger, Phil, *Registrar;* B.B.A., M.A., Sul Ross State University (2001)
Edwards, Bahola, *Assistant to the President and Secretary to the Board of Trustees;* A.G.S., Midland College; CPS (1982)
Esquibel Diane, *Community Liaison;* Cogdell Learning Center (2000)
Evans, Pervis, *Talent Search Advisor*; B.A., M.A., Texas Tech University (2003)
Feeler, William G., *Dean of Fine Arts and Communications; A.A., Odessa* College; B.A., North Texas State University; M.A., University of Texas at Austin (1989)
Franklin, Lorraine, *Data Center Manager;* A.A.S., Midland College (1998)
Fuller, James, *Assistant Coordinator of Developmental Studies;* A.A., San Angelo Junior College; B.A., University of North Texas; M.A., Texas Tech University (1975)
Gaona, Jaclyn*, Upward Bound Coordinator;* B.A., Angelo State University (2003)
Garza, Christy, *Video Conference Services Coordinator;* A.A.S., Midland College (2000)
Gibbs, Ryan, *Gear Up II Director;* B.A., M.P.A., Texas Tech University (2003)
Gonzalez, Rebecca, *Gear Up Director;* B.S., Eastern New Mexico University (2000)
Grenvik, Diane, *Assistant Director, Helen L. Greathouse Children's Center;* A.A.S., Midland College (1987)
Grinnan, James S., *Director of Counseling;* B.A., University of Texas at Austin; M.S., Texas A&M University, Licensed Professional Counselor (1996)
Gunn, Charles, *Chief of Police;* B.B.A., Texas Technological College; M.P.A., Southwest Texas State University (1998)
Haines, Robert, *Dean of Enrollment Management;* B.A., Wayland Baptist University; M.Ed., West Texas A&M University (1993)
Hammack, Becky, *Dean of Health Sciences***;** A.D.N., B.S.N., Angelo State University; M.S.N., Abilene Christian University; Ed.D., Baylor University; R.N. (2002)
Hannon, Susan, *Coordinator, Continuing Education***;** B.B.A., University of Texas of the Permian Basin (2004)
Harris, Karen K., *Technical Program Coordinator;* A.A.S., Midland College (1998)
Hart, Nancy L., *Dean of Business Studies;* B.A., University of Texas at Austin; J.D., University of Georgia (1985)
Hayes, David, *Technical Support Manager*; A.S., American Commercial College (1996)
Hernandez, Maria, *Resident Hall Manager*; B.A., Angelo State University (2003)
Hieb, Christopher J., *Graphic Artist;* A.A., Midland College; B.A., University of Texas of the Permian Basin (2001)

Holdridge, Shannon, *Academic Advisor;* B.A., M.A., Texas Tech University (2001)

Horseman, Barry, *Director of Workforce Education; B.*A., University of Texas of the Permian Basin (1998)

Jacobs, Stanley, *Associate Vice President of Instruction;* B.F.A., Washburn University; M.F.A., University of Kansas; Ph.D., Texas Tech University (1971)

Jenkins, Nikki, *Job Placement Coordinator;* B.B.S., Hardin Simmons University (2000)

Jolly, Richard C., *Executive Vice President and Vice President of Instruction;* B.A., Howard Payne; M.Ed., Ed.D., Texas Tech University (1983)

Jones, Mechelle, *Talent Search Director;* B.A., Texas Tech University (2002)

Jones, Ron, *Athletic Director/Women's Baseball Coach;* B.S., Central State University; M.Ed., University of Central Oklahoma (1994)

Johnson, Robert, *Men's Residence Hall Manager;* B.S., Valdosta State College; M.A., Southern Baptist Theological Seminary (2000)

Kirkland, Dustin, *Database Programmer;* B.S., Our Lady of the Lake University (2003)

Kirkland, Terry, *Supervisor of Grounds* (2001)

Krause, Janet, *Testing Coordinator;* B.S., University of Denver (2000)

Lawson, Betty, *Gear Up II Academic Advisor***;** B.S., New Mexico University, M.A., Eastern New Mexico University (2003)

Lopez, Louisa, *Residence Hall Manager;* B.A., St. Mary's University (1999)

Lopez, **Manuel,** *Database Programmer*; A.A.S., Texas State Technical College (2004)

Luft, Willard W., *Technical Supervisor, Breath Alcohol Testing Program;* B.S., Concordia College; M.S., Montana State University (1984)

Makowsky, Michael, *HSI-Title V Basic Skills Specialist;* B.A., Texas Tech University (1999)

Martinez, Jeremy, *Gear Up Community Liaison;* B.A., University of Texas Permian Basin (2001)

Matthies, Pat, *Student Advisor of Williams Regional Technical Training Center, Fort Stockton;* B.A., Texas A&M at Kingsville (2001)

May, Connie, *Accountant;* A.A.S., Midland College; B.B.A., University of Texas of the Permian Basin (2001)

Mays, Ann, *PC/Network Technician;* A.A.S., Midland College (2000)

McCarver, Chip, *Associate Dean of Public Information and Media;* A.A.S., Midland College, B.A. University of Texas at Austin, (2001)

McGuire, Paul, *Network Assistant;* B.S., Southern Nazarene University (2001)

McIntosh, Dennis, *PC/Network Technician;* A.A.S., Midland College (2000)

McKiddy, Pat, *HSI-Title V Computer Systems Developer;* B.S. University of Texas of the Permian Basin (2001)

Merritt, Judy Jordan, *Student Support Services Project Director;* B.A., Angelo State University; M.A., University of Texas of the Permian Basin (1999)

Miranda, Cecilia, *Librarian;* B.S., University of Texas at El Paso; M.A.L.S., University of Wisconsin at Madison (1981)

Morris, William G., *Dean of Social and Behavioral Sciences and Education Studies;* B.A., M.A., University of Colorado; Ph.D., University of Texas at Austin (1982)

Mowry-Lee, Brenda K., *Director of Williams Regional Technical Training Center, Fort Stockton;* B.B.A., Hardins Simmons University (1995)

Nelson, Kevin, *Talent Search Academic Advisor,* B.B.A. University of Texas of the Permian Basin (2003)

Parish, Tammy H., Workforce Education *Continuing Education Assistant Coordinator;* B.A., Texas Tech University (1996)

Perez, Sean, *PC/Network Technician;* A.A.S., Midland College (2001)

Pervier, Charles, *Dean of Technical Studies*; B.S., M.S., North Texas State University (1977)

Pervier, Lyndolyn, Workforce Education *Continuing Education Coordinator;* A.G.S., Midland College (1996)

Piwetz, Eileen, *Vice-President of Institutional Advancement;* B.S.N., Texas Woman's University; M.A., University of Texas of the Permian Basin; Ed.D., Nova University (1981)

Polnick, Katrina, *Assistant Women's Basketball Coach*; B.S., Angelo State University; M. Ed., Drury University (2003)

Prichard, Beverly B., *Director of Health Sciences Continuing Education;* B.A., University of Texas of the Permian Basin (1994)

Ramos, Yolanda, *Loan Coordinator;* B.S., Lubbock Christian University (1991)

Reed, Jan, *Director of Student Activities;* B.S., M.A., Texas Tech University (1991)

Reinke, Brian, *Assistant Men's Baseball Coach;* B.A., Augustana College (2000)

Renteria, Teresa, *Gear Up Community Liaison***;** B.A. Angelo State University (2002)

Riley, Oscar "Kenneth", *Director of Physical Plant;* A.S., Mountain View College; B.A., University of Texas of the Permian Basin (1998)

Roark, Mike, *Director of Operations at Chaparral Center;* B.B.A., Eastern New Mexico University (1988)

Roome, Tracy, *Coordinator*, *Child Development Center at Manor Park;* A.A.S., Odessa College (2000)

Savage, Deana M., *Associate Vice President of Instruction;* B.A., North Texas State University; M.Ed., Texas Woman's University; Ed.D., East Texas State University (1982)

Seanard, Betsy, *Coordinator of Business and Economic Development Center*; B.S., Louisiana State University (2003)

Sever, Dennis W., *Vice President of Information Technology and Facilities;* A.A.S., North Harris County College; A.A.S., Midland College; B.B.A., M.B.A., University of Texas of the Permian Basin (1984)

Sharp, Kathy, *Student Resource Coordinator*; B.S., M.L.S., Brigham Young University (2002)

Smith, Cheree L., *Director of Upward Bound***;** B.A., M.A., University of Texas of the Permian Basin (2002)

Smith, Hoxie W., *Director; Petroleum Geotechnology Training Center***;** B.S., Colorado State University; M.S., University of Texas of the Permian Basin (2003)

Spicer, Renee S., *Workforce Training Coordinator;* B.S., Eastern New Mexico University (2000)
Stevens, Mike, *Chaparral Center Director;* B.S., Texas Tech University (1981)
Thomas, Alison, *Programmer;* A.A.S., Midland College (1999)
Valeriano, Zaira, *Human Resources Coordinator;* A.A.S., Midland College (1997)
Velasquez, Charles, *Network Manager;* B.S., Sul Ross State University (1997)
Vickery, Julia, *Student Life Director;* B.A., M.A., University of Kansas (1997)
Wade, Margaret, *Dean of Mathematics and Science;* B.A., Stephen F. Austin; M.S., Ed.D., Texas Tech University (1990)
Wallace, J. Don, *Director of Media Services*; B.A., University of Texas of the Permian Basin (1997)
Wetendorf, Becky, *Associate Director of Financial Aid;* B.S., University of Texas of the Permian Basin (1999)
Wetendorf, Trey, *Admissions and Recruitment Coordinator;* B.S., Texas Christian University Ft. Worth; M.Ed., Texas Tech University (2000)
Williams, Dale, *Career Center Director;* B.A., M.A., Marshall University (2002)
Williams, Latisha, *Director Financial Aid;* B.S., Texas A&M University, M.B.A., University of Texas Of the Permian Basin (1998**)**
Wood, Peggy, *Coordinator of Developmental Studies*; *HSI-Title V Activity Director;* B.A., University of North Colorado; M.Ed., Colorado State University (1989).
Zenteno, Elizabeth, *Associate Director Cogdell Learning Center*; B.A., University of Notre Dame (2004)

Midland College Board of Trustees and MC President, Dr. David Daniel

FULL TIME FACULTY

Midland College is extremely fortunate to maintain a faculty of dedicated student centered instructors. The full time faculty listed here have been assembled as of February 2004 because of their professional expertise and their ability to meet individual student's learning needs. This list will vary somewhat from year to year.

(Year indicates beginning of affiliation with Midland College)

Allen, David, *Professor, Drama;* B.F.A., Ithaca College; M.A., University of Connecticut; Ph.D., Texas Tech University (1998)

Almaguer, Fernando*, Associate Professor, Government;* B.S., Abilene Christian University; M.A., Baylor University (1991)

Anderson, John*, Instructor, Chemistry;* B.S., Southeastern Oklahoma State University; M.S., University of North Texas (1999)

Avery, Doug, *Associate Professor, Welding Technology;* A.G.S., Midland College, B.B.A., M.B.A., University of Texas of the Permian Basin (1999)

Bailey, Carol*, Instructor, Art*; B.A., Texas Tech University*;* M.A., Fort Hays State University (1992)

Bartha, Gregory, *Respiratory Care Medical Director;* B.S., Stanford University; M.D., Yale University School of Medicine (1991)

Belazi, Omar, *Professor, Business Administration;* B.C., University of Libya; M.B.A., D.B.A., Texas Tech University (1982)

Bewley, Rabon, *Instructor, Instrumental Music;* B.A., Southeastern Oklahoma State University; M.M., Pittsburgh State University (1999)

Bezinque, Kim, *Instructor, Associate Degree Nursing;* B.S.N., Pittsburgh State University; M.S.N., Texas Tech University; Certified Pediatric Nurse; R.N. (1991)

Bostic, Bert, *Instructor, Music*; B.A., Marshall University (1995)

Brown, Elizabeth, *Professor; Program Director, Diagnostic Medical Sonography*; A.A., Northeastern A&M; B.S.R.T.(N), B.S.R.T.(U), University of Oklahoma Health Sciences Center; M.S.R.S., Midwestern State University; R.D.M.S. (2000)

Brown, Sylvia A., *Associate Professor, Information Technology;* A.A.S., Midland College; Microsoft Certified Master Instructor (1993)

Carrillo, Margie, *Instructor*, *Mathematics;* B.S., College of the Southwest (2001)

Carroll, Quinn B., *Instructor, Program Director; Radiography Technology;* B.S., University of Utah; M.Ed., University of Wyoming; University of Utah Health Sciences; R.T.(R) (1985)

Christensen, Deon, *Instructor, Professional Pilot Program;* M.S., University of Texas at Dallas (2001)

Clarkson, Walter W., *Professor*, *Information Technology/Electronics;* A.S., A.A.S., Midland College; CET (1982)

Coldiron, Juanita, *Instructor; Associate Degree Nursing*; A.D., Morris Harvey College; B.S.N., M.S.N., West Virginia University; R.N. (2003)

Coombs, Kerry, *Professor, Program Director, Veterinary Technology;* A.S., Rick's College; B.S., Brigham Young University; D.V.M., Colorado State University (1994)

Dixon, Michael*, Instructor, Mathematics;* B.S., M.A., University of Texas of the Permian Basin (1999)

Dodson, Betty, *Instructor; Program Director, Health Information Technology;* A.G.S., A.A.S., Midland College; B.A., University of Texas of the Permian Basin; R.H.I.A. (2001)

Draper, James, *Professor*; *Program Director, Information Technology;* B.S., University of Texas at Austin; M.S., University of Texas of the Permian Basin; CCAI, CCNA, MCP (1999)

Dummer, Terry, *Assistant Professor, Information Technology/Electronics;* A.A.S., Midland College; B.A., University of Texas of the Permian Basin (1996)

Durham, L.C., *Instructor, Director, Professional Pilot Program*; A.G.S. Midland College (2002)

Elder, Erica, *Kinesiology/Physical Education; Women's Volleyball Coach*; B.A., Austin College; M.Ed., Southeastern Oklahoma State University (2002)

Escamilla, Lacye, *Instructor*, *Biology;* B.S., M.S., Sul Ross State University (2001)

Ford, Sonia, *Mathematics;* B.S., M.A., Eastern New Mexico University (2002)

Franks, Jerry, *Professor, Government and Philosophy;* B.A., University of Alabama at Tuscaloosa; Ph.D., University of Texas at Austin (1981)

Frantz, Gavin, *Professor, Information Technology/Electronics;* A.A.S., Delta Community College; B.S., Southeastern Oklahoma State University (1998)

Garner, Daniel, *Instructor, Automotive Technology;* A.A.S., New Mexico Junior College (1995)

Gilmour, Terry, *Associate Professor, Government;* B.S., M.A. West Texas State University; Ph.D., Texas Tech University (1997)

Givens, Dennis, *Assistant Professor; Director Aviation Maintenance Technology;* A.S., South Plains College, A & P, I.A., W.T.E., Certified Vocational Instructor (1991)

Goodyear, Russell, *Professor, English, Humanities, Latin, and Spanish;* B.A., Henderson State University; M.A., University of Arkansas; Ph.D., University of Arkansas (1993)

Hargrove, Steve, *Instructor, Automotive Technology,* A.A.S., Odessa College (1994)

Heathman, William, *Instructor; Clinical Director, Radiography;* University of Iowa Hospital; B.S., University of Nevada; R.T.(R) (1986)

Hendrickson, Dan J., *Respiratory Care Medical Director;* B.S., Nebraska Wesleyan University; M.D., University of Nebraska Medical Center (1993)

Hernandez, Adrian, *Veterinary Technology***;** A.A.S., Midland College; B.S., Texas A&M University (2002)

Hernandez, Tomas O.*, Instructor, Biology;* B.S., M.S., Sul Ross State University (1995)

Hinds, Claudia, *Assistant Professor, Biology;* B.S., M.S., Colorado State University (1991)

Hodge, Kay*, Professor, Mathematics*; B.A., M.A., Ed.D., Texas Tech University (1988)

Houck, Michael L. Todd, *Instructor, History;* B.A., M.A., Ph.D., Texas Tech University (2002)

Howell, Pamela R., *Professor, English;* B.A., Southern Arkansas University; M.A., Ph.D., Texas Christian University (1983)

Hubble, Casey J., *Instructor*, *Government;* B.A., Wichita State University; M.A., Baylor University (2002)

Jackson, Melissa, *Instructor, English*; B.A., University of Texas-San Antonio; M.A., Our Lady of the Lake University, M.A. (2004)

Johnson, Doug, *Associate Professor, Information Technology;* A.A.S., Midland College; B.S., University of Texas at Arlington (1999)

Jolliffe, Teresa, *Instructor, English;* B.A., M.A., Texas Tech University (2000)

Jones, James "Diego", *Professor, Modern Languages;* B.A., M.A., West Texas State University; Ph.D., Texas Tech University (1978)

Jones, Susan, *Professor; Program Director; Vocational Nursing*; B.S.N., West Texas State University; M.S., Corpus Christi State University; R.N. (1996)

Jordan, Linda, *Instructor, Vocational Nursing;* A.A.S., Midland College; R.N. (1999)

2004 Teaching Excellence Award Winners
Claudia Hinds and Gavin Frantz

Jordan, Michael, *Professor, Music;* B.M.Ed., University of New Mexico; M.M., University of Colorado; D.M.A., University of Michigan (1981)

Joy, Dorothy, *Program Director, Associate Degree Nursing;* B.S.N., Corpus Christi State University; M.S.N, University of Texas Health Sciences Center at San Antonio; R.N. (1998)

Keesee, Rebecca Lea, *Assistant Professor, Associate Degree Nursing;* B.A., Texas A&M University; B.S.N., Texas Tech Health Sciences Center; M.S.N, West Texas A&M University; R.N. (2001)

Kemper, Jake, *Professor, Building Science Technology;* B.S., M.Ed., Sul Ross State University (1997)

King, Bruce, *Instructor, Aviation Maintenance Technology;* A & P (2000)

Kirk, Clayton Todd, *Assistant Professor, Psychology;* B.S., Abilene Christian University; M.S., Texas Christian University Ed.D, Texas Tech University (1997)

Korbach, Debbie, *Assistant Professor; Associate Degree Nursing*; B.S.N., University of Texas; M.S.N., Virginia Commonwealth University; Women's Health Nurse Practitioner; R.N. (2002)

Lawrence, Madylon, *Instructor*, *Vocational Nursing;* A.D.N., Odessa College; B.S.N., University of Texas of the Permian Basin (2001)

Leach, Ann, *Instructor, Program Director, Kinesiology/Physical Education;* B.S., Iowa State University; M.A., Sul Ross State University (1999)

Ledbetter, Dan, *Professor, Welding Technology;* B.S., North Texas State University; M.S., East Texas State University (1999)

Lindsey-Hicks, Glenda, *Professor, English;* B.A., University of Oklahoma; M.A., Ph.D., Oklahoma State University (1981)

Lumpkin, Adriana, *Associate Professor*, *Information Technology;* B.S., Sul Ross State University (1999)

Mangum, Paul D., *Professor*, *Biology;* B.S., M.S., Ph.D., Texas Tech University (1995)

Matthews, Ethel, *Instructor, Biology;* B.A., Our Lady of the Lake University; M.S., University of Texas of the Permian Basin (1993)

McCasland, Grant, *Men's Basketball Coach*; B.S., Baylor University; M.S., Texas Tech University (2003)

McClure, Wayne, *Professor, History;* B.A., Austin College; M.A., Ph.D., Texas Christian University (1976)

McDermett, Michelle, *Veterinary Technology*; A.A.S., Sul Ross State University (2002)

McKenzie, Laura, *Assistant Professor, English;* B.A., Eastern New Mexico University; M.A., University of Texas of the Permian Basin (2001)

Middleton, Stan, *Instructor; Clinical Director, Respiratory Care;* A.A.S., Midland College; B.S., University of Texas of the Permian Basin; R.R.T., R.C.P. (1995)

Mielkus, Jim, *Associate Professor*, *Professional Pilot Program;* A.A.S., Texas State Institute (2001)

Mikeska, Sonya, *Instructor, Athletic Trainer and Kinesiology/Physical Education;* B.S., M.S., Angelo State University (1996)

Mills, Jerry, *Assistant Professor, History and Government;* B.S., M.S., Texas A&I University (1991)

Mock, Lynn, *Associate Professor*, *Vocational Nursing;* A.A.S., Amarillo College; B.S.N., West Texas State University; R.N. (2001)

Morris, Betty, *Professor, Music;* B.M., North Texas State University; M.S., Juilliard School of Music; M.A., Texas Tech University; D.M.A., North Texas State University (1979)

Moss, Barry Kent, *Professor, Photography;* B.F.A., Murray State University; M.F.A., Southern Methodist University (1985)

Nicholson, Gena, *Instructor*, *Mathematics;* B.S., University of Texas at Austin (2001)

Nye, Joseph G., *Professor*, *Computer Graphics Technology;* A.A., Eastfield Community College; B.S., M.S., North Texas State University (1982)

O'Hara, Thomas, *Professor, Physics;* B.S., University of Texas at Austin; M.S., Ph.D., Louisiana State University (1978)

Oliver, Marion, *Instructor; Director, Fire Protection;* A.A.S., Midland College (1997)

Pape, Karen, *Instructor, English; Director, Writing Lab;* B.A., M.A., University of Texas of the Permian Basin (1996)

Patterson, Craig, *Professional Pilot Program*, A.A.S., Kansas State University (1999)

Peetz, Helen, *Instructor, Associate Degree Nursing;* B.S.N., The University of Texas System School of Nursing; M.S.N., Texas Tech University Health Sciences Center School of Nursing; R.N. (1999)

Peetz, Robert, *Professor, Criminal Justice;* A.A., Central Texas College; B.S., M.C.J., American Technological University (1982)

Penz, Ed, *Instructor, Associate Degree Nursing;* Diploma, Illinois Masonic Medical Center School of Nursing; B.S.N., M.S., DePaul University; R.N. (1999)

Penny, Linda*, Professor, Mathematics;* B.A., M.S., Texas A&M University (1999)

Pickett, Vickie, *Assistant Professor*, *Information Technology;* A.A.S., Midland College; B.S., M.B.A., Computer Science, University of Texas of the Permian Basin (1998)

Poage, E. Don, *Instructor*; *Program Director, Alcohol and Drug Abuse Counseling;* B.B.A., University of Texas at Austin; M.A., University of Texas of the Permian Basin (1998)

Poss, Delnor, *Kinesiology/Physical Education; Men's Golf Coach;* B.B.A., Hardin-Simmons University; M.Ed., Sul Ross University (1977)

Ramharter, Steve, *Kinesiology/Physical Education; Baseball Coach;* B.A., Rice University; M.Ed., Texas Tech University (2000)

Ramirez, Victor, *Instructor, Permian Basin Energy Education Project***;** B.A., University of Texas of the Permian Basin (2003)

Ramos, Tommy, *Kinesiology/Physical Education; Women's Softball Coach;* A.G.S., Midland College; B.S., University of Texas of the Permian Basin (1989)

Randle, Susan, *Instructor, Art;* B.A., University of Texas of the Permian Basin; B.F.A., University of Texas at Austin; M.A., Fort Hays State University (1997)

Richard, Patricia, *Assistant Professor*, *Associate Degree Nursing*; A.D.N., B.S.N., M.S.N., Angelo State University; R.N. (2003)

Richardson, Glen, *Professor*, *Chemistry;* B.A., Hardin Simmons University; M.A., University of Texas at Austin (1985)

Rosen, Andree, *Professor*, *Legal Assistant;* B.A., University of Texas at Austin; J.D., St. Mary's University School of Law (1998)

Schneider, G. Michael, *Instructor, Sociology;* B.A., California State University at Fullerton; M.A., University of Northern Colorado (1991)

Sevcik, Lenora, *Instructor, Associate Degree Nursing;* A.A.S., Delmar College; M.S.N., B.S.N., Texas Tech University Health Sciences Center; R.N. (2001)

Shellenberger, Anita, *Assistant Professor, Information Technology;* A.A.S., Midland College (1999)

Shofner, Chloice, *Professor, Economics;* B.B.A., M.B.A., Texas Tech University (1972)

Smith, Joe, *Instructor, Welding Technology;* A.G.S., Midland College (1989)

Smith, Travis, *Aviation Maintenance*; A & P (2001)

Steiner, Valerie, *Associate Professor, Associate Degree Nursing;* A.A.S., Midland College; B.A., California State University; M.S.N., University of Texas at El Paso; Women's Health Nurse Practitioner; R.N., (1998)

Stotts, Rita, *Program Director, Child Care and Development; Director, Helen L. Greathouse Children's Center and Manor Park Child Care Center, Inc.;* A.G.S., Midland College (1987)

Sumners, Ted, *Associate Professor*, *Automotive Technology;* A.S.G.S., Midland College (2001)

Taylor, Warren, *Professor, Art;* B.F.A., Bethany College; M.A., M.F.A., Fort Hays State University (1979)

Templeton, Bob, *Allison Chair of Journalism;* B.S., East Texas State University; M.J., North Texas State University (1986)

Thompson, Donna T., *Professor*, *Psychology;* B.A., Michigan State University; M.A., Ph.D., University of California at Los Angeles (1990)

Tindall, Tyler, *Professor, Speech;* B.S., M.A., West Texas State University; Ed.D., Texas Tech University (1977)

Truitt, David, *Professor*, *Mathematics;* B.S., M.A., Eastern New Mexico University (1979)

Van Husen, Laura, *Instructor, Mathematics;* B.A., University of Texas at Austin (1998)

Vest, Karen, *Instructor, Mathematics;* B.S., Southeastern Louisiana University (2000)

Watson, Rebecca T., *Professor, English;* B.A., M.A., University of Oregon (1975)

Webb, Lynda, *Instructor, Reading/English; Director, Reading*; B.A., Baylor University; M.A., University of Tennessee at Chattanooga (2002)

Weidmann, Robert, *Instructor, Program Director, Respiratory Care;* B.S., Southern Utah State College; R.R.T., R.P.F.T., R.C.P. (1984)

Westfall, Dale, *Professor, Business Administration;* B.B.A, M.B.Ed., West Texas State University (1979)

Wetendorf, Fred H., Jr.*, Instructor, Geology;* B.S., M.S., Southern Illinois University (1994)

Williams, Mary, *Instructor, English;* M.A., University of Texas of the Permian Basin; B.A., Ph.D., Texas Tech University (2001)

Willis, Kim, *Assistant Professor, Program Director, Emergency Medical Services;* B.S., Eastern New Mexico University; M.S., University of Texas of the Permian Basin; LP (2000)

Wood, Tracie, *Assistant Professor; Vocational Nursing;* A.A.S., Midland College; B.S.N., Texas Tech Health Sciences Center; R.N. (2001)

Young, Wayne, *Professor, Air Conditioning/Refrigeration;* B.S.O.E., Wayland Baptist University (1980)

Zabel, Andrea C., *Professor*, *Psychology;* B.A., Texas Tech University; M.S., Angelo State University; Ed.D., Texas Tech University (1990)

FULL TIME LAB FACULTY

Midland College gratefully acknowledges the following individuals who serve as full time lab faculty as of February 2004. This list may vary in different semesters according to student needs.

Cochran, Cindy, *Biology;* B.S., Texas Tech University (1998)

Lanier, Karen, *Journalism;* A.A., Midland College, B.A., University of Texas of the Permian Basin (1994)

Lenter, William, *Information Technology;* A.A.S., Midland College (2000)

McGowen, Roy, *Information Technology;* A.A.S., Midland College; CCNA (2002)

Patterson, Donna, *Modern Languages;* B.A., M.A., Texas Tech University (2000)

Scharf, Nancy, *Information Technology;* A.A.S., Midland College (1993)

Segovia, Raquel, *Information Technology*; A.A.S., Midland College (2002)

Upchurch, Glenda, *Accounting;* A.A.S., Midland College (1994)

Welch, Lisa, *Biology; B.S.*, University of Wyoming, M.A., Texas Tech University (1999)

ADJUNCT FACULTY

Midland College gratefully acknowledges the following individuals who serve as adjunct faculty members as of February 2004. This list may vary in different semesters according to student needs.

ACCOUNTING
- Upchurch Glenda, A.A.S.

AGRICULTURE
- Kirby, Milton, B.S., M.Ed.

AIR CONDITIONING, HEATING & REFRIGERATION
- Martin, Fred, A.A.S.

ALLIED HEALTH
- Bartold, Stephen, M.D.
- Dennis, Larry, PA-C, MPAS
- Milhauser, Steven, PA-C
- Roch, James, PA-C
- Runyan, Jack, PA-C, Ph.D.
- Wilson, Larry, M.D.

ALCOHOL AND DRUG ABUSE COUNSELING
- Dorethy, Daniel, B.A., M.Ed.

ANTHROPOLOGY
- Foster, Pamela, M.A.

ART
- Kirk, September, M.A.
- Holland, Dana, M.A.
- Vickery, Eric, M.F.A.

AUTOMOTIVE
- Campbell, Lance, A.A.S.

BIOLOGY
- Belizaire, Amelia, B.S.N.
- Burdette, Sue, B.S., M.S.
- Coombs, Robin, B.S.
- Elias, Dan, B.S., M.S.
- Humphrey, Denise, B.S.
- Johnson, Dustie, B.S.
- Larson, Greg, M.S.
- Miller, Jill, B.A.
- Mills, Billy, M.S.
- Tedder, James, B.S., M.S.
- Webb, Daniel, B.S., M.S.

BUSINESS
- Allen, Lawson, B.B.A.
- Austene, Kelli, M.B.A.
- Burden, Richard, L.L.M, J.D.
- Dunagan, Andy, B.S.
- Hannon, Susan, B.B.A.
- Havins, Catherine, M.Ed.
- Honaker, Kay, B.B.A.
- MacLeod, Chris, B.S.

CHEMISTRY
- Firkins, Justin, B.S.
- McQueen, Leah, B.S., M.S.

CHILD CARE AND DEVELOPMENT
- Fields, Donna, M.S.
- Galindo, Estella, M.A.
- Munden, Leisha, M.A.
- Nichols, Barbara, B.A.

COMPUTER GRAPHICS TECHNOLOGY
- Baker, Vanessa, A.A.S.
- Harris, Stan, B.S.
- Ruckman, David, A.A.S.
- Silva, Julio, A.A.S.

CONTINUING EDUCATION
- Adams, Suzan
- Ahrendson, Douglas
- Aleman, Lupe
- Anders, Terrance
- Baze Georgianna
- Becker, Jane
- Brahaney, Kay
- Braneff, Mel
- Brown, Sylvia
- Brownlow, Crystal
- Brunson, Brandon
- Bucy, Bill
- Campbell, Robbie
- Campbell, Shirley
- Carrasco, Jonathon
- Carrillo, Nancy
- Carruth, Bevra
- Castilla, Jonathan
- Chaney, Fred
- Cordero, Michelle
- Crenshaw, Susan
- Culver, Charlotte
- Cunningham, Chris
- Dalton, Charlotte
- Davis, Robin
- Desparrois, Michael
- Dowell, Kathy

Edwards, DiAnn
Edwards, Kimberly
Elliott, Barbara
Ellison, Mary Jo
Enriquez, Chris
Evans, Tina
Forrest, Margie
Foster, Kim
Garcia, Jon
Garcia, Kathy
Gillaspy, Genia
Gladden, Michelle
Gore, Donna
Griffin, Judy
Gutierrez, Socorro
Guyton, Sam
Halepeska, Bill
Harris, Belle
Hart, Jill
Haskell, Ryan
Hennis, Amy
Henson, Sally
Herring, Amy
Hightower, Blake
Hodgens, Jennifer
Holley, Janice
Hurta, Melanie
Johnson, Pete
Jolly, Ashley
Klattenhoff, John
Kovacich, Debbie
Larson, Charlotte
Ledbetter, Dan
Leggett, Danielle
Lindsey, Bernadette
Lloyd, Garry
Lozano, Matt
Lujan, Roxana
Madrid, Albert
McAdoo, Bruce
McArthur, Jan
McBurney, Amanda
McKown, Denise
Meador, Sarah
Mendoza, Derlys
Morgan, Michael
Moore, Ashley
Moore, Travis
Morris, Brenda
Morris, Will
Neilitz, Nathan
Odom, Altha
Oknefski, Mindy
Owens, Austin
Pearcy, Van
Pinkerton, Vicki
Pitts, Larry
Poe, Narda
Porsch, Barbara
Price, Phyllis
Proctor, Barbara
Puentes, Sissy
Puga, Richy
Ramharter, Mary Jo
Reker, Donna
Reyes, Clarissa
Rhoades, Harlan
Ricker, Prince
Routh, William
Schultz, Ralph
Shellenberger, Anita
Sigler, Missey
Shofner, Chloice
Smith, Todd
Speight, Becky
Stoltz, Kristen
Talley, Jennifer
Tassin, Alex
Taylor, Eloise
Thomas, Jamie
Thompson, Donna
Tindol, Adam
Traxel-Hawryluk, Claudia
Underwood, April
Van Stavern, James
Vannaman, Tom
Vasquez, Isaac
Vickery, Eric
Walsh, Lawrence
Watts, Cindy
Welch, Ofelia
White, Dana
Winston, Dee Ann
Woodson, Jane
Young, Jake

CRIMINAL JUSTICE
- Bell, Allen, M.S.

DRAMA
- Jebsen, Timothy, M.A.

ECONOMICS
- Franks, Hugh, M.A.

EDUCATION
- Brooks, Paul, M.Ed

EMERGENCY MEDICAL SERVICES
- Barnes, Kevin, RN, EMT-P
- Branch, Charlotte, EMT-P
- Derrick, Bill, EMT-P, RN
- Dickson, Jeff, EMT-P
- Gonzalez, Ismael, EMT-P
- Heredia, Jr., Manuel, EMT-P
- Hodges, Steve, EMT-P
- Martin, James, EMT-P
- Martin, Bill, EMT-P
- McGary, Brian, EMT-P
- Moseley, Travis, EMT-P
- Nunn, Bodie, EMT-P
- Owens, Rick, EMT-P
- St. Clair, Jeriami, EMT-P

ENGLISH
- Carrillo, Aundrea, M.A.
- Cline, Judith, M.A.
- Dougharty, Jerri, M.A.
- Favor, Katherine, M.A.
- Fitts, Claudia, M. Ed.
- Griffin, Horace, B.A., M.A.
- Henegar, Christy, M.A.
- Holland, Dana, M.A.
- Huelster, Dorthea, M.A.
- Johnson, Lori, B.S.
- Johnson, Michelle, B.S.
- Koesjan, Lily, M.E.
- Knight, Josh, M.A.
- Landrum, Kathy, M.A.T.
- Lorenz, James, M.S.E.
- Maples, Jill, M.A.
- McKenzie, Billie, M.Ed.
- Mendez, Constance, M.A.
- Nunley, Elizabeth, M.A.
- Ogrin, Dee D., M.S.
- Porter, Alison, B.A.
- Sexton, Janet Kaye, M.A.
- Singleton, David, M.A.
- Walker, Geoff, M.A.
- Zachry, Katanna, M.A.

FIRE PROTECTION
- Kuhn, Mark, A.A.S.
- Muller, Robert, A.A.S.
- Oakley, Wyatt, A.A.S.

GEOLOGY
- Erskine, Woody, B.S.
- Gawloski, Joan, B.S., M.S.
- Lawler, Sydney, B.A., M.S.
- Penley, Michael, B.S., M.S.

GOVERNMENT/POLITICAL SCIENCE
- Burns, Robert, B.A., Former Mayor of Midland
- Cook, John, J.D.
- Dalton, Pat, M.P.A.
- Gibbs, Ryan, M.P.A., B.A.
- Hammon, Greg, M.A.
- Manning, Sam, Ed.D.
- Meador, William, M.A.
- Roomberg, Susan, M.P.A.

HEALTH INFORMATION TECHNOLOGY
- Cosner, Denise, RN; BSN

HEALTH SCIENCES CONTINUING EDUCATION
- Allen, Katherine, BA, MA, RMT
- Bautista, Tammy, HUC
- Bersosa, Alfred
- Bragg, Johnny L.
- Brown, Elizabeth, MSRS, RDMS
- Corbett, Sherry, RN
- Dodson, Betty, R.H.I.T.
- Dodson, Michael
- Donaldson, Vaughn, EMT-P
- Edwards, Linda, CNA
- Fields, Donna, MS
- Foster, Kathleen, RN
- Fryar, Thomas
- Grenvick, Diane
- Hamels, Paul, RMT, MTI
- Hannifin, Mark
- Heredia, Yalina L.
- Heathman, William, BS, RTR
- Ingram, Berry, EMT-P
- Johnson, Dusty L.
- Jones, Susan, RN, MS, CS, LPC
- Jordan, Linda, AAS, RN
- Kimbrough, Glyndon Ruth, NFA
- Lawrence, Madylon, RN, AAS, BSN
- Lester, Sherry
- Lomax, Renee, RN

Lothringer, Joan, RN
McBurney, Marilyn, A.S.C.P.
Middleton, Stan, AAS, BS, RRT, RCP
Mock, Lynn, BSN, RN
Mossbarger, Deborah L., RN
Munden, Leisha L., M.A.
Munoz, Elizabeth, CNA
Oliver, Marion, EMT-P
Partridge, Jr., Toby, EMT-P
Penz, Edward, RN, CNA, BC, MS
Powell, Linda, LVN
Roome, Tracy D.
Saunders, Beth, RMT
Sevcik, Lenora C., RN, MSN
Stotts, Rita, AGS
Torello, Penelope, ABOC
Waldrop, Terry, AAS, CPS
Weidmann, Robert, RRT, RPFT, RCP
Willis, Jack K., BS, EMT-P, LP
Wood, Tracie J., AAS, BSN, RN

HISTORY

Arnold, John, M.S.S.
Bland, Kenneth, M.A.
Cooper, Doris, M.A.
DeLaO, Frank, M.A.
Henry, Paula, M.A.
Holguin, Rudy, M.A.
Hurt, Randy, M.L.S.
Kennedy, Damon, M.A.
Little, Terry, M.A.
Meador, William, M.A.
Powers, Kristi, M.A.
Scarbrough, Cary, M.S.
Synatschk, Debra, M.A.
Wilson, Susan, M.A.

INFORMATION TECHNOLOGY

Bynum, Kent, B.B.A.
Bynum, Sondra, M.Ed.
Dennison, Tammy, M.S.
Farr, Gary, CNA, CNE, ASE Network Specialist
Floyd, Kay, A.G.S., CPS
Granado, Lisa, B.B.A.
Hamilton, Pamela, B.B.A.
Herring, Amy, M.Ed.
Laing, Chuck, A.A.S.
Newton, Janet, M.Ed.
Pilley, Brenda, B.B.A.
Scharf, Nancy, A.A.S.
Sullivan, Mary, A.A.S.
Waldrop, Terri, A.A.S.

KINESIOLOGY/PHYSICAL EDUCATION

Armstrong, Lance, Tennis Teaching Professional
Becker, Steve, Shodan/Black Belt
Brian, Christopher, Certified Tae Kwon Do Instructor
Courter, Price, PGA License
Dulin, Leon, Ed.D
Garcia, Gilbert, M.Ed.
Kelso, Barbara, Certified Aikido Instructor
Kelso, Les, Certified Aikido Instructor
Lawless, Rita, Certified Cheerleader Instructor
McReynolds, Melinda, Certified Aerobics Instructor
Pierce, Tony, Certified National Soccer Coaches
Polnick, Katrina, M.Ed., B.S.
Roberts, Christy, Certified Aerobics Instructor (Step-Kickboxing Trainer)
Singh, Lupe, Certified Aerobics Instructor
Speight, Becky, Certified Aerobics Instructor
White, Dana, Certified Yoga-Fit Training Program Level II, taught and owned Dance Studios

LEGAL ASSISTANT

Byer, Elizabeth, J.D.
Lacy, Frank, J.D.
Langford, Melanie, CLA
Roosa, John, J.D.

MATHEMATICS

Abbot, Carolyn, B.S.
Battle, Jane, B.S.
Cranford, Sara, B.S., M.Ed.
Cultreri, Susan, B.S.
Edwards, Phillip, B.A., M.Div.
Foreman, Francis, B.S., M.E.
Kahlich, Lou Ann. B.S.
Leonard, Margaret, B.A., M.A.
Lopez, Louisa, B.A.
McCarty, Lois, B.A., M.Ed.
McDonald, Barbara, B.S.

McIlwain, Michael, B.S., M.A.
Newton, Janet, B.S.
Nicholson, Karen, B.S., M.Ed.
Puetz, Brad, B.S.
Salas, Pablo, B.S.
Schroeder, Ron, B.S.
Severino, Joseph, B.A., M.S.
Skidmore, Scott; BS., M.A.
Tavarez, Rachel, B.S.
Tervooren, Dale, B.A. M.Ed.
Willis, Barbara, B.S.

MODERN LANGUAGES

AMERICAN SIGN LANGUAGE
Brasel, Laural, M.A.

FRENCH
Leshnower, Susan, M.A.

GERMAN
Davis, Kerry, M.A.T.

SPANISH
Depew, Betty, M.A.Ed.
Heard, Patricia, M.A.
Nelson, Elizabeth G., M.A.

MUSIC
Doherty, Gary, M.E.
Gjevre, Naomi
Griffin, Ruth Ann, B.A.
Moss, Vivian, B.Ed.
Pinell, Javier
Pysh, Greg, M.M.
Santorelli, Michael, M.M.
Santorelli, Shari, M.M.
Vester, Debbie, B.S.

NURSING-ASSOCIATE DEGREE
Farquhar, Paula, RN, MSN
Kirby, Cathy, RN, BSN
Price, Bea, RN, MSN
Reeves, II, Norman, RN, MSN
Sullivan, Patricia, RN, MS

NURSING-VOCATIONAL
Corbett, Sherry, RN, BSN

PETROLEUM GEOTECHNOLOGY
Sykes-Bookhammer, Diane
Cochran, Rob
Gantz, Kent
Hise, Becky
Lea, Ralph
Lufholm, Peter
Ogden, Becky
Ornelas, James
Payne, Celia
Simpson, Berry

PHILOSOPHY
Whitman, Allen, B.D.

PSYCHOLOGY
Almon, Jeannette, M.A.A.
Clemmer, Fern, Ed.D.
Edens, David, M.S.
Jones, Keli, M.A.
Jurek, Paul, Ph.D.
Shelton, Stephanie, M.A.

RADIOGRAPHY
Black, Todd, RT
De La Rosa, Diane, RT
Edge-Tindall, Jodie, RT
Ford, Aaron, RT
Hirt, Steven, RT
Hughes, Marlon, MD
Ives, Kathy, RT
Lopez, Ester, RT
Matthews, Cecelia, RT
McCraney, Karen, RT
Myers, Brandon, RTR
Perales, Isiquio, RT
Van Cleave, Jack, RT
Wright, Kelly, RT

READING
Daneker, Elizabeth, B. S.
Harrison, Wanda, B. A
Jones, Kelie, M.A.
McAdoo, Yolanda, M. A.
Oakes, Jody, M.Ed.
Quilimaco, Gracie, Lily, B.A.
Waddell, Robert, M.A.
Windham, Stacy, B.S.

RESPIRATORY CARE
Gordon, Susan, RRT

SOCIAL WORK
Ellis, Gayle, M.S.W.

SOCIOLOGY
Edens, David, M.S.

SPEECH
Allen, Katherine, M.A.
Curry, Audrey, M.A.
Henry, K. Delise, M.Ed.
Ogrin, Dee D., M. S.
Reed, Jan, M.A.

2004 - 2005 Reference Calendars

2004

JANUARY

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

FEBRUARY

S	M	T	W	T	F	S
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

MARCH

S	M	T	W	T	F	S
	1	2	3	4	5	6
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21	22	23	24	25	26	27
28	29	30	31			

APRIL

S	M	T	W	T	F	S
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MAY

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30	31					

JUNE

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

JULY

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

AUGUST

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

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MIDLAND COLLEGE CALENDAR 2004-2005

For your convenience, 2004-2005 reference calendars are on page 23.

STUDENT ORIENTATION

June 16	Student Orientation Meeting in the Scharbauer Student Center 9-11 am
August 5 & 18	Student Orientation Meeting in the Scharbauer Student Center 9-11 am
November 11	Student Orientation Meeting in the Scharbauer Student Center 9-11 am

2004 FALL SEMESTER

June 14 - Sept. 3	**WEB Registration** for Fall - **www.midland.edu**
August 9	Walk-in Early Fall Registration - Open to All Students
August 23-27	Faculty & Staff Meetings
August 25	Registration Extended Office Hours Until 7:30 pm
Aug. 26 - Sept.10	Concurrent High School Registration Begins
August 27	**Last day to Drop** and Obtain 100% of Refundable Fees *(See Refund Policy)*
August 28	Residence Hall move-in after 12:00 pm
August 30	**First Class Day** and **Late Registration Begins** (Late fee charged)
August 31	Begin Submission of Intent to Graduate *(See Graduation Section of Catalog)*
September 6	Holiday (Labor Day)
September 9	Last Day to Late Register
September 15	Census Day
November 15	**WEB Registration** for Spring & Winter Interim - **www.midland.edu**
November 19	**Last Day to Withdraw** in Registrar's Office with a Grade of "W"
November 22	**Walk-in Early Registration** for Spring & Winter Interim
November 24	Holiday After 5 pm (Thanksgiving)
November 29	Class Instruction Resumes
December 13-16	**Final Examinations**
December 17	Semester Ends; Holiday after 5 pm (Christmas)
December 17	Residence Hall closes at 12:00 pm

2004-2005 WINTER INTERIM SESSION

Nov. 15 - Dec. 10	**WEB Registration** for Winter Interim - **www.midland.edu**
November 22	Walk-in **Early Registration** for Winter Interim
December 20	**Registration** 8-9 am; **First Day of Class**
December 20	Census Day
December 24	Holiday (Christmas)
December 31	Holiday (New Year's Eve)
January 3	**Last Day to Withdraw** in Registrar's Office with a Grade Of "W"
January 6	**Final Exams** and Grades Due

2005 SPRING SEMESTER

Nov. 15 - Jan. 21	**WEB Registration** for Spring - **www.midland.edu**
Nov. 22 - Dec. 10	Walk-in **Early Registration** for Spring Begins
January 3	Administrative Offices Open
January 10-14	Faculty and Staff Meetings
January 12	**Registration Extended Office Hours** Until 7:30 pm
January 13-28	**Concurrent High School Registration** Begins
January 15	Residence Hall move-in after 12:00 pm
January 17	Holiday (Martin Luther King Day) Registration Open (Scharbauer Student Center)
January 17	**Last day to Drop** and Obtain 100% of Refundable Fees *(See Refund Policy)*
January 18	**First Class Day** and **Late Registration Begins** (Late fee charged)
January 27	**Last Day to Late Register**

2005 SPRING SEMESTER (cont.)

February 2	Census Day
February 25	**Last Day to Submit Request to Participate in Graduation** Ceremony and to Order Cap and Gown *(See Graduation Section of Catalog)*
March 7-11	Holiday (Spring Break)
March 14	**Class Instruction Resumes**
March 24	Holiday, after 5:00 pm (Easter)
March 29	Class Instruction Resumes
April 15	**Last Day to Withdraw** in Registrar's Office with a Grade of "W"
April 18	**WEB** Registration for Spring Interim, Summer I & II, and Fall **www.midland.edu**
April 25	**Walk-in Early Registration** Begins for Spring Interim, Summer I & II
May 9-12	**Final Examinations**
May 13	Semester Ends; **Graduation** (Al G. Langford Chaparral Center, 7 pm)
May 14	Residence Hall closes at 12:00 pm

2005 SPRING INTERIM SESSION

April 18 - May 13	**WEB** Registration for Spring Interim - **www.midland.edu**
April 25 - May 13	Walk-in **Early Registration** for Spring Interim
May 16	**Registration** and **First Day of Class**
May 17	**Last Day to Late Register** and Census Day
May 26	**Last Day to Withdraw** in the Registrar's Office with a Grade of "W"
May 30	Holiday (Memorial Day)
June 1	**Final Examinations** and Grades Due

2005 SUMMER SESSION I

April 18 - June 2	**WEB** Registration Summer I - **www.midland.edu**
April 25 - June 2	Walk-in **Early Registration** Summer I
June 1	**Last day to Drop** and Obtain 100% of Refundable Fees *(see Refund Policy)*
June 2	**First Class Day** and **Late Registration Begins** (Late fee charged - Payment due at the time of registration)
June 8	**Last Day to Late Register** and Census Day
June 29	**Last Day to Withdraw** in The Registrar's Office with a Grade of "W"
July 4	Holiday (Independence Day)
July 12	**Final Examinations**; Session Ends

2005 SUMMER SESSION II

April 18 - July 12	**WEB Registration** for Summer II - **www.midland.edu**
April 26 - July 12	Walk-in **Early Registration** for Summer II
July 12	**Last day to Drop** and Obtain 100% of Refundable Fees *(see Refund Policy)*
July 13	**First Class Day** and **Late Registration Begins** (Late fee charged)
July 19	**Last Day to Late Register** and Census Day
August 9	**Last Day to Withdraw** In the Registrar's Office with a Grade of "W"
August 18	**Final Examinations**; Session Ends

All dates are subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies. Please review dates in respective class schedules.

NOTE: Course selection and registration is only guaranteed if the course(s) have been paid for as stated on the student's Statement of Account or in the semester schedule of classes. Midland College reserves the right to withdraw students from any and all courses at any time. Reasons for withdrawal may include, but are not limited to, the following: Non-paid accounts, Disciplinary Actions, THEA Requirements, Housing Violations, Prerequisites or Co-requisites.

HISTORY OF MIDLAND COLLEGE

Midland College began in September 1969 as the Midland campus of the Permian Junior College system. It was re-created in 1972 with the formation of the Midland College District. Bonds in the amount of $5,100,000 were issued for the construction of a 115 acre campus. Ground breaking at the new campus was held October 23, 1973. In 1975, spring semester classes were held in the new buildings. The Pevehouse Administration Building (which holds the I. A. O'Shaughnessy Presidential Suite and the Orpha Olsen Gibson Board Room), the Abell Hanger Science Faculty Building and the Maintenance Building were the forerunners of the complete campus. The Murray Fasken Learning Resource Center, the Dorothy and Clarence Scharbauer, Jr. Student Center (which houses the Harriet and Harvey Herd Faculty Lounge), the Technology Center and the Physical Education Building were completed for the Fall 1975 semester. With an eye for continued growth, enrollment and programs, the Allison Fine Arts Building, including the McCormick Gallery and the Wagner & Brown Auditorium, an addition to the Technology Center and the Al G. Langford Chaparral Center with a seating capacity of 5,000, were dedicated in 1978.

The addition of a housing facility for athletes was secured from private funds and athletes moved on campus during the Spring term of 1983. The Davidson Family Health Sciences Building, including the Davidson Lecture Hall and the Helen L. Greathouse Children's Center, was completed for the 1985 Fall semester. Landmarks of the Midland College campus are the beautiful Hodge Carillon Tower, the Marian Blakemore Memorial Fountain and the Mr. and Mrs. Carlton Beal Plaza. Fifty-two additional acres were purchased in 1988. A twelve court tennis center is the result of a joint project of the City of Midland and Midland College. Six new courts were added in 1991. In the Fall of 1991, an addition doubling the size of the Scharbauer Student Center was completed. The addition is the new home of facilities for campus and community events. In 1992, the Cogdell Learning Center was established. The Williams Regional Technical Training Center of Fort Stockton opened in 1996 and was dedicated in 2002. The Davidson Distinguished Lecture Series was also established in 1996. Midland College West was added in 1997. Fifty-three acres north of the campus were purchased in 1999, yielding a campus of 220.62 acres. Also in 1999, O'Shaughnessy Hall, a female residence hall, was dedicated, and the Phyllis and Bob Cowan Performing Arts Series was established. The Advanced Technology Center, including the Franz Weis Industrial Technology Center, and a men's residence hall opened in 2000. The Jack E. Brown Dining Hall and the Dorothy and Todd Aaron Medical Science Building, including The Gregory Bartha, M.D. Atrium, were opened in 2001. The Nadine & Tom Craddick Hall was dedicated in 2003 and the Dollye Neal Chapel and Hall's Way, a pedestrian bridge between Midland College and the Midland Community Theatre, were dedicated in 2004.

STATEMENT OF PURPOSE

Mission

Midland College is a comprehensive public college dedicated to educational excellence. The faculty and staff are committed to instruction that sustains a life-long quest for knowledge and provides students with academic, intellectual, occupational, and professional proficiency—including knowledge in and appreciation of the arts and sciences; critical thinking; clear and effective communication; analytical reflection; and technical skills. The College serves the diverse learning communities of its region by providing a range of flexible programs from community enrichment to the baccalaureate degree.

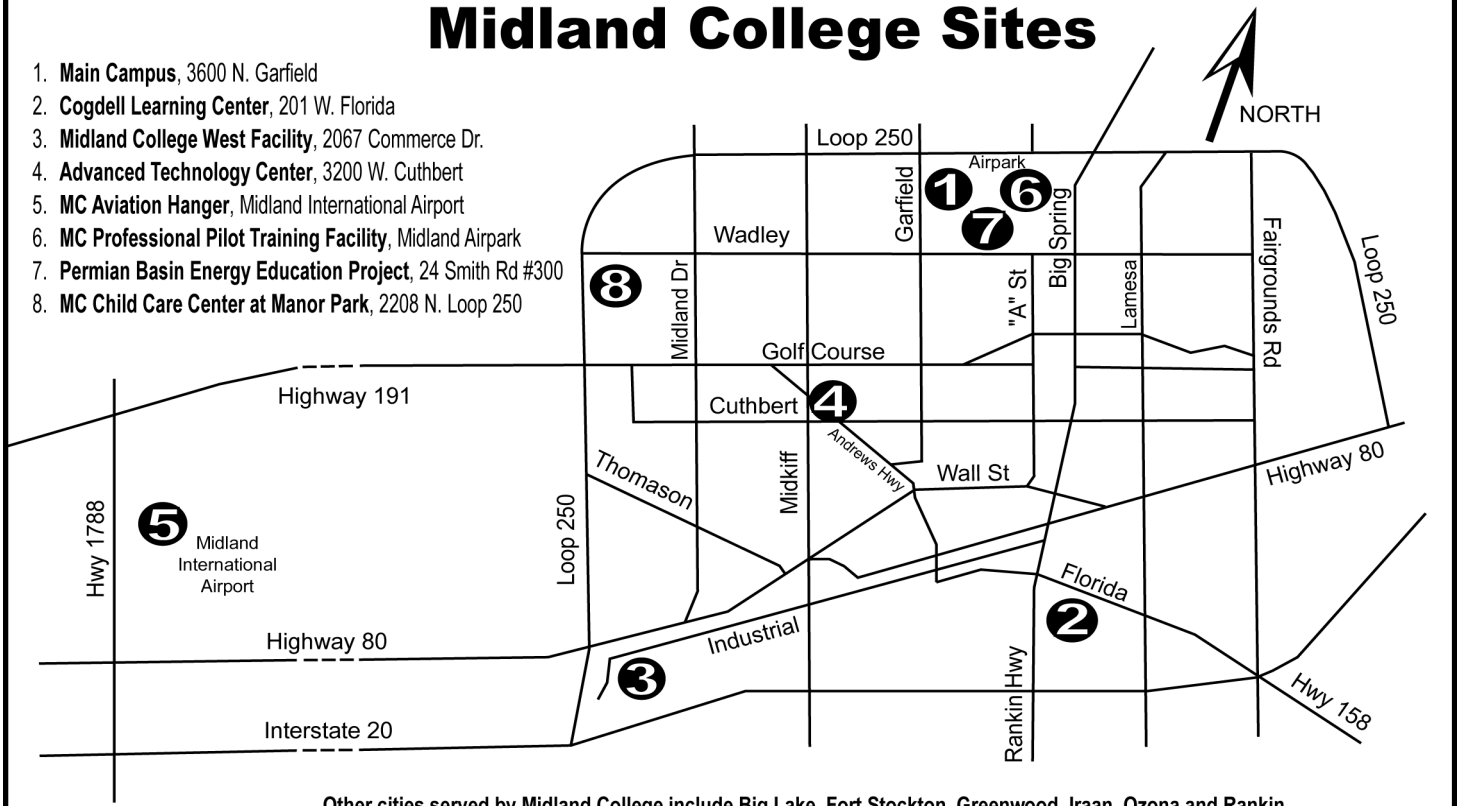
Objectives

Midland College strives to fulfill its mission through effective programs with clear objectives:

1. To provide an academic and occupational focus for business and professional learning environments through the following options:
   - Certificate programs in technical and vocational fields
   - Transfer coursework and Associate of Arts and Associate of Science degrees
   - Associate of Applied Science degrees
   - Bachelor of Applied Technology degrees
2. To provide flexible educational opportunities by combining the best of traditional methods with effective and innovative teaching methods, including interactive distance learning, computer-based instruction, and developmental assessment and response.
3. To respond to community, business, professional, and regional needs by providing credit, non-credit, and continuing education courses; workforce training; and cultural opportunities and activities.
4. To increase student retention and decrease barriers to success through effective advising, career counseling, and financial aid.
5. To cooperate with other institutions and agencies in seeking and creating new avenues for student access to higher education.

Midland College Sites

1. **Main Campus**, 3600 N. Garfield
2. **Cogdell Learning Center**, 201 W. Florida
3. **Midland College West Facility**, 2067 Commerce Dr.
4. **Advanced Technology Center**, 3200 W. Cuthbert
5. **MC Aviation Hanger**, Midland International Airport
6. **MC Professional Pilot Training Facility**, Midland Airpark
7. **Permian Basin Energy Education Project**, 24 Smith Rd #300
8. **MC Child Care Center at Manor Park**, 2208 N. Loop 250



Other cities served by Midland College include Big Lake, Fort Stockton, Greenwood, Iraan, Ozona and Rankin.

MIDLAND COLLEGE FACILITIES

Advanced Technology Center

The Advanced Technology Center (ATC), located at 3200 W. Cuthbert in Midland, is a highly advanced technical educational facility which allows high school and college students the opportunity to gain employable skills in technology while earning high school diplomas, college certificates, and associate of applied science degrees. This facility also enables Midland-area residents to further enhance their technical skills through industry-recognized certifications and other continuing education opportunities. Educational programs and courses taught at the ATC include all aspects of computer information technology, welding technology, metallurgy, computer integrated manufacturing, automotive technology, electronics technology, computer graphics, and health science technology.

The Franz Weis Industrial Technology Center and accompanying exhibit are located near the Automotive Technology labs at the ATC. The exhibit depicts the life and works of Franz Weis, a master engine builder, who resides in Midland. Between 1965 and 2001, Mr. Weis built engines for Indy-type racing cars that won 107 races including cars driven by Jim Hall; Al Unser, Sr.; Bobby Rahal; Emerson Fittipaldi; Arie Luyendyke; and Al Unser, Jr. Mr. Weis won the Vandevell Engine Builder of the Year award for 1987, 1988, 1989, and 1990. The Franz Weis Industrial Technology Center is used for special high school and college automotive classes as well as industry training for automotive technology professionals.

Business and Economic Development Center

The B.E.D.C., located at Midland College Cogdell Learning Center at 201 W. Florida in Midland, promotes economic development in the community by providing comprehensive management, financial, and technical business assistance and training to small businesses and entrepreneurial ventures. It also conducts business and economic research and offers governmental procurement and international trade guidance to private sector businesses.

Cogdell Learning Center

In 1992 Midland College established a presence in South Midland. That presence is the Midland College Cogdell Learning Center. The purpose of the Cogdell Learning Center is to refer South and East Midland residents to Midland College resources. Via an extensive degree of community outreach, South and East Midland residents will be referred to everything from credit coursework to Kids' College.

The mission of the Cogdell Learning Center is to provide quality learning and life enhancing opportunities through programs that effectively address the unique needs of South and East Midland residents. The Center serves as a gateway to Midland College and other community resources for individuals who wish to further pursue personal, career, and academic goals. The Cogdell Learning Center is committed to the residents of this area and strives to serve this economically and culturally diverse community.

The Cogdell Learning Center provides the following services: community outreach, GED and ESL courses, federal Talent Search grant services, small business assistance (Business and Economic Development Center), parent training (Barbara Yarbrough Parent Center), adult literacy assistance (Midland Need to Read), and federal financial aid assistance, including Bill Pace Cogdell Scholarship.

Dollye Neal Chapel

The Dollye Neal Chapel was created and endowed through the generosity of Dollye Neal Ballenger as "a place apart" on the Midland College campus for the College family of staff, faculty, students, supporters and officials. While the Chapel has no religious affiliation, the Chapel is open weekdays to all, providing a proper setting for private meditation and reflection. It will also serve as a venue for small events such as weddings and student and faculty meetings that are appropriate for the Chapel's special environment.

McCormick Gallery

Given as a gift by Colonel & Mrs. Walter B. Smith, in memory of her parents, W.F. and Mary McIntyre McCormick, and her brother George D. McCormick, the McCormick Gallery was established in 1978. The art gallery is located in the main foyer of the Allison Fine Arts Building. Approximately six exhibits are installed each academic year with a wide range of media.

Midland College Aviation Maintenance Technology

The Aviation Maintenance Technology program is located in a hangar at the Airport at 2405 Windecker. The hangar is an advanced “state of the art” training facility that offers students a unique opportunity to be trained on real aircraft. The program offers two certificates in Airframe Maintenance and Powerplant Maintenance. This training can qualify the student to take the Federal Aviation Administration (FAA) examination for the Airframe or Powerplant licenses

Midland College Child Care Center at Manor Park, Inc.

Midland College in collaboration with Manor Park, Inc., created the Midland College Child Care Center, located within the Manor Park, Inc. campus, 2208 North Loop 250. The Center exists for three purposes: child care service, instructional lab support for child development, psychology, health science and other related courses to meet college and high school students’ educational goals, and support of the Eden philosophy which includes the presence of children within the senior adult care community. Both senior adults and children receive benefits from social and cognitive interactions. A classroom for instructional purposes is located adjacent to the Child Care Center.

Midland College West Facility

Midland College West, located at 2067 Commerce Drive, was added to assist the non-credit education and credit course offerings efforts in 1997. This 4200 square foot building, and two acre adjacent training yard, is the site for the Transportation Training and other Continuing Education courses.

Williams Regional Technical Training Center

In 1993, Fort Stockton community leaders placed advancement of technical and higher education among their goals for economic community planning. Early in 1994, a task force of community leaders through the Fort Stockton Chamber of Commerce began meeting with Midland College administration about the possibility of expanding local higher education technical programs. With the task force citing the need for additional facilities to accommodate future technical course development, a sub-committee reviewed the properties then available and concluded that a new facility built next to the high school would best serve the needs of the region. Under the direction of the task force, over $650,000 was raised to complete a 10,000 square foot facility which opened for classes in September of 1996.

The Regional Technical Training Center (RTTC), was approved by the Southern Association of Colleges and Schools as the first branch campus of Midland College in 1998. Basic academic course offerings are primarily in the areas of biology, economics, English, government, history, math, physical education, psychology, and sociology. Technical courses include child care, paralegal, automotive, personal computer technician, alcohol and drug abuse counseling, accounting, criminal justice, medical terminology, business, management and office procedures. Beyond the academic and technical course offerings, the RTTC has developed a wide variety of continuing education programs to meet the less traditional education needs of the region. A "Kids' College" two week program has also been added to the program to offer educational enrichment programs to the community's youth during the summer. In 2002, the name was changed to the Williams Regional Technical Training Center.

The Three Presidents of Midland College

Dr. Jess Parrish and Dr. Al Langford (MC's first President) join current President, Dr. David Daniel, at the Blakemore Fountain in Beal Plaza for this rare photo opportunity.

Permian Basin Energy Education Project

The Permian Basin Energy Education Project, located in the Tgaar Tower at 24 Smith Road, Suite 300, was developed to provide ongoing safety and occupational training for entry-level oil field service workers. The facility includes two large classrooms equipped for multi-media presentations, an assessment room, a student lounge, and staff offices. Course offerings include Universal Oilfield Safety Training, Well Servicing, Hands on Applications Training, and Drilling. The program is designed to assist individuals who are unemployed, underemployed, or very recently employed in the oil field service industry with basic job skills. All courses are offered free of charge due to Department of Labor funding.

Distance Learning

Distance learning at Midland College is planned learning that normally occurs in a different place from teaching and, as a result, requires special techniques of course design, special instructional techniques, special methods of communication by electronics and other technology, as well as special organizational and administrative arrangements.

Through its Distance Learning Program, Midland College offers a variety of non-traditional learning environments. MCNet is an interactive television classroom experience in which students from off-site locations become a part of the classroom setting based at either the main campus or one of the off-campus sites (Big Lake, Rankin, Ft. Stockton, Greenwood, Iraan, and Ozona). Computer Communication-Based Instruction (CCBI) provides course work through e-mail and/or fax in which students use course and lesson information from a disk in order to complete course(s) objectives and send in lessons through e-mail and/or fax. Web Based courses are developed by individual instructors and provide complete course content through use of the Internet. Regional Electronic Academic Communications Highway (R.E.A.C.H.) Courses are interactive television courses which are broadcast through a special network that includes U.T.P.B., Howard College, and Midland College. Virtual College of Texas (VCT) allows students to access courses via the Internet that are not offered at Midland College. Students can view the schedule at www.vct.org and all enrollments must be made through Midland College.

For additional information on any of these non-traditional learning approaches, please contact the Department of Distance Learning at (432) 685-5537.

Midland College's University Center

Midland College provides opportunities to earn upper-level degrees without leaving Midland ... or, to have a seamless transfer to a partner university.

For further information regarding the University Center, please contact the Office of the Associate Vice President of Instruction for Academic and Transfer, Dr. Stan Jacobs, at (432) 685-5545.

Bachelor & Master Programs

Lubbock Christian University
Bachelor of Science in Organizational Management
Contact Scott Rhodes at (432) 570-0068

Sul Ross University
Bachelor of Science in Biology
Bachelor of Science in Natural Resource Management
Bachelor of Science in Earth Science
Contact Dr. Margaret Wade at (432) 685-4615

Texas Tech University Health Science Center
Master of Physician Assistant Studies
Contact Stephanie Cardenas at (432) 620-9905

Transfer Programs

Angelo State University's "Access ASU" Program

Texas Tech University's "Pathways" Program

University of Texas of the Permian Basin's "Direct Connect" Program

For information on these partner programs, contact Trey Wetendorf at (432) 685-5502.

STUDENT ADVISING AND ADMISSIONS

Advising and Counseling

Midland College Counselors and Advisors will provide the following assistance to each individual student:

1. Arrange to take all required testing.
2. Determine which courses will transfer toward a four year degree or determine which courses are needed for a particular two year technological degree.
3. Plan and approve a students class schedule.
4. Assist students in career choices or refer to Career Center.
5. Assist students in seeking employment or financial aid.
6. Refer student to any other needed Midland College service such as veterans officer, support service coordinator, disability counselor, all student club and activity opportunities, etc.

Admission

Midland College maintains an open-door policy which insures that all persons who can profit from post-secondary education shall have an opportunity to enroll. Applicants may assume admission acceptance after all requirements are met. All inquiries should be addressed to the Vice President of Student Services.

Basis of Admission

Midland College reserves the right to require academic documentation for any applicant. A student's eligibility for re-enrollment at their previous institution may be a consideration for admission at Midland College.

High School - Graduates from accredited Texas High Schools or equivalent institutions are eligible for admission. A certification statement of graduation is required for admission. Proof of high school graduation is required and must be documented. Proof of graduation may include an official high school transcript.

Examination - Students may be admitted upon satisfactory completion of the General Education Development (GED) test. A certification statement of satisfactory completion of the (GED) is required for admission. Proof of satisfactory completion of the (GED) is required, and must be documented with the official (GED) scores.

Individual Approval - Individuals who are 18 years of age or older and do not have a high school diploma or GED may be admitted without examination at the discretion of Student Services Administrators at Midland College. Transcripts from previous high schools attended, together with tests and other devices, may be used in lieu of high school graduation. Students admitted on individual approval without a GED or high school transcript are not eligible to receive Title IV federal financial assistance.

Individual Approval is an important component of the "open door" admission policy at Midland College. Recognizing the great diversity represented in today's society, the Individual Approval policy ensures that all persons desiring educational opportunities may enroll and progress toward their goal. The flexibility of Individual Approval for admission is a valuable tool for determining the benefit potential of education for all members of our diverse community.

Early Admission Program - Midland College will consider for early admission high school students between the ages of 16 to 18 on the basis of individual merit providing they have permission of the school district and the student's parents/legal guardian.

Concurrent Enrollment - Midland College has entered into agreements with the Midland Independent School District, the Greenwood Independent School District and Trinity School allowing high school students to earn both high school and college credit for selected courses. Students at Midland High School, Robert E. Lee High School, Greenwood High School and Trinity School may participate in this program. For more information, students should contact their high school counselor. Similar programs exist at out-of-district sites.

Home School - Home-schooled high school students seeking admission as regular students are required to:

1. be at least 16 years of age and be classified as a Junior or Senior level student
2. complete the Midland College Admission Application
3. provide an Early Admission Permission Form with approval to take college courses signed by the parent.
4. comply with all state Texas Success Initiative testing requirements.
5. provide an official transcript which must meet all TEA standards.

Students may be required to complete additional academic assessment to determine proper placement in courses before enrolling. Students will be required to have a Midland College Counselor/Advisor approve their schedule each time they enroll or change their schedule.

Transfer Students - Transfer students seeking admission are required to provide a transcript from every other institution attended. For enrolling purposes a transfer student must provide a college transcript from the last institution attended by the end of his/her first semester in attendance. For more information on transferring credits see the **Transfer Information** section of the Catalog.

Academic Fresh Start - Residents of Texas who seek admission to a state college or university may do so without consideration of courses undertaken ten or more years prior to enrollment. Students have the option of electing to have course work taken ten or more years prior to enrollment to count as usual or to be ignored for admission purposes. Any student electing to have course work ignored may not receive any course credit for any courses taken ten or more years prior to enrollment. Those hours ignored can be used as a basis for exemption from the Texas Skills Initiative.

Right of Appeal - Persons who are denied admission to the college may appeal to the Student Admissions, Advising, and Due Process Committee. Contact the Registrar for information on the appeal process.

Audit - A student may contract with the instructor to enroll in a credit course as an audit (non-credit) student. An audit student may attend class, but will not receive a final grade nor credit for the audited course. The student is required to pay full tuition and additional fees. An audit student must declare before the 12th class day.

International Students - International students are welcome at Midland College. They add cultural diversity which is encouraged here. Once accepted, they are eligible to take courses, participate in student life, become involved in the community and transfer to other colleges. Like other students, they must abide by Midland College rules as stated in the Midland College Catalogue and Student Handbook and as international students, they must abide by additional federal and state guidelines.

Admission is contingent upon the evaluation of the following criteria and upon Midland College's ability to serve the individual needs as determined by the college's representatives. Students from other countries should submit:

1. an application for admission,
2. a transcript from the last school or college attended (must be the equivalent of a United States high school graduate); the official transcript must be translated into English and must show each course and the grade earned,
3. satisfaction of the English proficiency standard by meeting one of the following conditions:

    a) a 525 score on the TOEFL or a 195 on the computer based TOEFL. The TOEFL would be taken prior to admission.

    b) one year or two consecutive semesters of English taken within the past two years with the equivalent grade of “C” or better.

c) having the student live with a host family. The host family would assume responsibility for language training.

It is also highly suggested that students coming from non-English speaking countries be required to take an ESL course their first semester at Midland College.

4. proof of financial responsibility.

Prospective international students must file completed applications with all required forms with a non-refundable application fee. The fee should be in the form of a check or money order payable to Midland College and sent to the attention of the international student advisor. An I-20 form will be issued to the student when the above qualifications have been met. International students must enroll for at least 12 semester hours of course work. Residence Halls are available on campus.

Web Based Opportunities

Midland College offers an on-line service for students called Campus Connect. This service is available via the Internet and the Midland College Website, www.midland.edu. Campus Connect provides students access to their college information including:

1. class schedule
2. grade report that lists semester grades
3. course availability
4. unofficial transcript
5. status of school account
6. degree audit that lists the courses that have been completed and those needed to complete a degree or certificate
7. demographic information on file
8. status of Financial Aid

To log on, you must be in the Midland College Student Data Base. Go to the website at www.midland.edu and select Campus Connect.

Enter your social security number and your pin number and press the access key. Note, your pin number is the first four numbers in your birth date. Examples: July 4 birth date, Pin number is 0704. Students will have the opportunity and are encouraged to change their pin numbers upon entering Campus Connect.

Campus Connect
now at
www.midland.edu

Register online, or check your student information through a **secure** online connection.

Registration Information

Registration for fall and spring semesters occurs in three stages: early registration, regular registration, and late registration. Registration information is available in each semester's Class Schedule or in the Student Services office.

Residence Classifications

Tuition and fees are determined by resident classification established by state law.

In-District Residents are classified as students who:

1. are 18 years or older,
2. have been residents of Texas for 12 months, and
3. have been gainfully employed within the state for a period of 12 months prior to enrollment, including six months as residents in the Midland Community College District.

In the case of students under 18 years, the parents must meet the above criteria.

Out-of-District Residents are classified as students who:

1. are 18 years or older,
2. have not lived within the Midland Community College District six months prior to registration, and
3. have been a resident of Texas 12 months prior to registration.

In the case of students under 18, the parents must meet the above criteria.

Out-of-State Residents are classified as students who:

1. are United States citizens 18 years of age or older, and
2. have not been a resident of Texas 12 months prior to registration.

When the student is under 18 years of age, the student's family residence for the prior 12 months determines residence status.

International Residents are citizens of another country who are in the United States on non-immigrant visas. Persons living in the United States under a visa permitting permanent residence or who have filed with the proper federal authorities a declaration of intention to become a citizen, and aliens who are permitted by Congress to adopt the United States as their domicile while they are in this country, have the same privilege of qualifying for Texas resident status for tuition purposes as do citizens of the United States.

Student Residence Requirements

It is the responsibility of each student attending Midland College to register under the proper residence classification and pay the correct tuition and fees. The Texas Higher Education Coordinating Board, rule 21.38, requires each student to provide substantiating documentation to affirm residence for tuition purposes. It also requires that students sign an Oath of Residency. The Midland College Board recognizes the authority of the Coordinating Board to set residency policy as authorized by the Texas Legislature and Midland College will follow the guidelines as set forth by the Coordinating Board.

Residence Classifications:

TEXAS RESIDENT - An adult Texas resident (18 years of age and older) is defined as one who has resided continuously within the State of Texas for 12 months immediately prior to his/her original registration. A minor Texas resident is defined as one whose parent(s) or legal guardian has claimed the dependent for federal income tax purposes both at the time of enrollment and for the tax year preceding enrollment. This classification is defined by the State Auditor's Office and must be adhered to by the institution.

NON-RESIDENT - A non-resident student is defined as one who does not qualify as a Texas resident (out-of-state, international, etc.). A non-resident student classification is presumed to be correct so long as the student is in the state primarily for the purpose of attending school. To be reclassified as a resident, after one or more years of residency, the student

must show proof of intent to establish Texas as his/her own residency. A student who owns property in Midland College District may be eligible for a waiver of out-of-state tuition. Students who believe they are eligible for such waivers must contact the Admissions Office.

IN-DISTRICT - A Texas resident who physically resides within the geographic boundaries of the Midland College District, excluding student housing or residence halls. To qualify for In-District tuition, a student must have been classified as a Texas resident, and have been a resident of the Midland College District for a period of six months before first enrollment. A student may reclassify from Out-of-District to In-District status, with appropriate documentation, after six month's residency in the Midland College District.

OUT-OF-DISTRICT - A Texas resident who does not physically reside within the geographic boundaries of the Midland College District. Aliens living in the United States under a Visa permitting residence must meet the same requirements for qualifying for resident status for tuition purposes as do U.S. citizens. A permanent resident must meet the same length of residency requirements as a citizen.

WRITTEN DOCUMENTATION: At minimum, Midland College will have on file a copy of one or more of the appropriately dated documents which certify that the student classified as a resident has the legal right to the correct classification as of the official census date of the semester or term for which he or she is enrolling. Documents which may be accepted for this purpose include:

A. Texas high school transcript
B. Texas college or university transcript
C. Employer statement of date of employment
D. Permanent Texas Drivers' license (at least one year old). Generally, the license expiration date minus date of enrollment should not exceed three years
E. Property tax payments
F. Bank statement
G. Utility bill
H. Other third party documentation

Documents submitted will be reviewed before a reclassification is made. The Midland College Admissions Office will provide a Residency Reclassification form that students will complete when applying for reclassification. TUITION FOR STUDENTS RESIDING OUTSIDE OF THE MIDLAND COLLEGE DISTRICT The Midland College Board adopts Section 130.0032, Subchapter A, of the Texas Education Code that permits a person who resides outside of the Midland College District and who owns property subject to ad valorem taxation by the Midland College District, or a dependent of the person, to pay tuition at the rate applicable to a student who resides in the district. To qualify for this benefit, the property owner or dependent must provide the Admissions Office with a copy of a Notice of Appraised Value Statement from the Midland Central Appraisal District in the property owner or dependent's name that shows Midland College as one of the taxing units.

General Information The Texas Higher Education Coordinating Board publishes a Residency Brochure, entitled "Residence Status, Rules and Regulations" pursuant to Title 3 of the Texas Education Code which is distributed to Colleges and Universities in the state of Texas. Copies are also available on the Coordinating Board website: http://www.thecb.state.tx.us. This guide is used as a resource by Midland College to establish a student's correct residency status.

Student Records

A permanent record is defined as one's accumulated academic record including data confirming a student's eligibility for admission and proof that registration requirements have been met. The procedures for the preparation and maintenance of all records are thorough and in keeping with standard practices. The permanent records are kept in the Office of the Registrar.

The student's permanent records are confidential. Individuals may examine personal records at any time. Personnel within the institution may examine student records when it is in the best interest of the student.

Privacy Rights of Parents and Students
(Public Law 93-380) as it relates to Midland College)
Family Educational Rights and Privacy Act (FERPA)

Review of Records Students having attended Midland College have the right to inspect, review and obtain copies to any and all official records, files, and data directly related to them. Access to the students' records maybe obtained in the following manner:

A. Students may make requests in person or in writing of the appropriate records custodian.
B. The appropriate office of the college will make the designated records available within a reasonable period of time, but in no case more than 45 days after the request.
C. Copies of records will be provided at the current prevailing cost at Midland College.

Accuracy of Records Any student having attended Midland College will have an opportunity to challenge and have corrected inaccurate, misleading, and inappropriate data through Midland College existing policies. The custodian of the record will summarize action taken.

Maintenance of Student Records The retention of records for Public Junior Colleges has been established by the Texas State Library and Archives Commission. The schedule establishes mandatory minimum retention periods of student records. Midland College adheres to the schedule as provided. A copy of the Retention Schedule for Records of Public Junior Colleges is available by contacting: http://www.tsl.state.tx.us/slrm/recordspubs/jc.html

General Information This is the information, which may be released to the general public without the written consent of the student. A student may request that all or part of the general information be withheld from the public by contacting the Admissions Office asking for a copy of the Student Privacy Notice and completing the requested information. The following is included as general information:

A. Name
B. Date and place of birth
C. Address
D. Parent's name and address
E. Telephone
F. Major field of study
G. Number of hours enrolled current semester
H. Classification
I. Participation in officially recognized activities and sports
J. Weight and height of athletic teams
K. Dates of attendance
L. Degrees and awards received
M. All previous educational agencies or institutions attended
N. Photographs that may be used in Midland College publications, videos or internet

Authorized Access to Student Records As provided in PL 93-380, the following will be provided access to student's records without consent from the student; and no record thereof will be maintained.

A. Officials, faculty, staff of Midland College who have a legitimate educational interest in the student's record.
B. Officials of other schools in which the student seeks or intends to enroll. The student is entitled to a copy of the record forwarded to the other institutions if she/he so desires.

C. In connection with a student's request for or receipt of financial aid, as necessary to determine eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
D. State or local officials to which educational data must be reported.
E. Legitimate organizations (ACT, CEED, EST) developing, validating, or administering predictive tests or student-aid programs. Such data is not to be released in any identifiable form and will be destroyed by the organization after the research has been completed.
F. Accrediting agencies.
G. To parents or an eligible student who claim the student as dependent for income tax purposes.
H. To comply with a judicial order or a lawfully issued subpoena.
I. Representation of the Comptroller-General of the United States, Secretary of BEW, administrative heads of educational agencies, or state education authorities.
J. Emergency situations where the information is necessary to protect the health or safety of some person.

All other individuals, agencies, or organizations which request or obtain access to a student's record must have prior written consent of the student involved.

Areas Which Maintain Student Records

A. Academic Records
   1. Student Record Office - Registrar
B. Financial Records
   1. Business Office
   2. Student Financial Aid Office

The Vice-President of Student Services is responsible for the supervision of student records and the implementation of this policy.

Complaints concerning alleged failures by Midland College to comply with the requirement of FERPA may be addressed to:

Family Policy of Compliance Office
U.S. Department of Education
600 Independence Avenue, SW
Washington, D.C. 20202-4605

FEE SCHEDULE INFORMATION

Tuition and Fees

Tuition and fees are payable at the time of registration. The most economical method of enrollment is to pay all tuition fees prior to the beginning of classes.

Tuition and fees are subject to change without notice. Current tuition and fees are charged according to the schedule on the following page.

Dual-College Registration and Fees

Students who enroll both in a community college and a senior college or university should register for the community college courses first. After that has been completed, they should take their receipt to the senior college or university and register. This will result in savings of tuition and fees.

Senior Citizen Exemption

Midland College offers senior citizens an exemption from the payment of general use fees when they enroll in credit classes. To be eligible for the exemption, students must be sixty-five years of age or older, pay tuition cost plus any lab fees necessary for that course. All other Midland College policies apply.

Lost or Damaged Property Charges

Students may be charged for loss or damages to college property for which they are responsible. Non-payment of these obligations may result in the withholding of grades, transcripts, or graduation.

Book Return Policy

New textbooks, in new condition, (i.e. no writing, highlighting or any damage which would prevent resale as a new book) as well as used books, with the receipt, may be returned for a full refund through the 12th day of class of a regular semester, the first three class days of a summer session, or the first two class days of a flex-entry course. New books in new condition and used books purchased after the 12th day of class, after the first three class days of a summer session, or after the first two class days of a flex-entry course, may be returned for a full refund when accompanied by the purchase receipt within three (3) days of the date of purchase.

Tuition and Fee Schedule

The schedule below reflects combined tuition and general use fees required of all courses. In addition to the schedule below, certain courses may require additional fees for labs, health sciences liability insurance, private instruction and testing.

The schedule below and those on the following pages reflect the current tuition and fee rates. **All tuition and fees printed in this catalog are subject to change by the Midland College Board of Trustees.**

HOURS	IN-DISTRICT RESIDENT	OUT-OF-DISTRICT RESIDENT	OUT-OF-STATE RESIDENT/ALIEN
1	93.00	98.00	284.00
2	130.00	140.00	284.00
3	167.00	182.00	284.00
4	204.00	224.00	360.00
5	241.00	266.00	436.00
6	278.00	308.00	512.00
7	315.00	350.00	588.00
8	360.00	400.00	672.00
9	405.00	450.00	756.00
10	450.00	500.00	840.00
11	495.00	550.00	924.00
12	540.00	600.00	1,008.00
13	585.00	650.00	1,092.00
14	630.00	700.00	1,176.00
15	675.00	750.00	1,260.00
16	720.00	800.00	1,344.00
17	765.00	850.00	1,428.00
18	810.00	900.00	1,512.00
19	855.00	950.00	1,596.00
20	900.00	1,000.00	1,680.00
21	945.00	1,050.00	1,764.00
22	990.00	1,100.00	1,848.00
23	1,035.00	1,150.00	1,932.00
24	1,080.00	1,200.00	2,016.00
25	1,125.00	1,250.00	2,100.00
26	1,170.00	1,300.00	2,184.00
27	1,215.00	1,350.00	2,268.00

Additional Costs
Laboratory Fees

1.	Accounting, all lab courses	24.00
2.	Air Conditioning, Heating, and Refrigeration, all lab courses	24.00
3.	Arts 1311, 1312, 1316, 1317, 2311, 2312, 2326, 2327, 2333, 2334	12.00
	Arts 2316, 2317, 2366, 2367	10.00
	Arts 2331, 2332, 2341, 2342, 2346, 2347, 2348, 2349, 2356, 2357	24.00
4.	Auto Maintenance Technology, all lab courses	24.00
5.	Aviation Maintenance Technology, all lab courses	24.00
6.	Biology	24.00
7.	Building Science Technology, all lab courses	24.00
8.	Chemistry	24.00
9.	Child Care and Development, all lab courses	24.00
10.	Communication 1129, 1130, 2129, 2130	5.00
	Communication 2309, 2310, 2311, 2315, 2327	12.00
	Communication 1318, 1319, 1320, 1321	24.00
11.	Computer Graphics Technology, all lab courses	24.00
12.	Criminal Justice, all lab courses	16.00
13.	Dance, all classes	20.00
14.	Diagnostic Medical Sonography, all lab courses	24.00
15.	Drama 2366	12.00
16.	Emergency Medical Services, all lab courses	24.00
17.	English 0170, 0171, 0181, 0280 and all Freshman and Sophomore classes	8.00
18.	Fire Protection Technology, all lab courses	24.00
19.	French	8.00
20.	Geology	24.00
21.	German	8.00
22.	Health Information Technology, all lab courses	24.00
23.	Information Technology, all lab courses	24.00
24.	Kinesiology/Physical Education, all activity courses	20.00
25.	Latin	8.00
26.	Legal Assistant, all lab courses	24.00
27.	Math (all classes except Math 0190 and 0191)	7.00
28.	Music 1105 through 1107, 1159, 1162 through 1165, 1181 through 1184, 2181 through 2184	24.00
	All MUAP, All MUEN	24.00
29.	Nursing, Associate Degree, all lab courses	24.00
	Nursing, Vocational, all lab courses	24.00
30.	Physics	24.00
31.	Professional Pilot, all lab courses	24.00
32.	Radiography, all lab courses	24.00
33.	Reading, all courses	8.00
34.	Respiratory Care, all lab courses	24.00
35.	Sign Language	8.00
36.	Spanish	8.00
37.	Speech 1144, 1145, 2144, 2145	5.00
	All other Speech courses	8.00
38.	Veterinary Technology, all lab courses	24.00
39.	Welding Technology, all lab courses	24.00

Special Charges

1. Advanced Standing and CLEP Examination 50.00
2. Associate Degree Nursing Exit Exam Fee 30.00
3. Associate Degree Nursing Midcurricular Fee 35.00
4. General use fee is included in the "Tuition and Fee Schedule" on page 42.
5. Identification Card Replacement Fee 1.00
6. Installment Payment Plan 20.00
   Installment Payment Plan Late Fee 10.00
7. *Liability Insurance 17.00
   *Liability Insurance for Emergency Medical Services courses 71.00
8. Late Registration (1st class day through census date) 15.00
   Late Registration after census date 50.00
9. Make-up Examination 5.00
10. Music Private Instruction Fee 40.00
11. NET Admission Test (Required for admission into Associate Degree Nursing, Diagnostic Medical Sonography, Emergency Medical Services, Radiography, Respiratory Care and Vocational Nursing) 20.00
12. Net Test Fee for Fire Protection 20.00
13. Parking replacement sticker or additional vehicle 1.00
14. Parking Fines 5.00
15. Private Flight Instruction Fee 6,500.00-11,200.00
16. Professional Pilot Application Testing Fee 45.00
17. Returned Check 10.00/25.00
18. THEA fee (Required for ENGL 0370; READ 0370; and MATH 0191) 29.00
19. Vocational Nursing Testing Fee (Required for VNSG 1119 and VNSG 1332) . . 90.00

***Student Liability Insurance** is required for students enrolled in Alcohol and Drug Abuse Counseling 2366; Associate Degree Nursing clinical courses; Child Care and Development courses; Diagnostic Medical Sonography clinical courses; Emergency Medical Services clinical courses; Radiography clinical and practicum courses; Respiratory Care clinical courses; and Vocational Nursing clinical courses. This is subject to change due to insurance rate changes.

Installment Payment Plan (Fall and Spring Semesters Only)

Students may pay tuition and fees on an installment payment agreement. The student must execute the installment agreement in person at the Cashier's Office. A $20 processing fee is charged to set up this plan. At the time the student signs the agreement, 50% of all tuition and fees (including the processing fee) are due. The remaining balance is payable in two equal payments prior to the 6th class week and the 11th class week of the semester. If the payments are not paid by the due date, a $10 late fee will be charged. An additional $10.00 fee will be assessed to students' accounts with a balance 10 days after last payment due date on contract. Failure to have the balance completely paid may result in denial of credit for work completed for that semester.

Refund Policy

Please be aware that IN ALL CASES refunds are made according to the date that classes officially begin rather than the date the student enrolls. All tuition and fee refunds made to the student must be initiated by the student coming in person to the Office of Counseling and Advising. The date placed on the drop slip by the counselor shall determine the amount of refund and the date of withdrawal.

Refunds for installment agreements will first be applied to balances owed, including balances not yet due. Refunds will be the applicable percentage of the total tuition and refundable fees due for the semester, less any amount not paid. If a student has paid less than the amount due after applying the applicable refund percentage, the student is required to pay the balance. In accordance with Coordinating Board Rule 9.103, the students who officially drop or withdraw from the institution will have their tuition and refundable fees refunded according to the following schedules:

Refund Schedule for Complete Withdrawal

Regular Semester Length	Summer Sessions	3-Week Flexible Entry
100% - Prior to 1st class day	100% - Prior to 1st class day	100% - prior to 1st class day
70% - 1st Fifteen class days	70% - 1st Five class days	70% - 1st through 3rd class days
25% - 16th through 20th class days	25% - 6th and 7th class days	25% - 4th class day
NONE- After 20th class day	NONE - After 7th class day	
	NONE- After 4th class day	

Students who officially reduce course load will have their tuition and fees refunded according to the following schedules:

Refund Schedule for Reduction in Course Load

Regular Semester Length	Summer Sessions	3-Week Flexible Entry
100% - Prior to 1st class day	100% - Prior to 1st class day	100% - Prior to 1st class day
100% - 1st through 12th class days	100% - 1st through 4th class days	70% - 1st through 3rd class days
70% - 13th through 15th class days	70% - 5th Day	25% - 4th class day
25% - 16th through 20th class days	25% - 6th and 7th class days	
NONE- After 20th class day	NONE After 7th class day	

Pro Rata Refund Policy

In accordance with the Higher Education Amendments, Section 484B, students receiving any Title IV funds (Pell, Supplemental Educational Opportunity Grant, State Student Incentive Grant, FFEL Stafford Subsidized Student Loans, or FFEL Parent Loans for Undergraduate Students), who completely withdraw from school prior to the 60% point in the semester may owe a repayment of grant funds received. Part of the repayment may be owed directly to the Department of Education and the remainder to the school. Midland College is required by the Department of Education to evaluate each student who receives Title IV funds to determine if the student has earned all of the money received and calculate if the student owes. Students owing will be notified in writing. The student must then respond by repaying the funds owed or establishing a repayment agreement. Students not responding will no longer be able to receive any Title IV funds at any school until repayment is made.

Amounts repaid will apply to funds in the following order:

FFEL Subsidized Stafford Loan
FFEL Parent Loan for Undergraduate Students
Pell Grant
Supplemental Educational Opportunity Grant
Other Title IV aid

For additional information, contact the Financial Aid Office.

Tuition and fees paid directly to the institution by a sponsor, donor, or scholarship shall be refunded to the source rather than directly to the student.

The student's copy of the registration receipt must be presented at the time that a refund is requested. Please allow 30 days for refunds to be processed.

SERVICES FOR STUDENTS

Counseling/Advising

Midland College maintains a professionally staffed and equipped counseling center to help students in academic, personal and career counseling, financial aid, international student advising, and a testing service. During each semester, counselors are on duty in the Student Services Office.

A student may find the guidance and counseling services helpful in choosing or changing careers, selecting areas of study, gaining more independence, aiding with various personal problems, or learning to adopt a more mature attitude and conduct.

1. ACADEMIC advisement is provided regarding appropriate major and course selection, study habits, developmental work or transferring to other colleges or universities. Catalogs from other institutions and other information on transfer possibilities are available in the Guidance and Counseling Center.
2. CAREER advising is available to include interest assessment and personality style. Up-to-date information is kept to determine occupational details such as average wage, detailed job descriptions, employment projections, and usual educational/training requirements.
3. PERSONAL/SOCIAL ADJUSTMENT COUNSELING is provided on a confidential basis regarding issues of life adjustments which many college students experience.
4. TESTING center provides the facility and staff to administer GED, THEA, CLEP, ASE, SSAT and numerous other exams as requested.
5. REFERRAL is provided regarding expert assistance useful in such matters as financial aid, tutoring, job placement, medical emergencies, or personal adjustment problems.

Testing Program

Midland College administers an extensive testing program for interested students and residents of the community. The Testing Center provides the facility for staff to administer ACT, ASE, CLEP, GED, NET, SAT, SSAT, THEA, 16 PF and FAA Certification.

Texas Success Initiative

The Texas Legislature in June 2003 approved the Texas Success Initiative as a program designed to help students be successful in college. It includes assessment of students before entering a state-supported college or university, advisement and an individual plan designed to prepare students to meet college readiness skills.

TEXAS HIGHER EDUCATION ASSESSMENT (THEA)

The Texas Higher Education Assessment (THEA) is a requirement of all state supported colleges and universities to assess the academic skills of each entering undergraduate before enrollment of the student.

Midland College uses the following approved instruments: Texas Higher Education Assessment, (THEA) formerly TASP, and COMPASS.

The following standards are established to determine a student's readiness to enroll in freshman-level academic coursework at Midland College.

THEA - Reading 230+; Mathematics 230+ (270 or an appropriate Math placement test score is required for placement in college level Math courses); Writing 220+

COMPASS - Reading 81; Algebra 39 (71 or appropriate Math placement test score is required for placement in college level Math courses); Writing - Essay: 6 or Essay: 5 plus 59 objective

Both THEA and COMPASS are offered at the Midland College Testing Center located in the Scharbauer Student Services Building. Please call 432/685-4504 for testing dates. The cost is $29.00 for each testing session.

Exemptions/Exceptions

Students can be exempt from the requirements of THEA based on the following:

For a period of five (5) years from the date of testing, a student who is tested and performs at or above the following standards:

1. ACT (American College Test) - Composite score of 23 with a minimum of 19 on both the English and mathematics tests:
2. SAT (Scholastic Assessment Test) - a combined verbal and mathematics score of 1070 with a minimum of 500 on both the verbal and the mathematics tests.
3. For a period of three (3) years from the date of testing, a student who is tested and performs on the Texas Assessment of Academic Skills (TAAS) with a minimum scale score of 1770 on the writing test, a Texas Learning Index (TLI) of 86 on the mathematics test and 89 on the reading test.
4. A student who has graduated with an associate or baccalaureate degree from an institution of higher education.
5. A student who transfers to Midland College from a private or independent institution of higher education or an accredited out of state institution and who has satisfactorily completed college level course work as determined by Midland College.
6. A student who has previously attended any institution and has been determined to have met readiness standards by that institution.
7. A student who is enrolled in a certificate program of one year or less.
8. A student who is serving on active military duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States and has been serving for at least three years preceding enrollment. Documentation will be required.
9. A student who on or after August 1, 1990 was honorably discharged, retired, or released from active duty as a member of the armed forces of the United States or the Texas National Guard or service as a member of a reserve component of the armed forces of the United States. Documentation will be required.
10. Students who are classified as "Casual Students." A Casual Student is a non degree seeking student taking courses for personal enrichment only. Consult with a Midland College Counselor or adviser for course prerequisite and placement requirements. Casual Students are not eligible for Financial Aid.

Advisement and Plan for Academic Success

For each student who fails to meet the passing standards as described above, Midland College has established a program:

1. to advise the student and determine a plan regarding developmental education necessary to ensure the readiness of that student in performing freshman-level academic coursework.

Each plan for academic success shall:

1. be designed on an individual basis to provide the best developmental education opportunity for each student to succeed in or be ready for freshman-level academic coursework.

Placement Tests

If college readiness indicators are not available, Placement Tests are required for Math, English and Reading intensive courses.

Concurrent Student Placement - Midland College staff will work with high school counselors to ensure proper placement for all concurrent students. College and high school counseling staff will use the progression of the student through the appropriate high school course work to identify students' eligibility to take concurrent courses. High school students wishing to enroll in concurrent courses must pass all sections of the exit-level TAAS exam or appropriate TAKS score. In addition, many concurrent courses require that students pass one or more portions of the THEA/COMPASS exam. Some courses also require students to take a placement test in addition to portions of the THEA/COMPASS exam. Students should contact high school counselors or Midland College counselors for exam and placement information.

Advanced Standing Examination - Midland College administers College Level Examination Program (CLEP) examinations. Departmental advanced placement examinations may be prepared by the department chairman for use in cases where CLEP tests are not available. By this means, students may accelerate their college program. A student must have taken, or be taking an equal number of hours at Midland College before they advance place out of a course.

Credit for Non-traditional Learning - Midland College may grant credit toward a degree or certificate if an enrolled or previously enrolled credit student has achieved knowledge and skills from non-traditional sources. This knowledge may be demonstrated by: 1) written examination conducted by nationally recognized services or by a Midland College instructional department; 2) professional certification; 3) previous course work at an institutionally accredited vocational school or program; or 4) military training/education. Interested students should contact the Registrar's Office for detailed information. Procedures exist for the granting of credit in each category of nontraditional learning.

Occupational and Career Interest Surveys - The Career Occupational Preference System, Meyers-Briggs personality indicator, Self-Directed Search, Career Assessment Inventory, Texas C.A.R.E.S., and Choices-CT are available to help inventory interest for students in a variety of occupations.

High School Equivalency Examination - Midland College offers the General Educational Development (GED) examination for those who have not completed a formal high school education. The successful completion of this examination secures a certificate of high school equivalency and enables students to enter college and pursue a college degree.

Other Tests - Midland College also administers other tests that may be useful to people of the community.

Reading Development Placement

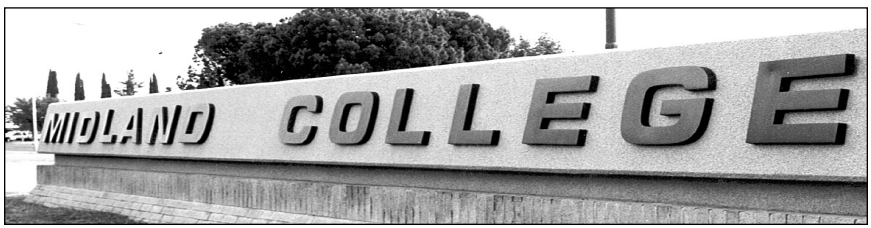
COURSE	THEA	COMPASS	PREREQUISITE
READ 0370 / READ 0170	200 or less	0 - 63	No prerequisite
READ 0371 / READ 0171	201 - 229	64 - 80	Specified placement score or "C" or greater in READ 0370 / READ 0170
READ 0180			"C" or greater in READ 0371 / READ 0171
Academically Restricted Courses	230+	81+	Specified placement score or "C" or greater in READ 0180

English Placement and Development Sequence

COURSE	THEA	COMPASS	PREREQUISITE
ENGL 0370 / ENGL 0170	204 or less	0 - 43 and writing score of 1 - 5	No prerequisite
ENGL 0371 / ENGL 0171	205 - 219	44 - 58 and writing score of 5	Specified placement score or "C" or greater in ENGL 0370/ ENGL 0371
ENGL 0280			"C" or greater in ENGL 0371/ ENGL 0171
ENGL 1301	220	59+ and writing score of 5 or writing score of 6	Specified placement score or "C" or greater in ENGL 2080

Math Placement

COURSE	THEA	COMPASS	PREREQUISITE
Math 0389	205 or less	Below 60 (Pre-Algebra)	
Math 0390	206	0390 placement	"C" or greater in Math 0389
Math 0192-0195	206	0390 placement	"C" or greater in Math 0389
Math 0391	230	0391 placement	"C" or greater in Math 0390 or "P" in all sections Math 0192-0195
Math 0196-0199	230	0391 placement	"C" or greater in Math 0390 or "P" in all sections Math 0192-0195
Math 1314	270	1314 placement	"C" or greater in Math 0391
Math 1316		1316 placement	"C" or greater in Math 1314
Math 1324	270	1324 placement	"C" or greater in Math 1314
Math 1325			"C" or greater in Math 1324
Math 1332	270	1314 placement	"C" or greater in Math 0391
Math 1333	270	1314 placement	
Math 1342	270	1314 placement	"B" or greater in Math 0391
Math 1348		1348 placement	"C" or greater in Math 1316
Math 1350			"C" or greater in Math 1314
Math 1351			"C" or greater in Math 1350
Math 2412			"C" or greater in Math 1314
Math 2413		2413 placement	"C" or greater in Math 1316
Math 2414			"C" or greater in Math 2413
Math 2415			"C" or greater in Math 2414
Math 2320			"C" or greater in Math 2415



Career and Job Placement

The purpose of the Midland College Job Placement Office is to provide our students and graduates with opportunities for full- and part-time employment. The office is designed to prepare, screen, and refer qualified applicants to job openings. These activities include resume preparation, seminars on interviewing skills, job search techniques, and on-site job interviews.

International Student Advising

Midland College has a counselor appointed to assist international students with problems concerning admission, registration, and adjustment to the college and community while attending college and transferring to other institutions. The international student advisor is located in the Student Services Office.

Student Support Services

The Student Support Services (SSS) is a federal TRIO program, funded by the U.S. Department of Education. The office provides opportunities for academic development, assists students with college requirements and serves to motivate students toward the successful completion of their postsecondary education. The goal of SSS is to increase the college retention and graduation rates of participants and facilitate the transition from one level of higher education to the next.

To be selected into SSS, students must first apply and be accepted to Midland College. U.S. citizens or legal residents who are receiving Pell grants are strongly encouraged to apply to the program. Citizens and resident students who are First Generation College (neither parent has a four year degree) or students who are disabled are also eligible to apply. Student Support Services is located in room 104 of the Scharbauer Student Center.

Career Center

The Career Center provides services for students that includes tutoring, career guidance, services for students with disabilities, and support for mature returning students and single parents to enable them to succeed at Midland College.

Services for Students with Disabilities

The Career Center provides services for students with disabilities. These services include assistance with the registration process, information on adaptive and assistive equipment, access and accommodation for programs and course work, and referral to other appropriate resources.

The Helen L. Greathouse Children’s Center

The Helen L. Greathouse Children's Center is accredited by the National Association for the Education of Young Children. The center exists for two purposes: service and teacher training. The service function is met by providing a high quality child care program for children ages 24 months to five years. The center hours of operation are 7:30 a.m. to 5:30 p.m. This service function is also met by providing a model early childhood education program for the children, families, and early childhood professionals of the Midland community. The Children’s Center serves as a training site for students to practice teaching young children. The overall goal of the Children’s Center is to help the children develop the competence to function in a changing world. Those interested in enrolling children in the center should contact the Director of the Children’s Center for scheduling and fee information.

Bookstore

The college bookstore is operated for the convenience of students and faculty. Textbooks and a variety of classroom supplies are available through the bookstore or you can shop online at www.midlandcollegebookstore.com.

Food Services

Hot and cold food and beverages may be obtained at the snack bar which is located in the Student Center. Breakfast and lunch are available to students, faculty, staff, and visitors.

Lost and Found

All articles which are found on campus should be turned in to the Midland College Police Department (MCPD) located by the game room in the Student Center. Likewise, those who have lost an article should check with MCPD.

Police Services

Your College Police Department is here to assist in any way possible, including unlocking vehicles when keys are locked inside, and providing jump starts when lights are left on or batteries are dead. The Police Department also provides security escorts as necessary or requested.

Sex Offenders are required by Federal and State law to register with the local police department. Information on sex offenders registered in Texas may be found at http://records.txdps.state.tx.us/soSearch/soSearch.cfm

The purpose of the Department is to provide as safe an environment as is possible for the students and employees of Midland College.

Student Handbook

A student's enrollment indicates acceptance of the standards of conduct that appear in the Student Handbook. Each student also has the responsibility to become familiar with the traffic and parking regulations found in the Handbook. Student Handbooks will be mailed to new Midland College students. Additionally, a copy of the Student Handbook may be obtained from the Office of Student Services or at registration.

Student Identification Cards

Photo ID cards are made in the Student Center. Full-time ID cards are used for library access and free admission to ball games, dances, and other school activities.

Publications

The students of the Communication Department at Midland College publish The Chaparral, a magazine reflecting campus life and a newspaper, *El Paisano*, that informs students of current events and developments at Midland College. Communication students also publish *Tableau* which promotes creative writing in the English Department.

Health Services and Emergency Medical Care

Midland College maintains first aid stations for the student body. In the event that medical care beyond that of first aid is needed, doctors at Midland Memorial Hospital are available for emergency service 24 hours per day, seven days per week. Individuals desiring information on insurance coverage may contact the Student Activities Director. For further information refer to the health services pamphlet.

EZ Rider Bus System

The campus is on Midland's EZ Rider public transportation system's Blue Route. The campus bus stop is on Chaparral Circle, just north of the bookstore. Citywide, buses operate from 6:15 a.m. to 6:15 p.m., Monday through Saturday. Buses stop on campus every 30 minutes, first traveling north and then returning south, and connect to other parts of the city. Maps are available in Student Services, and bus passes can be purchased from the cashier.

Murray Fasken Learning Resource Center (LRC)

The LRC is a repository of 57,484 cataloged books, 86,880 microforms, 320 videos, 154 CD-ROM programs and 368 magazine, journal and newspaper subscriptions which support the Midland College curriculum. Special subject collections include Health Sciences and Law. Videotapes, audio cassettes, compact discs, and other materials are available for research. The collection is primarily for students, faculty, and staff use. Materials are available for checkout through current ID cards. Library holdings are described by an online catalog enabling author, title, subject, and keyword searches. Labs in the LRC provide computers for word processing and computer-assisted instruction. The LRC's web site is extensive (***www.midland.edu/lrc)***. Included are links to numerous online databases and to highly recommended web sites for virtually all academic subjects.

Housing

Midland College offers modern Residence Halls providing an atmosphere for academic success, appropriate social activities and a safe, living environment for full-time students (enrolled in 12 or more semester credit hours). Students living in the MC residence halls are expected to behave responsibly, to promote respect for the rights of others, support appropriate study opportunities, and enjoy a positive college experience.

A full-time manager and several student resident assistants live in the residence hall providing supervision and direction for students. They are responsible for the daily operation of residence halls, providing leadership for educational and social programs, and offering individual assistance to students for both academic and personal issues.

Residence Hall Reservations:

- Submit a completed application for housing available from Student Services or online.
- Mail $100 room reservation deposit with completed application to Midland College Student Housing, 3600 N. Garfield, Midland, TX 79705.
- Room assignments are made on a first-come, first-serve basis after the application and deposit are received. Roommates will be assigned by college personnel with consideration given to roommate preferences.
- The room reservation is confirmed and assigned upon receipt of a signed Housing Contract. This contract is legal and binding for the full academic year and expires at the end of the spring semester.
- Room reservation deposits are refunded if written notification is received by July 1, for the fall semester and December 1, for the spring semester.
- After moving in, the reservation deposit becomes the property damage deposit.

Residence Hall Information:

- The Residence Halls will be available for move in at noon on the Saturday before the first day of class each semester. In the fall semester, students must vacate the residence hall within 24 hours of their last final. In the spring, it will close on Saturday at noon following the last day of class. The Residence Hall will be closed during Christmas break.
- Food Service will provide 19 meals per week: weekdays - 3 meals per day, weekends - 2 meals per day during posted hours of operation. Meal service will not be available Thanksgiving, Christmas, Spring Break and Easter holidays.
- Residence Hall occupants are subject to the rules and regulation, policies and procedures of the college.

Room and Meal Charges

All students who reside in residence halls are required to pay for both room and meal charges. If full payment is made at registration, a package plan at a price of $1,730 per semester is available. (Applicable sales tax will be charged on the meal charges, current sales tax rate is 8.25%. Current meal charges will be $830 of the $1,730.)

Any student moving into the residence hall after the twelfth class day will be charged for the remaining days in the semester at the following rates:

Room	$9 day	$63 week
Board	$9 day	$63 week

Students desiring to pay room and meal charges by installments may do so by request to and with approval of the business office; however, the cost will be slightly higher. Failure to meet installment obligation can result in late fees. Installments are due on or before the following dates:

- **Fall Semester** — **Residence Hall**
  September (date of registration) — $880 + applicable tax
  Second Installment (Prior to 6th class week) — $440
  Third Installment (Prior to 11th class week) — $440

- **Spring Semester**
  January (date of registration) — $880 + applicable tax
  Second Installment (Prior to 6th class week) — $440
  Third Installment (Prior to 11th class week) — $440

- **Meal tickets** for non-dorm students is $830 + state sales tax per semester. An installment can be made with $430 + applicable tax at registration and two installments of $215.

The costs reflected above cover 19 meals per week-three meals per day, Monday through Friday, two meals per day on Saturday and Sunday.

Prices do not reflect sales tax and are subject to change due to fluctuating food costs. Visa or MasterCard will be accepted.

Withdrawal from Residence Hall

The residence hall contract is an academic year agreement which expires at the end of the spring semester. Students moving out of the residence halls prior to the end of the spring semester will forfeit the room deposit. Room deposits less any damages will be returned to the student at the end of the academic year.

Room and meal charges will be refunded as follows:

Official withdrawal prior to the first official move-in day* 100%

Official withdrawal prior to the 3rd after official move-in week 75%

Official withdrawal prior to the 6th after official move-in week 50%

Official withdrawal prior to the 11th after official move-in week 25%

Official withdrawal during or after the 11th class week 0%

A student who is administratively withdrawn shall be refunded room and meal charges on a pro-rata basis. *Official move-in day occurs when resident completes any move-in paperwork.

STUDENT ACTIVITIES

An important part of Midland College is its varied student activities program including student events, concerts, lectures, educational programs, intramural competition, and clubs. These activities serve as a source of enrichment to the regular classroom experience.

Although events vary from year to year, there are fall mixers to welcome new students, after-game parties, bowling, casino night, dances, and noon-time entertainment. Student activity calendars listing various special and regular events are published each month. Most special events and programs are available at no cost to students. Contact a member of the Student Government Association or the Director of Student Activities for more information. Students are admitted to all athletic events and activities with a Midland College student ID.

Clubs - Student clubs provide activities in such areas as student government, spirit, religion, health sciences, and various majors. These clubs are sponsored by faculty or staff.

Student Government - Midland College's Student Government Association provides numerous leadership opportunities. The Student Government organizes and assists with extracurricular activities including homecoming, speakers, mixers, and fund raising. The MCSGA actively participates in regional and statewide student government association.

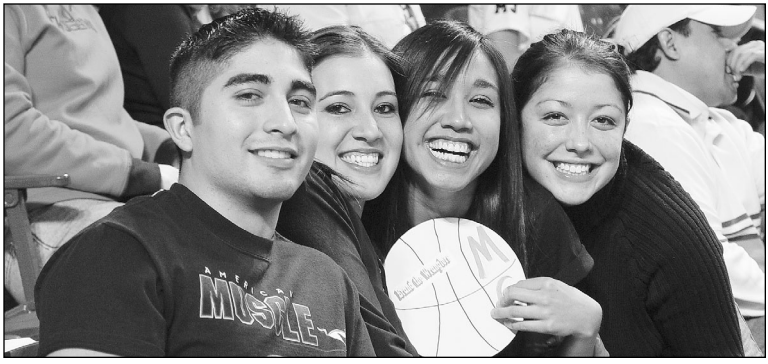
Athletics - Midland College is a member of the Western Junior College Athletic Conference (WJCAC) and Region V of the National Junior College Athletic Association. The varsity program at Midland College is highly competitive in men's basketball, women's basketball, volleyball, golf, baseball, and softball.

Intramurals - Intramural sports offer the opportunity for each student to participate in their favorite sports during leisure time or in competitive tournaments. Intramural activity includes flag football, basketball, volleyball, tennis, pool, golf, soccer, disc golf and ping pong. Member schools of the NIRSA annually hold tournaments in intramural sports. These activities afford our intramural athletes the opportunity to compete with other students from around the state. Students interested in intramural sports should contact the Intramural Director.

Cheerleaders - support athletic teams and represent Midland College at MISD school and community program on request. Tryouts are in April of each year. Contact the Cheer Sponsor for information.

Guest Speakers - The Davidson Distinguished Lecture Series presents, twice a year, speakers whose academic accomplishments, civic leadership, and/or public achievements will interest, enrich, and enlighten Midland students and citizens. Departments and other groups also schedule guest lecturers and speakers to promote student interest in current topics.

Performing Arts - The Phyllis and Bob Cowan Performing Arts Series presents, twice each year, cultural and artistic performances of international interest and scope to stimulate and inspire the Midland arts community which prides itself on a rich tradition of excellence in the performing arts.



CONTINUING EDUCATION

The Department of Continuing Education offers a large selection of non-credit courses and learning opportunities. Participants are most often individuals who are primarily committed to adolescent and adult responsibilities rather than to a traditional education program. The courses provided by this department are designed to meet specific learning needs, and their format and duration vary accordingly. Courses may be offered on- or off-campus to accommodate special needs and requests.

Avocational Courses - These courses are designed for personal enrichment and recreation in a wide range of topics and are developed to respond to needs and requests of the community.

College Classics - Classes are offered in response to expressed needs and interests for individuals age 50 and older.

Kids' College - A summer enrichment program is offered for students who have completed the first through sixth grades. Our program runs 16 days each summer divided into two sessions.

HEALTH SCIENCES CONTINUING EDUCATION

A multi-faceted program offering educational courses with clinical experiences for entry level health careers such as certified nurses aide and phlebotomy. In addition to course offerings, this program is approved as a provider by the Texas Nurses Association, Texas State Board of Social Work Examiners, Texas Board of Nursing Facility Administrators, Texas State Board of Licensed Professional Counselors, Texas Department of Health for EMS, National Athletic Trainers Association Board of Certification, and Texas Department of Human Services for Medication Aides, to provide educational activities to those licensed or certified in the State of Texas or nationally.

WORKFORCE EDUCATION

Workforce Training

Customized training opportunities are available for entities within the private and/or public sector through the Midland College Workforce Training Department. Diverse training opportunities include, but are not limited to: technical training, software training, supervisory and management training, and vocational training. The adaptable nature of this training program provides local business and industry a great tool to meet their staff development needs. For more information please call Barry Horseman at (432) 697-5863 ext. 3603.

Vocational/Technical Continuing Education

Vocational Continuing Education offers certification and mandatory licensure updates and seminars for the professionals. Classes have also been developed for students to enhance their occupational skills or retrain for other career opportunities.

Dual courses are those CREDIT courses that may be taken as NON-CREDIT. Most credit courses, subject to approval and space availability, fit into this category.

Midland College works with individuals, and groups to plan continuing education courses, seminars and forums.

Continuing Education Unit (CEU) Courses - Initial job skills, skills upgrading, instructional classes for career certifications and retraining are the main focus of these courses.

TRANSPORTATION TRAINING

This program provides individuals with the proper training in order to obtain a CDL License to operate a commercial motor vehicle safely within the rules and regulations set out by the Department of Transportation. Job placement assistance is available to qualified students who seek a career in the Transportation Industry. Customized courses in various transportation areas are available. The program is located at 2067 Commerce Drive, (432) 689-4900 or 1-800-474-7164.

PETROLEUM GEOTECHNOLOGY TRAINING CENTER

The Petroleum Geotechnology Training Center (PGTC) located at Midland College is a unique educational facility designed specifically for the local oil and gas industry. The PGTC offers Continuing Education Unit courses designed to help geoscientists and engineers integrate seismic, geologic and engineering information at Linux and PC based computer workstations. Dynamic interaction between the community, the college, and industry enables the PGTC to continue to provide high quality, leading edge workstation education and to meet the professional training needs of the community it serves. For more information please call (432) 686-4242 or (432) 685-4568.

PERMIAN BASIN ENERGY EDUCATION PROJECT

The Permian Basin Energy Education Project was developed to provide ongoing safety and occupational training for entry-level oil field service workers. A combination of classroom and hands-on equipment training is utilized. All courses are free of charge due to Department of Labor funding. Course offerings include Universal Oilfield Safety Training, Well Servicing, Hands on Applications Training, and Drilling. Future course offerings will include Roustabout Training and Transport Driver Training. Individuals who are unemployed, underemployed, or very recently employed in the oil field service industry are eligible to participate. The program is located at the Tgaar Tower, 24 Smith Road, Suite 300. For more information please call (432) 687-5564.

ADULT BASIC EDUCATION

The Department of Adult Basic Education (ABE) offers a variety of programs to help adults increase their academic and life coping skills. Students are provided with the opportunity to improve their skills in reading, math, science, social studies, language arts, civics, and English. There are no fees for any ABE program. Attendance of registration class is required before students enter the instructional classes. Individuals must be 17 years of age to enroll and provide proof of age. Current offerings are:

General Education Development (GED) - Preparation classes are available in the Midland College Learning Skills Center to prepare individuals to take the GED examination. GED preparation is also offered at additional sites within the Midland community, including the Midland College Cogdell Learning Center and Casa de Amigos.

English as a Second Language (ESL) - Classes provide students with the opportunity to improve their English speaking, reading, and writing skills. ESL classes are offered at different locations throughout the Midland community, including the Midland College Cogdell Learning Center and Casa de Amigos.

Multi-Use Computer Lab - Multi-level computer instruction assists students with the English language as well as provides instruction in general academics (reading, math, science, social studies, language arts).

Citizenship - Resident aliens are prepared for United States citizenship with individualized academic instruction. Level I and Level II classes are offered.

STUDENT RIGHTS, RESPONSIBILITIES AND DUE PROCESS

I. Students' Rights and Responsibilities

Students, employees and visitors at Midland College, by the nature of their citizenship and residence, have certain individual rights and freedoms established by the Constitution and the laws of the United States, the State of Texas and the respective communities where they live. The possession of the personal rights is neither increased nor diminished by reason of a person's association with Midland College.

A. Midland College recognizes and accepts the following rights and freedoms as being essential to the educational process:
   (a) freedoms of expression in the classroom consistent with commonly accepted standards of decency and respect for others;
   (b) freedom from improper, unfair, or capricious academic evaluation;
   (c) freedom from improper disclosure of personal belief or expression on the basis of classroom activities;
   (d) the right to have one's personal record kept in professional confidence;
   (e) freedom of association;
   (f) freedom of inquiry and expression consistent with commonly accepted rules governing libel, slander and good taste;
   (g) freedom of exercise in the rights and responsibilities of citizenship;
   (h) guarantee of procedural due process in disciplinary proceedings; and
   (i) right to distribute or post printed material in compliance with the college's posted policy.

B. Midland College expects employees, students, visitors and guests of the college to accept the following responsibilities:
   (a) compliance with and support of duly constituted civil authority;
   (b) respect for the rights of others and cooperation to insure that such rights are maintained, whether or not one agrees with the views of those exercising such rights;
   (c) maintenance of ethical and commonly accepted standards of decency and respect for others and stewardship of college resources while using electronic communication devices;
   (d) cooperation to insure that the will of the majority is implemented after due consideration, but not to include the suppression of the minority;
   (e) to exercise disagreement in a responsible manner and within the framework compatible with the orderly resolution of differences;
   (f) knowledge of and active support of college regulations.

C. Students with identified disabilities should report their need for accommodation to the Student Services Office. Students with grievances related to discrimination on the basis of a disability may contact the Student Services Office or follow the directions on the posted notices for grievances.

II. Student Conduct/Misconduct

Midland College has declared that the following actions constitute an interference with the lawful and orderly use of the college premises, facilities and activities to accomplish the objectives of the college. These actions are therefore strictly prohibited on the Midland College campus and other college property and facilities and during all college-sponsored activities wherever occurring:

A. Disrupting or obstructing or attempting to disrupt or obstruct, any lawful activity of the college, or violating H.B. 141, as enacted by the 61st Texas Legislature.

B. Interfering with, or attempting to interfere with, the lawful exercise of freedom of speech, freedom of movement, freedom of peaceable assembly, or other rights of individuals or groups.

C. Illegally possessing, using, selling, or being under the influence of dangerous drugs, narcotics or alcohol.
- The college prohibits possession and consumption of alcoholic beverages.
- The college strictly enforces the state law that prohibits the possession and consumption of alcohol by those under the age of 21.
- The college strictly prohibits attending classes while under the influence of alcohol.
- The college prohibits possession or use of controlled substances, i.e. drugs, in its residence halls or at any off campus college-sponsored event.
- The college strictly enforces the local, state, and federal laws which prohibit the sale of controlled substances on its campus.

D. Possessing or using firearms, weapons, or explosives, unless authorized by the college. A person commits an offense if he or she intentionally, knowingly, or recklessly possesses or goes with a firearm, illegal knife, club or prohibited weapon on the physical premises of a school or educational institution, any grounds or building on which activity sponsored by a school or educational institution is being conducted, or a passenger transportation vehicle of a school or educational institutional, whether the school or educational institution is public or private, unless pursuant to written regulations or written authorization of the Midland College Administration (Texas Penal Code 46.03). This prohibition includes, but is not limited to, fireworks of any kind, illegal knives, clubs and razors.

In addition, Midland College prohibits the same weapons from being brought onto any campus of the college.

Lockers and vehicles on any campus of Midland College may be inspected by school personnel if there is reasonable cause to believe that they contain weapons, drugs or other contraband items.

In the event a student possesses a license to carry a concealed handgun under state law, the possession of such weapons on any campus of the college is prohibited.

Only local, state and federal authorities are authorized to carry firearms on their person when on the campus of Midland College, either as visitor or a student.

E. Sexual Harassment is expressly prohibited and offenders are subject to disciplinary action.

Sexual Harassment may be defined as either unwelcome sexual advances, requests for sexual favors, and other expressive or physical conduct of a sexual nature, when:
- submission by a student to such conduct is explicitly or implicitly made a term or condition of status in a course, program, or activity; or
- submission to or rejection of such conduct is used as the basis for academic decisions affecting the student; or
- such conduct has the purpose or effect of substantially interfering with a student's academic performance; or
- such conduct, in intent or effect, creates an intimidating, hostile, or offensive environment for learning.

Students who perceive that they have been sexually harassed may address their questions or complaints to their appropriate guidance counselor, supervisor, Division Dean, or other administrator. In such cases, the Vice-President of Student Services should be contacted immediately for consultation. Resolution of the complaint will then be handled according to the usual procedures for grievances.

F. Advocating the overthrow by force or violence of any legally constituted governmental body, system, or any local, state, or federal law, or any rule, regulation or policy of the Board of Trustees and administrative officials of the college.

G. Engaging in physical assault, harassment, obscene, profane, reckless, tumultuous, destructive or unlawful course of conduct.
H. Hazing in all forms, as defined and prohibited in the Texas Penal Code Articles 1152, 1153, 1154, and 1155 and any addendum thereto.
I. Academic cheating or plagiarism; willfully submitting false information with the intent to deceive; forgery, alteration, or misuses of college documents or records.
J. Malfeasance in an elective or appointive office of any college endeavor.
K. Refusal to present an appropriate appearance in dress and grooming while participating in or attending a college activity. Students who dress so unconventionally or bizarrely that it causes disturbances, disrupts campus life, or calls undue attention to itself will be asked to conform to a more conventional form of dress. At Midland College, individual members of faculty and staff are given a considerable amount of discretion in determining what is appropriate for the educational activity under their responsibility. Whatever is clearly stated by those responsible as being appropriate or not appropriate will be the prevailing standard in that particular area of activity.
L. Refusing or failing to comply with lawful order of any college or public official acting in the performance of duties in the administration and enforcement of these policies.
M. Theft, vandalism, defacement or destruction of college or student property.
N. Failure to meet financial responsibilities to the institution promptly including, but not limited to, passing a worthless check in payment to the institution.
O. Failure to return, defacement of, or destruction of, college property which has been issued as educational equipment, such as, but not limited to, tools, cameras, recorders, musical instruments, etc.
P. Violation of established safety and health requirements in laboratory, shop or other educational settings.
Q. Violation of campus housing regulations.

III. Student Discipline

A. Any student violating policies and general rules on student rights, responsibilities, conduct and privacy shall be subject to immediate removal from any college premises, facilities, or activities. Such removal or exclusion shall not prejudice or interfere with subsequent disciplinary action by the college.

There are occasional exceptional situations where a student's physical or psychological condition is such that action needs to be taken to withdraw the student from the college. The action could occur, for instance, if the conditions were such that the student could not benefit from the educational program, was threatening to self and/or others; or was disruptive to others.

B. Complaints regarding student behavior may be originated by students, faculty, staff members, or citizens outside the college community. The Vice-President of Student Services or his or her designee will investigate any complaints and notify the student in writing of all charges, the name of the person lodging the charge, the disciplinary action, and the right to a hearing.

C. Disciplinary action may include:
(a) admonition and warning
(b) formal written warning
(c) fines
(d) loss of privileges
(e) formal disciplinary probation
(f) suspension
(g) dismissal

College imposed sanctions are additional to any action taken by law enforcement officials.

IV. Student Due Process

Midland College provides due process procedures for its students to assure that specific problems are addressed in a fair, reasonable, and timely manner. Students may seek review of decisions or redress of grievances related to their participation in college programs or activities including:

- disciplinary action
- assignment of a final course grade (see Grade Appeal Policy, page 61)
- denial of admission to, dismissal from, or denial of readmission to a limited access program
- any perceived discriminatory action based on race, color, age, natural origin, sex, handicap, marital status, religion, or any other condition prohibited by law

Students are encouraged to seek informal resolution of problems by discussing issues directly with the college employee involved and/or that individual's supervisor. In the event that informal discussions do not resolve disputed issues, a student may request a formal hearing. During a hearing, the decision in dispute and related circumstances will be reviewed, and the student will have an opportunity to present his or her viewpoint.

A. Hearing Procedures

1. A student seeking a formal hearing of a disputed decision should file a statement of grievance and written request for hearing with the Vice-President of Student Services within fifteen working days of the event in question. Such a request must describe the disputed act, the parties involved and the action requested.

2. The Vice-President of Student Services will assure that appropriate college personnel are informed, and a hearing will be scheduled within fifteen working days of the filing of a grievance. A due process facilitator will be appointed to conduct the hearing and provide information to all parties involved in the hearing process.

3. The hearing panel will consist of a balanced group including a member of the department or division involved, an individual outside the department or division involved, and a representative from the instructional area or the Student Services area, as appropriate. The student may present information and/or arrange, with permission of the facilitator, for others to present information. A campus resource person will be available if the student needs assistance in the hearing procedure. The Midland College employee involved in the dispute may do likewise. All materials to be considered in the hearing must be submitted to the facilitator 48 hours prior to the scheduled hearing. It is the policy of the college that legal counsel will not be involved in dispute resolution before all internal remedies have been exhausted.

4. The hearing panel may uphold, overturn or revise the disputed decision and the facilitator conducting the hearing will provide all involved parties a written statement of the panel's decision.

5. Actions which result from disputed decisions and which affect student status or participation in Midland College programs or activities will be deferred until after formal hearing unless otherwise directed by either the Vice-President of Instruction or the Vice-President of Student Services.

6. When either the Vice-President of Student Services or the Vice-President of Instruction has been directly involved in disputed action with a student, he or she shall designate a representative to serve in his or her stead during hearings or appeals.

B. Appeals

1. A student may appeal the action taken by the hearing panel. However, only procedural matters will be addressed in subsequent review.

2. A student seeking to appeal the decision of the hearing panel must file a written request with the Vice-President of Student Services within ten days of receipt of the hearing panel's decision. This request must state the grievance and requested action and will be forwarded to the appropriate Vice-President for review.

3. If a need for an appeal hearing is determined, the Vice- President of Student Services and the Vice-President of Instruction shall handle appeals in each other's areas of supervision including selecting balanced panels to hear such appeals and chairing appeal hearings.

4. The student will be given a decision regarding an appeal within ten working days of filing the request for appeal.

5. The President has the right to overturn any decision from a hearing or an appeal.

GRADE APPEAL POLICY

Students are strongly encouraged to first discuss their concerns directly with the involved faculty.

If the disputed issue is not resolved, the next step is an informal meeting with the appropriate academic dean or Midland College administrator. The appropriate dean is the direct supervisor of the involved faculty.

Once a final course grade has been filed with the Registrar, if the issue has not been resolved, the student may request a formal hearing. During the hearing, the student and the faculty member will have an opportunity to present their viewpoints and relevant materials. Actions which result from disputed decisions and which affect student status or participation in Midland College programs will be deferred until after the formal hearing unless otherwise directed by the Vice-President of Instruction.

A student seeking a formal hearing of a disputed action must submit a written notice to the appropriate Associate Vice-President of Instruction within fifteen business days of the beginning of the academic semester following the filing of the grade. The request must describe the disputed act, the parties involved, and the action requested.

The Associate Vice-President of Instruction will inform appropriate college personnel, including the Vice-President of Student Services, the Executive Director of Human Resources, and a campus facilitator, of the need for a hearing. The Vice-President of Student Services or their designee will provide the student with a list of approved campus resource persons to assist the student with the appeal procedure. Facilitators and student resource persons will be selected by the appropriate Associate Vice-President of Instruction and will receive training in grade appeal procedures and standards.

A hearing will be scheduled within fifteen business days of the student's written notice. The facilitator will schedule the hearing, receive information from the parties involved, and assemble a hearing panel and distribute relevant information to the panel members. Panel members will include a member of the division involved, an individual outside the division involved, and a representative from Student Services area.

The hearing panel may uphold or overturn the disputed grade and the facilitator will provide all involved parties a written statement of the panel's decision.

The President has the right to overturn any decision from a hearing or panel.

Typical Estimated Costs for Midland College (IN-DISTRICT)

Based on Full-Time (15 Hours) For Fall & Spring

	Living with Parent	Living in Apartment	Living in Residence Hall
Tuition/Fees	1,340	1,340	1,340
Books/Supplies	821	821	821
Room/Board	2,054	6,073	3,460
Transportation	1,255	1,255	1,255
Personal/Misc.	1,542	1,542	1,542
Total	**$7,012**	**$11,031**	**$8,418**

FINANCIAL AID

Financial Aid at Midland College is intended to help students and their families pay for the costs associated with obtaining a college education. Knowing that there is a limited amount of funds available and an ever increasing need for financial assistance, it is our stance that the primary source for funding an education rests with the students and their families. As students prepare for college they often discover that their own financial resources, including help from their parents, are not enough to meet the costs of the college they wish to attend. This discovery may cause them to postpone or abandon plans to attend college and can be very discouraging. Financial Aid in the form of grants or work study can help with the cost of a college education.

Financial aid programs were developed to give financially needy students more options. With financial assistance from state or federal governments, civic groups and even the colleges themselves, more and more students have found that they can afford to go to college and that they may be able to attend the college of their choice.

One source of financial aid often overlooked is the reduced tuition rate of a local public community or junior college. Due to the state funding and local taxing districts community or junior colleges are able to significantly reduce the costs of a college education. Students should consider the option of attending locally for the first year or two. If students and parents will save the difference in the tuition costs between a community college and a four-year school they may be able to pay for the next two years of tuition at the four-year school.

Eligibility for aid is determined in many ways depending on the type and amount of aid received. Need-based aid includes Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Texas Public Education Grant (TPEG) Student State Incentive Grant (SSIG), Toward Excellence Access and Success Grant (TEXAS) I and II, and Federal College Work Study (FCWS). The eligibility criteria for these aid programs is demonstrated financial need. This need is determined by completion of the Free Application for Federal Student Aid(FAFSA). The results of the application will produce a dollar amount that the families and students are reasonably expected to contribute toward their educational expenses. This amount is called the “Expected Family Contribution” or EFC. It is subtracted from the estimated cost of education determined by the school resulting in what is called demonstrated NEED. Students may receive aid up to this amount of need but may not exceed it with any and all types of aid.

To be eligible for federal programs, an applicant:

1. must be a U.S. citizen, permanent resident of the U.S., or citizen of certain former trust territories
2. enrolled as a regular student in an eligible program
3. must be making satisfactory academic progress
4. must sign the following statements: Statement of Educational Purpose, Statement of Updated Information, and Selective Service Registration.

All students receiving federal financial aid at Midland College must have a high school diploma or a GED. In addition, a student cannot receive financial aid from more than one school during the same semester.

Eligibility for various scholarships may be based upon a combination of academic achievement, financial need, and the wishes of the donor.

Students should apply for all types of aid as early as possible. Midland College has preference dates, which means that all needed forms or documents must be received prior to these dates to have aid available for payment of tuition and fees at registration.

Steps for Applying for Need-Based Financial Aid

1. Complete the application for federal aid each year after filling out federal income tax forms. Also, complete the Midland College application process.
2. Apply for all types of aid funded by Midland College by completing the Free Application for Federal Student Aid (FAFSA) and General Scholarship application by the deadlines.
3. Submit all required documents to the Financial Aid Office.
4. Check on the status of your application periodically. This process is a long one and can take several months to complete.

Need-Based Aid Award Procedure - Federal grants and work-study are awarded on a first come, first serve basis. In accordance with federal regulations, preference is given to applications which are submitted prior to the deadlines indicated.

Federal Aid Preference	Priority/Deadline Dates
Fall	June 1
Spring	September 1
Summer	February 15

The financial aid process is lengthy. If the priority deadlines are missed, funds may not be available in time for registration.

Satisfactory Academic Progress for Financial Assistance

Policy:

In order to receive Financial Aid a student must have a High School Diploma or GED, and documentation of such must be provided prior to enrollment. All federal financial aid recipients must maintain their eligibility to receive such assistance from the College by meeting the minimum satisfactory progress criteria. Enrollment status indicates the load level of a student (full-time = 12 or more hours per semester, 3/4 time = 9 to 11 hours per semester, 1/2 time = 6 to 8 hours per semester, and less than 1/2 time = 5 hours or below)

1. **Minimum GPA** - The minimum grade point averages that students must obtain are:
   a. the minimum cumulative grade point average is 2.0 or a “C” average (based on all past semesters)
   b. prior to receiving aid each student will be evaluated for cumulative 2.00 GPA
   c. scholarship and state grant recipients must also meet the individual program requirements if different from college policy.
2. **Minimum Hour Completion** - All federal aid applicants and or recipients must:
   a. complete at least 75% of the minimum number in the categories listed above for the hours for which they have been funded per semester for a total for the year
   b. prior to being awarded each student will be evaluated for the 75% completion of course work attempted
3. **Maximum Time Frames** - Students are expected to complete their degrees or educational objectives within a reasonable number of semesters.
   a. students may attempt a maximum of 93 hours to complete an associate degree
   b. the time limit applies to all students whether or not financial aid was received
   c. taking extra (non-degree) courses may exhaust financial aid eligibility prior to completion of degree

d. transfer work that is applied toward the student's program of study and posted to their transcript will be included

The above policies apply retroactively to all students. Exceptions will be made if the degree requires more hours than can be completed in the maximum time frame. Re-enrollment for a course in which a grade of A, B, C, D, or F has been earned is considered to be a repeated course. The student may be funded for a repeated course. If the student does repeat a course the new grade will be used to calculate GPA.

Consequences of not making progress:

Satisfactory Progress is evaluated once each year (at the end of the spring semester) except for the maximum time conditions and students who completely withdraw before 60% of the semester is over if they receive financial aid. Those students are placed on financial aid suspension immediately and must follow the "Removal From Suspension Procedures" below to regain eligibility. At the time of evaluation, if a student fails to maintain satisfactory progress, the student will be placed on financial aid **SUSPENSION**.

Students who are on financial aid SUSPENSION will no longer be eligible to receive any form of financial assistance at Midland College.

Procedure to follow for removal of suspension:

1. **STUDENT'S SUCCESSFUL COMPLETION OF COURSES**
   Students on financial aid suspension for reasons other than time may be removed from financial aid suspension if they receive academic advising and complete the appropriate number of hours to bring their progress up to the hours required and achieve a 2.0 grade point average for those hours.
2. **REQUEST A REVIEW BY DIRECTOR**
   Students on suspension who have mitigating circumstances may request a review of their suspension by submitting a letter requesting a review. They must provide the following:
   a. the circumstances which caused their suspension
   b. their plans to correct the circumstances
   c. any intended future enrollment plans
   d. a current copy of their academic transcript
   e. any other pertinent documentation

   Review letters should be addressed to the Director of Financial Aid. No action will be taken until a written request for review has been received.
3. **APPEAL TO THE FINANCIAL AID APPEALS COMMITTEE**
   Those students who are not removed from suspension by the Director after the summary review may make written appeal to the Midland College Financial Aid Appeals Committee. Written procedures are available in the Financial Aid Office. Exceptions to this policy may be made at the discretion of the Director of Financial Aid. Criteria that will influence the Financial Aid Director's decision may include but is not limited to the following:
   a. class attendance, completion of assignments, and substantiated academic progress in required courses
   b. unusual circumstances, such as extended medical confinement or a death in the family
   c. utilization of campus supportive services
   d. response to Financial Aid Office contacts

This policy statement supersedes all other policy statements on this subject.

Grants

Federal Pell Grant - Eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). The award amount (approx. $4,000 maximum) is determined by need and is set by the U.S. Department of Education.

Federal Supplemental Educational Opportunity Grant (SEOG) - Eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). The award amount is determined by need with a minimum of $100 per year and a maximum of $4,000 per year.

Texas Public Education Grant (TPEG) - Eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). The award amount is determined by need with a maximum of $1,500 per year.

Student State Incentive Grant (SSIG) - Eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). The award amount is determined by need with a minimum of $100 per year and a maximum of $2,500 per year.

Toward Excellence, Access, and Success (TEXAS) Grant Program - Among other criteria, eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). To qualify, a student must: be a Texas resident; graduate from a public or accredited private high school in Texas no earlier than fall 1998; apply no later than 16 months after high school graduation; complete the recommended or advanced high school curriculum or its equivalent; have financial need; enroll in at least 9 semester hours in an undergraduate or certificate program; not be convicted of a felony or a crime involving a controlled substance. The maximum award amount at Midland College is $1,270 per year.

Toward Excellence, Access, and Success (TEXAS) II Grant Program - Among other criteria, eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). To qualify, a student must: be a Texas Resident; have financial need; if applying for his/her first award, has a family contribution of no more than $2000; be enrolled at least ½ time in the first 30 hours (or their equivalent) in an associate's degree or certificate program at a public two-year institution of higher education; and has not been convicted of a felony or a crime involving a controlled substance. The maximum award amount at Midland College is $1,270 per year.

Student Employment

Federal College Work Study Program - Eligibility is determined by completion of the Free Application for Federal Student Aid (FAFSA). Students on this program work an average of 15 hours per week and are paid by the federal program and the college. The amount of award is based upon the minimum wage of $5.15 per hour with a maximum of 19 hours of work per week or $1,200 a semester.

Institutional Part-time Student Employment - Students on this program also work on campus an average of 19 hours per week. Funds for this program come from institutional sources.

Loans

Midland College now participates in the Federal Family Education Loan Program (FFELP). We offer the following loans only: Subsidized Stafford Loans and Plus (Parent) Loans

To apply for a student loan, you must meet the following criteria:

1. In addition to having filled out a FAFSA (Free Application for Federal Student Aid), you must have a completed file in the financial aid office. A complete file is defined as all complete and acceptable documents being submitted and fully processed.
2. You must have completed at least 12 semester hours at Midland College within the preceding two long semesters (excluding interim and summer terms) with an overall GPA of 2.0 (this includes transfer students).
3. Transfer students must submit all academic transcripts to the Financial Aid Office from all prior schools attended, and must have completed 75% of all hours attempted at all schools.
4. Student cannot have an existing loan balance over $6125.
5. You must be enrolled in a minimum 6 semester hours.
6. You must complete both an Entrance and Exit Counseling session.
7. Your Spring loan (2nd Disbursement) will be cancelled if you drop below 6 semester hours in the Fall of the year.
8. Your loan application process must be complete by the 12th class (Census) day. Any appeals to this policy should be directed to the Loan Coordinator.

To be awarded a student loan, you must meet all eligibility guidelines established by the Department of Education. If you are interested in a student loan, contact the Loan Coordinator, in the Financial Aid Office at 685-4693 to set up an appointment to determine if you are eligible for a student loan. You will then be required to attend an Entrance Counseling session before your application will be processed.

Scholarships

The primary purpose of the scholarship program at Midland College is to provide financial assistance to students who, without aid, would be unable to attend college. In addition, Midland College seeks to:

1. attract and retain students with outstanding intellectual, creative, and leadership abilities;
2. develop a student body with socio-cultural, economic, geographic, and ideological diversity; and
3. develop a student body committed to quality education in the liberal arts tradition.

Consequently, Midland College offers academic and performance scholarships, as well as need based scholarships, both endowed and undesignated, that recognize excellence. Scholarship awards may be based upon merit, interest, need and ability. Generally, only full-time students carrying at least 12 hours are eligible to apply. However, special situations such as scheduling conflicts may allow scholarship recipients to enroll on a part-time basis.

A student must be officially accepted for enrollment at Midland College before a commitment of financial aid will be made.

Normally, scholarships are awarded for one year. Students are eligible to reapply provided that they continue to meet necessary academic standards and adhere to the required enrollment status. In most cases, one-half of the yearly scholarship is awarded for the fall semester and the remaining half for the spring semester. Scholarships are gifts and do not have to be repaid. Unless specified in the scholarship agreement, no scholarship aid shall be given for audited courses or for workshop participation.

Fasken Top 5 Percent: Applicants must be in the top 5 percent of their graduation class in high schools outside of Midland County. Applications are made through the high school or the Midland College Financial Aid Office after February 1. The award will not exceed tuition, fees, and books to a maximum of $750 per semester.

Legacy Scholarship Program: Applicants must have a high school GPA of 2.75 and be a graduate of a Midland County high school, and complete 40 hours of community service at an approved agency. Applications will be available in the high school counselor's office. The scholarship amount is the amount of tuition with a maximum of $500 for the fall and spring semesters only. Students must be enrolled in at least six semester hours. In order to renew the scholarship, the student must remain in good standing, reapply, and complete 40 more hours of community service.

Abell-Hanger GED: Applicants must have received their GED within the last twelve months through the Midland College Testing Center. Applications must be available at the Midland College Financial Aid Office. The scholarship amount in the amount of tuition with a maximum of $625 for the fall and spring semesters only. Students must be enrolled in at least six semester hours. The scholarship is renewable for three additional semesters, provided that the student remains in good standing.and reapplies for the scholarship for the Sophomore year.

Abell-Hanger ECS: Must be an Abell-Hanger Special, GED or SIP scholarship recipient (in good standing) at Midland College. Student must have 3.0 GPA or higher. Student must provide 25 hours of community service each semester and be a citizen of the State of Texas and the United States. The amount of scholarship is $6,250 per semester and is renewable for two years or four semesters if qualifications are met. Student must be enrolled in at least 12 credit hours per semester and have financial need. Deadline for application is April 1st.

Athletic Scholarships: These scholarships are governed by the conference rules and are awarded by the coaches and based upon athletic ability with the necessary academic criteria in order. Applications are available from the Midland College Athletic Department. The amount of scholarships will vary.

The General Scholarships: Midland College General Scholarships are funded by many sources. The application deadlines are: Fall 2004 - April 1; Spring 2005 - October 1. Generally a grade point average of 2.0 or greater is required; however, some have higher standards. Exceptions may be made on an individual basis at the discretion of the Director of Financial Aid.

Veterans Benefits: Students eligible for veteran benefits should contact the Veterans Coordinator in the Midland College Registrar's Office.

Other State Aid Programs

Competitive Scholarship Policy: Competitive scholarships pertain to certain students who, when receiving competitive scholarships will pay out-of-district tuition rates who would normally pay non-resident tuition rates.

A Competitive Scholarship is defined as a "scholarship totaling $1,000.00 or more for the Academic Year, which both residents and non-residents applicants will be in competition to receive." Competitive scholarships may be awarded on the basis of either Academic Potential or Performance which is determined by the nature and scope of the scholarship for which the award will be made. The scholarship committee makeup will depend upon which department has responsibility for the selection of recipients of the particular scholarship. For example, Athletic scholarship selections will be made by the appropriate Athletic Department. Journalism scholarships will be made by the Journalism Department. General scholarship recipients will be selected by the Financial Aid Scholarship Committee and so on. The factors to be used in the selection of recipients will depend upon the individual scholarship requirements. For example, Basketball scholarships may be primarily performance-based when Journalism scholarships may be based primarily upon academic potential.

An Academic Year for purposes of Competitive Scholarships is defined to be the Fall Semester through Summer II Session of each school year. The Fall semester usually begins in late August or early September and the Summer II session usually ends in August of the following year.

Hazelwood Act: Texas veterans who were residents, joined the military in Texas, and are now residents may be eligible for an exemption of tuition and fees. The Hazelwood Exemption will cover no more than 150 cumulative semester hours. Applicants must provide a DD214 or discharge papers and must complete a short application. A new application must be completed each academic year. If a student uses their Hazelwood Exemption at a school other than Midland College, a Hazelwood transcript will be requested.

Valedictory Scholarship: The highest ranking graduate from any accredited high school in Texas is eligible for exemption from tuition for the first two long semesters following graduation. Certification from the Texas Education Agency is required.

Early High School Graduation Scholarship Program: The Exemption program provides a $1000 exemption from the payment of tuition for students that have completed the requirements of high school graduation (grades 9-12) in no more than 36 continuous months. The student must have attended a public high school in Texas only, and must be a Texas resident. To apply, the student's high school counselor must submit documentation to the Texas Higher Education Coordinating Board.

AFDC/TANF Recipient Exemption: The Exemption program provides a tuition and fee exemption for students that have received or been on AFDC/TANF for at least six months of their senior year in high school. The student must be under 22 years old and start using the exemption within 12 months of their high school graduation. Students must apply through the Department of Human Services.

Blind/Deaf Students Exemption: Students that are legally blind or deaf may be exempted from paying tuition and all fees. Students must apply through Texas Rehabilitation Commission.

Foster Care Students Exemption: Students that have been in foster care or other residential care under the conservatorship of the Texas Department of Protective and Regulatory Services on or after the day preceding the student's 18th birthday, the day of the student's 14th birthday, if the student was also eligible for adoption on or after that day; or the day the student graduated from high school or received the equivalent of a high school degree, are eligible to receive a tuition and fee exemption. The student must enroll within 3 years of the earliest of the following dates: the date the student was discharged from foster or other residential care, graduated from high school or received the equivalency degree, or the student's 21st birthday.

Senior Citizens Exemption: Senior Citizens 65 or older may be exempt from paying course-related fees. To receive the exemption the student must present a valid picture id and proof of birth date to the Midland College Financial Aid Office.

Fire Fighter Exemption: Students employed as fire fighters are exempt from the payment of tuition and laboratory fees for courses offered as a part of a fire science curriculum. To apply, students must contact the Midland Fire Protection Department and submit documentation to the Midland College Financial Aid Office.

Texas National Guard Tuition Assistance Program: Certain members of the Texas Army or Air National Guard and Texas State Guard may be eligible to receive a tuition exemption. To apply, students should contact the Education Services Office at Camp Mabry: http//www/agd.state.tex.us/education/.

Educational Aides Exemption: Students that are Certified Educational Aides may be eligible for a tuition and mandatory fee exemption. Eligibility is based on the students current Free Application for Federal Student Aid or the previous years tax return. In addition, student must meet Midland Colleges criteria for satisfactory academic progress. The student must then apply through their employing school district.

Tuition Rebate Program: The Texas Education Code authorizes tuition rebates for students who complete baccalaureate degrees with no more than 3 credits in excess of those required for their degrees. Students interested in this program should access the Texas Higher Education Coordinating Board WEB site at: www.thecb.state.tx.us or they should contact the financial aid office at the four-year state institution they plan to attend. Midland College does not offer this program because we do not offer a bachelor degree.

STUDENT ACADEMIC INFORMATION

Students are responsible for knowing their course grades and scholastic status. Advisors and counselors are available at all times to help students with academic questions especially those concerned with unsatisfactory work.

Student Classification and Load

Students with less than 30 semester hours of credit are classified as freshmen. Students with 30-59 hours of credit are classified as sophomores.

The normal student load during a regular semester is 12 to 15 hours with a maximum of 19 hours. Maximum load during the summer session is seven hours for each six-week term. Appeals for an overload should be directed to the Vice President of Instruction or a designee.

The following guide is offered to help evaluate the number of hours a working student should try to complete in one semester.

Hours worked per week	Suggested Semester Hours
40	3 - 6
30	9 - 12
20	12 - 15
15	15 - 17

Scholastic Standards

Student retention is essential to the Midland College mission, and every effort is made to promote student success. Each student's scholastic standing is dependent upon his/her scholastic performance and is evaluated in relation to the minimum scholastic standard each regular semester. The standard is achievement of a 2.0 grade point average **and completion of at least half of the semester hours attempted.** A student is in good scholastic standing if he/she has no previous academic record at Midland College or has met the minimum scholastic standard.

A student who falls below the minimum scholastic standard will be placed on scholastic probation and will be allowed to enroll for a maximum of twelve semester credit hours in the next regular semester. A student who fails to meet the minimum scholastic standard for two consecutive regular semesters will be placed on scholastic enrollment restriction and will not be allowed to enroll for more than two courses in a regular semester. To remove the enrollment restriction, a student must complete six semester credit hours during a regular semester or two consecutive summer sessions with a 3.00 grade point average. This average must be achieved without dropping any classes after the semester census date.

Upon student request, a student's counselor or faculty advisor may grant an exemption to the enrollment limits resulting from scholastic probation or scholastic enrollment restriction. If a student's request for exemption is denied, he/she may appeal this decision in writing to the Vice President of Instruction. Subsequent appeals may be pursued according to student rights and due process procedures.

A student will be notified when placed on scholastic probation or scholastic enrollment restriction.

A student will not be placed on scholastic probation or enrollment restriction as a result of scholastic performance during summer sessions. However, scholastic performance during summer sessions may be used to remove scholastic probation or scholastic enrollment restriction. Only semester credit hours and grade points earned at Midland College are used for calculations of scholastic standing.

Honors Program

The Midland College Honors Program provides an enhanced, creative, and supportive learning environment and special recognition for talented students. The curriculum includes interdisciplinary Humanities courses, special Honors sections, and independent Honors contracts in regular classes. These opportunities provide a flexible and individualized program designed to develop the special abilities and interests of the participants. Graduation as a "Midland College Scholar" is possible with 12 semester hours of Honors credit. Other students in the program, but with fewer credits, will receive "Honors" designation on their transcripts. For further information and application forms, contact the Honors Program office,141 AFA, 685-4640, or Dr. Donna Thompson or Dr. William Morris.

Concurrent Enrollment

Midland College has entered into agreements with the Midland Independent School District, the Greenwood Independent School District and Trinity School allowing high school students to earn both high school and college credit for selected courses. Students at Midland High School, Robert E. Lee High School, Greenwood High School and Trinity School may participate in this program. For more information, students should contact their high school counselor. Similar programs exist at out-of-district sites.

Tech Prep Program

The Tech Prep Program is a sequence of study beginning in high school and continuing through college. This cooperative venture between Midland College and several area independent school districts allows students to begin learning technical skills in high school that will eventually lead to employment in high-demand career areas. Students should contact high school counselors or the Associate Vice-President for Instruction, Occupational/ Technical Programs to obtain more information.

Class Attendance, Withdrawals, and Incomplete Contracts

Absences: Students cannot be successful without regular class attendance, and it is their responsibility to know the policies and procedures associated with absences:

1. Three consecutive classroom hours of unexcused absences or a total of six classroom hours of unexcused absences as reported by the instructor may result in a student being dropped from the course. Midland College reserves the right to deal at anytime with individual cases of non-attendance.
2. In such cases where each class is longer than one hour in length, a proportionately less number of absences is allowable.
3. In the case of excused absences, it is the obligation of the student to notify the instructor as soon as practical and make up all missed work.

Excused Absences:

1. When a student represents Midland College in an event, it is the student's responsibility to initiate the making up of missed work prior to making the trip.
2. If severe weather is perceived to cause hazardous driving conditions, the student should initiate the making up of missed work.
3. It is the responsibility of the instructor to determine whether absences for other reasons are excused.

Student Withdrawals:

1. In the event that a student is not dropped from the class for non-attendance and to avoid receiving a grade of "F", it is the responsibility of the student to complete a withdrawal form provided by the counselors in the Student Services Office.
2. Withdrawals also can be handled by mail. Students who receive "Warning" letters may complete the drop request portion of the letter and return it to the Office of Student Services. In such cases where the student has moved unexpectedly, a letter stating the desire to withdraw will be accepted. Withdrawals may not be made by telephone.

3. Students who withdrew and have outstanding debts to the Library, Financial Aid Office, Business Office, etc. will not be given clearance to re-enroll until these debts are paid.
4. The last day for withdrawal will be the 12th week of a long semester and the 4th week of a summer term.
5. In such cases where the student contracts for an Incomplete "I" rather than a "W", he/she must make up the work within the specified period of time on the contract or the grade will automatically become an "F".

Incomplete Grade. A student who does satisfactory work in a course but does not finish due to extenuating circumstances, e.g. major illness, family tragedy, etc., may be eligible to receive an Incomplete ("I"). An "I" grade is given after the student has had a conference with the instructor and an Incomplete Contract has been completed and signed. The contract states the conditions that must be fulfilled and the time permitted for the work to be completed which must be no later than the end of the next regular semester. After the work is completed or the time expired, a final grade will be assigned. At this time, the instructor must submit a final grade. If a final grade is not submitted, a grade of F will be assigned.

In exceptional cases, the deadline may be extended. An incomplete may only be extended once. An extension should only be granted after a conference between the student, faculty member, and the dean and must have final approval of the dean. Appeals may be pursued according to student rights and due process procedures.

Grades, Honor Roll, and Graduation

A grade is assigned for each credit course which a student completes, and a passing grade may be earned only if the student is enrolled for the duration of the course. The instructor of record determines all grades for a course. The method of determining a grade is included in the syllabus that is presented to students at the beginning of the course. Grade reports are mailed to students at the close of each semester or term.

Grades or transcript notations and their corresponding rating values are as follows:

Grade	Rating	Transcript or GPA Value
A	Excellent	4 grade points per semester hour
B	Outstanding	3 grade points per semester hour
C	Average	2 grade points per semester hour
D	Passing	1 grade point per semester hour
P	Satisfactory	0 grade points per semester hour
F	Unsatisfactory	0 grade points per semester hour
I	Incomplete	Not used in either the semester or cumulative GPA
W	Withdrew Passing	Not used in either the semester or cumulative GPA
AU	Audit	Not used in either the semester or cumulative GPA
CR	Credit By Exam	Not used in either the semester or cumulative GPA
N	No Grade Reported	Not used in either the semester or cumulative GPA
*	Repeated Course	Grade points assigned by the letter grade - used in semester and cumulative GPA
( )	Course Repeated	Grade points assigned by the letter grade - used in semester GPA only not in the cumulative GPA
[ ]	Remedial Course	Grade points assigned by the letter grade - used in semester GPA only not in the cumulative GPA
@	(After Grade) Articulated Course	Not used in either the semester or cumulative GPA
H	(After Grade) Honors Designation	Honors course - grade points assigned by the letter grade - used in semester and cumulative GPA

The grade of "P" applies to the pass or fail option and is available for designated courses only.

A semester hour is the standard unit of measurement of college work. Semester hours are assigned to courses based on instructional hours per course in lecture, laboratory and/or external learning experience as approved by the Texas Higher Education Coordinating Board.

Grade point averages are computed by dividing the total number of grade points accumulated by the total number of semester hours attempted. Grades of "W" are not included in calculations of grade averages, and incomplete grades are not included until the final grades have been recorded.

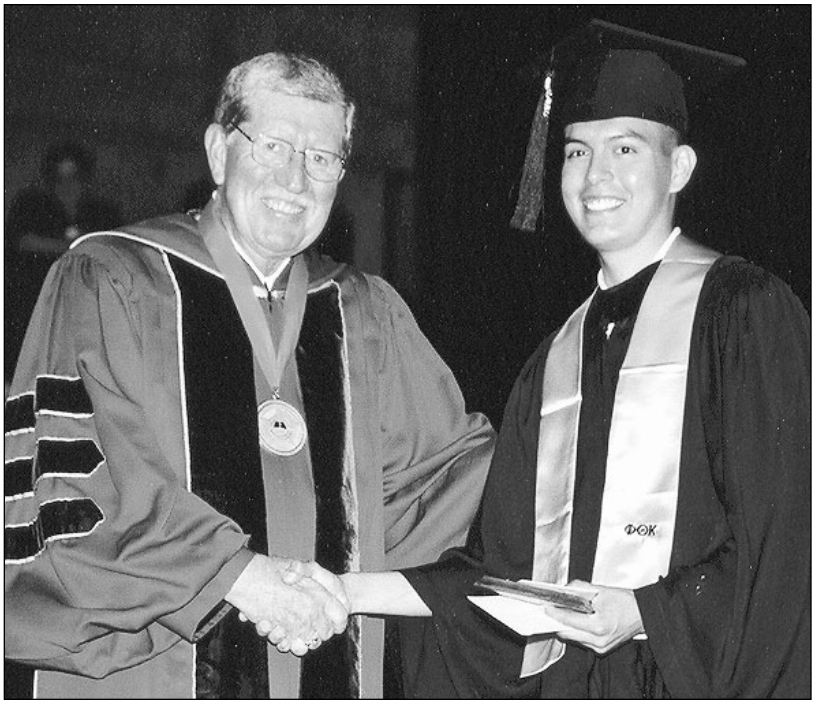
Honor Roll - The honor roll is published after the fall and spring semesters. The purpose of the honor roll is to honor full-time students, that is, those who have enrolled in and completed twelve or more semester hours of college level course work and whose academic achievements are worthy of recognition. Students earning an average of 4.00 will be included in the President's List; those with an average from 3.50 to 3.99 will be included in the Dean's List.

Transcript of College Record - The transcript of college work is an official copy of the student's permanent record in the computer bearing the college seal and the signature of the Registrar. Copies of a student's transcript are available upon written request from the Office of the Registrar.

Graduation/Degree Posting - Each Spring, Midland College holds a Commencement Program to recognize those students who have completed degree and certificate programs during the course of the year. The deadline for filing for graduation is posted in the Spring Semester schedule of classes and all students planning to receive a certificate or degree should complete an Intent to Graduate available in the Registrar's Office.

Degrees and certificates are posted to transcripts only after the student has completed all requirements needed for such a degree or certificate. Transcript postings are made at the end of the Spring, Summer II and Fall semesters.

Graduation with Honors or High Honors will be calculated by the Midland College Registrar using the following criteria: The GPA will be determined by using only Midland College courses, and for the printed graduation program, the calculation will be made only on those courses that have been completed through the end of the fall semester prior to spring graduation. For posting to the transcript, all Midland College courses will be used to determine Honors status.



President, Dr. David Daniel, congratulating an MC graduate

TRANSFER INFORMATION

Transfer to Midland College

Midland College accepts college-level courses earned from accredited colleges and universities for degree application provided they are equivalent to the appropriate Midland College courses and a grade of “C” or better was earned in each course. A grade of “D” will be accepted only for non-major courses. Questions regarding the transferability of lower-division courses from other institutions into Midland College certificate and degree plans should be taken directly to the dean responsible for the field of study or program.

Transfer Students - Transfer students are required to provide copies of all transcripts from every college or university previously attended. As transcripts from accredited colleges and universities are received, they are evaluated in the Registrar’s Office. A copy of that evaluation is sent to the student at the address recorded in the student files.

Students are advised that if transcripts from previous colleges and universities are not received within the student’s first semester of attendance, it may jeopardize continued enrollment until the transcripts are received.

Reverse Transfer Degree Program - Graduates from an accredited college or university holding a baccalaureate degree may receive an Associate in Applied Science degree from Midland College upon successful completion of thirty (30) semester hours of courses within a technical specialty area and any leveling courses as determined by the appropriate dean. Students interested in the program should consult with a counselor in Student Services.

Non-traditional Education - Students may request credit for non- traditional education. Determination of the amount of acceptable credit follows a carefully monitored process and begins with a visit to an appropriate faculty member, Dean, or the Registrar. The maximum credit to be awarded is forty (40) semester credit hours. The student must meet THEA requirements before the credit is awarded. Texas law limits the amount of credit for non-traditional learning that may be awarded for courses in American History and Political Science. A maximum of three hours in American History and three hours in Political Science is permitted.

Transfer to Other Colleges

Transfer Procedures - Students planning to transfer to another college after attending Midland College should contact a counselor as soon as possible. The counselor will help prepare a list of courses to be taken at Midland College designed to transfer to that degree and school. Students who have attended Midland College should have no difficulty in transferring credits at full value to a senior college or university if the following steps are completed:

1. Students should select a major field of study and a senior college or university which offers a bachelor’s degree in that field. A Midland College counselor or advisor will help students select Midland College courses corresponding to those they would take at the senior college or university.
2. Students should write to the admissions office of the senior college or university for a copy of its current catalog. Students should check with the senior college or university regarding admission requirements and transfer regulations.
3. Early in their last semester at Midland College, students should apply for admission to a senior college or university and ask the Registrar to send an official transcript.

Transfer Appeal Process - The following presents procedures for the resolution of disputes involving the transfer of lower-division courses from Midland College to other public institutions in Texas.

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied. A receiving institution shall also provide written notice of the reasons for denying credit for a particular course or set of courses at the request of the sending institution.

2. A student who receives notice as specified may dispute the denial of credit by contacting a designated official at either the sending or receiving institution.
3. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Texas Higher Education Coordinating Board rules and guidelines.
4. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution that denies the course credit for transfer shall notify the Commissioner of Higher Education of its denial and the reasons for the denial.
5. The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.
6. The Higher Education Coordinating Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the Commissioner's designee.
7. If a receiving institution has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, it should first contact the sending institution and attempt to resolve the problem. In the event that the two institutions are unable to come to a satisfactory resolution, the receiving institution may notify the Commissioner of Higher Education, who may investigate the course. If its quality is found to be unacceptable, the Higher Education Coordinating Board may discontinue funding for the course.

DEGREE INFORMATION

The Core Curriculum

The requirements for degrees are based on guidelines established by the Southern Association of Colleges and Schools and the Texas Higher Education Coordinating Board. Degree programs contain a basic core of general education courses reflecting not only courses taken but also learning as a lifetime endeavor. Included are logical thought and critical thinking. Students study mathematics and sciences, the arts and philosophy, and human behavior and social interaction. For some degrees, there are additional requirements in Communications and Physical Activity.

Core Requirements

To determine the degree sought, first consult the Degree Plan and Course Descriptions section beginning on page 80. Core requirements for your specific degree are outlined below.

Core Area	AAS, AAGS, and ASGS Degrees	AA and AS Degrees
Mathematics and Natural Sciences	Minimum of 3 sch*	3 sch* Mathematics
		8 sch* Natural Sciences
Visual and Performing Arts and Humanities	Minimum of 3 sch*	3 sch* Visual and Performing Arts
		3 sch* Humanities
Social and Behavioral Sciences	Minimum of 3 sch*	6 sch* United States History (3 sch* may be History of Texas)
		6 sch* Federal and State Government I, II
		3 sch* other Social Sciences
Communications	Competency in reading, writing and speaking - *see degree plan*	6 sch* ENGL and 3 sch* SPCH
Physical Activity	*see degree plan*	1 sch* Physical Activity
Total Required	Total of 15 sch* selected from Approved Core Courses	42 sch*

* sch = semester credit hours

See APPROVED CORE COURSES on next page.

Approved Core Courses

Courses are to be selected from the list below.
For the semester credit hours required, refer to the previous page.

MATHEMATICS AND NATURAL SCIENCES

Mathematics: MATH 1314, MATH 1316, MATH 1324, MATH 1332, MATH 1333, MATH 1342, MATH 1348, MATH 2412, MATH 2413, MATH 2414, MATH 2415

Natural Sciences: BIOL 1406, BIOL 1407, BIOL 1408, BIOL 1409, BIOL 1411, BIOL 1413, BIOL 1424, BIOL 2401, BIOL 2402, BIOL 2421, CHEM 1405, CHEM 1411, CHEM 1412, GEOL 1403, GEOL 1404, GEOL 1405, PHYS 1401, PHYS 1402, PHYS 1415, PHYS 1417, PHYS 2425, PHYS 2426

VISUAL AND PERFORMING ARTS AND HUMANITIES

Visual and Performing Arts: ARTS 1301, ARTS 1303, ARTS 1304, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2366, MUSI 1306, MUSI 1308, MUSI 1309, MUSI 1310

Humanities: HUMA 1301, HUMA 1302, PHIL 1301, PHIL 2303, PHIL 2306, ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, ENGL 2342, ENGL 2343, FREN 2311, FREN 2312, GERM 2311, GERM 2312, LATI 2311, LATI 2312, SPAN 2311, SPAN 2312

SOCIAL AND BEHAVIORAL SCIENCES

U.S. History: HIST 1301, HIST 1302, HIST 2301

Government/Political Science: GOVT 2301, GOVT 2302

Other Social/Behavioral Sciences: ANTH 2301, ANTH 2302, ANTH 2351, HIST 2321, HIST 2322, ECON 2301, ECON 2302, GEOG 1303, PSYC 2301, SOCI 1301, SOCI 1306

COMMUNICATIONS

ENGL 1301, ENGL 1302, SPCH 1311, SPCH 1315, SPCH 1318, SPCH 1321

PHYSICAL ACTIVITY

KINE 1100, KINE 1101, KINE 1102, KINE 1103, KINE 1104, KINE 1105, KINE 1108, KINE 1109, KINE 1110, KINE 1113

COMPETENCY REQUIREMENTS

In addition to the Core Curriculum, the College also requires its students to be competent in the following areas:

- Reading, writing, and fundamental mathematics; these areas are assessed through THEA testing and, if needed, remediation.
- Oral communication; this competency is addressed in either an approved course**, departmental testing, or in specific classes required for your degree.
- Basic use of computers; this will be assessed through departmental testing, or evaluation of your high school course work.

** Non-Core courses approved to meet the Oral communication competency requirement are BMGT 1305, RNSG 1513, LGLA 2305, RADR 1309, RSPT 1360.

Degrees Offered

Midland College offers five degrees: Associate of Arts, Associate of Science, Associate of Arts in General Studies, Associate of Science in General Studies, and Associate of Applied Science. The Associate of Arts or the Associate of Science is chosen from a regular course of study as listed in the catalog. These degrees are primarily for the first two years of a four year degree. The Associate of Arts in General Studies or the Associate of Science in General Studies is selected when an individualized plan is needed. These degrees can also be used for the undecided major. The Associate of Applied Science is selected for a major in an occupational/technical field of study.

Degree Majors - The following presents the major fields of study available at Midland College. Information about specific courses in each of these areas is presented in the section of this catalog entitled Degree Plans and Course Descriptions.

ASSOCIATE OF ARTS

Art
Communication
Drama
Education
English
Government/Political Science
History
Kinesiology
Modern Languages
Music
Psychology/Social Work
Sociology/Anthropology
Speech

ASSOCIATE OF SCIENCE

Biology
Business Administration
Chemistry
Communication
Criminal Justice
Drama
Education
English
Geology
Government/Political Science
Health Careers
History
Kinesiology
Mathematics
Physics
Psychology/Social Work
Sociology/Anthropology

ASSOCIATE OF APPLIED SCIENCE

Air Conditioning, Heating, and Refrigeration Technology
Alcohol and Drug Abuse Counseling
Automotive Technology
Business Administration
Child Care and Development
Computer Graphics Technology
Diagnostic Medical Sonography
Emergency Medical Services
Fire Protection Technology
Health Information Technology
Information Technology—
Business Computer Applications
Computer Maintenance/Electronics
Data Management
Networking
Programming
Law Enforcement
Legal Assistant
Nursing
Professional Pilot
Radiography
Respiratory Care
Veterinary Technology
Welding Technology

CERTIFICATES

Accounting
Air Conditioning, Heating, and Refrigeration Technology
Alcohol and Drug Abuse
Counseling
Automotive Technology
Aviation Maintenance Technology—
Airframe
Powerplant
Building Science Technology
Business Administration
Child Care and Development
Computer Graphics Technology
Computer Maintenance
Diagnostic Medical Sonography
Emergency Medical Services—
Emergency Medical Technician
Fire Protection Technology
Intermediate
Paramedic
Health Information Technology—
Coding
Medical Transcription
Information Technology—
Business Computer Applications—
Administrative Assistant
Business Computer Applications—
Administrative Clerk
Computer Maintenance / Electronics (Basic/Advanced)
Data Management
Networking
Programming
Law Enforcement
Legal Assistant
Long Term Care
Nursing—Vocational
Radiography—
Computed Tomography
Magnetic Resonance Imaging
Transfer Studies
Welding Technology

Specific Degree Requirements

As a general requirement for graduation, for all degrees, each student must complete 15 semester hours of general education courses, and meet competency levels in written communication, mathematics, oral communication, and computer skills.

Associate of Arts and Associate of Science Degrees. To receive an Associate of Arts (AA) or Science (AS) degree, a student must:

1. Complete one of the regular degree plans as listed in the catalog and approved by the appropriate dean.
2. Complete a minimum of 62 semester credit hours 25 percent of which must be from Midland College. A maximum of forty semester credit hours may be achieved through post secondary level non-traditional credit, including written examination, professional certification, previous course work at an institutionally accredited vocational school or program, and military service training/education. Non-traditional credit must apply to specific courses.
3. Have overall minimum GPA of 2.0.
4. Satisfy the requirements of the Texas Academic Skills Program.
5. File an intent to graduate with the Registrar.
6. Clear all financial obligations to Midland College.

Associate of Applied Science Degree. To receive an Associate of Applied Science degree (AAS), a student must:

1. Complete one of the regular degree plans as listed in the catalog and approved by the appropriate dean.

2. Satisfy the general education core course and competency requirements.
3. Complete a minimum of 62 semester credit hours, 25 percent of which must be of Midland College course work. A maximum of forty semester credit hours may be achieved through post secondary level non-traditional credit, including written examination, professional certification, previous course work at an institutionally accredited vocational school or program, and military service training/education. Non-traditional credit must apply to specific courses.
4. Have overall minimum GPA of 2.0.
5. Satisfy the requirements of the Texas Academic Skills Program.
6. File an intent to graduate with the Registrar.
7. Clear all financial obligations to Midland College.

Associate of Arts or Sciences in General Studies. Students not wishing to receive an associate degree in a specific major may be granted an Associate of Arts or Sciences in General Studies (AAGS or ASGS - A student may receive only one General Studies degree). These students must:

1. Complete a minimum of 62 semester credit hours 25 percent of which must be from Midland College. A maximum of forty semester credit hours may be achieved through post secondary level non-traditional credit, including written examination, professional certification, previous course work at an institutionally accredited vocational school or program, and military service training/education. Non-traditional credit must apply to specific courses.
2. Satisfy the Core and Competencies with the following differences for each degree.

	AAGS	**ASGS**
Mathematics and Natural Sciences	3 hours	3-9 hours
Social and Behavioral Sciences	3 hours	3-9 hours
Visual and Performing Arts and Humanities	9 hours	3 hours

3. Take 2 semester credit hours of Kinesiology/Physical Education activity; some exceptions may be granted.
4. Have overall minimum GPA of 2.0.
5. Satisfy requirements of the Texas Academic Skills Program.
6. File an intent to graduate with the Registrar.
7. Clear all financial obligations to Midland College.

Additional Associate Degrees. To receive an additional associate degree, a student must: 1) complete the course of study for that degree; 2) have an overall minimum G.P.A. of 2.0; 3) satisfy requirements of the Texas Academic Skills Program unless exempted; 4) file an intent to graduate with the Registrar; and 5) clear all financial obligations to Midland College. In addition, at least 25% of the semester credit hours for the degree must be taken at Midland College and must not apply toward any previous degree.

Guarantee Policy

Midland College guarantees to those who graduate with an Associate of Arts (AA) or an Associate of Science (AS) degree, or who have met the requirements of a 62 semester credit hour transfer plan, that their credits will transfer to those Texas colleges and universities who cooperate in the development of the course selection guides. If the transfer of any such courses is rejected, the student may take, tuition free, any alternative course at Midland College that is acceptable to the receiving institution. Certain special conditions apply.

Midland College also guarantees that its Associate of Applied Science (AAS) graduates and certificate completers have mastered exit competencies in certain technical job skills. If the employer of any such graduate judges those skills to be lacking, Midland College will provide the graduate with up to nine semester hours of additional training tuition free. Certain conditions apply.

DEGREE PLANS AND COURSE DESCRIPTIONS

ACCOUNTING

Dean:	Nancy Hart	142 T	685-4657
Faculty:	Dale Westfall	158 T	685-4658
Lab Instructor:	Glenda Upchurch	170 T	686-4208
Division Secretary	Yvonne Hennig	142 T	685-4656

The accounting curriculum has been established to provide for the needs of individuals wishing to enter the workforce in the field of accounting and business. The Accounting Technician Certificate Program is designed to prepare a student for a career as an entry-level accounting assistant in business, industry, and government. Emphasis is placed on accounting theory, practice, and other related business administration activities.

The certificate in this field offered by Midland College and the courses needed to achieve this credential are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Accounting Technician Certificate

Specialty Courses **A minimum of 22 Semester Credit Hours**

*ACNT 1403, *ACNT 1411, * ACNT 2382, *ACCT 2401, * ACCT 2402, *ACNT elective

Related Courses **A minimum of 19 Semester Credit Hours**

BUSI 1301, BUSI 2301, *ITSW 1404, POFT 1302 or ENGL 1301, POFT 1325, SPCH elective

MINIMUM SEMESTER CREDIT HOURS = 41

Accounting Technician Certificate

First Semester	
ACNT 1403	4 Hours
POFT 1325	3 Hours
BUSI 2301	3 Hours
BUSI 1301	3 Hours
ITSW 1404	4 Hours
First Semester Total	**17 Hours**
Second Semester	
ACCT 2401	4 Hours
POFT 1301 / ENGL 1301	3 Hours
SPCH Elec	3 Hours
ACNT 1411	4 Hours
ACNT 2382	3 Hours
Second Semester Total	**17 Hours**

Third Semester

ACCT 2402 *	4 Hours
ACNT Elec *	3 Hours
Third Semester Total	**7 Hours**

ACNT 1331
Individual Income Tax Accounting (3-0) **3 Hours**

Basic instruction in the tax laws as currently implemented by the Internal Revenue Service providing a working knowledge of preparing taxes for the individual. Prerequisite: ACCT 2401 or consent of instructor.

ACNT 1392
Special Topics in Accounting Technician (3-0) **3 Hours**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Special topics include: Governmental & Not-for-Profit Accounting, Auditing, and Intermediate Accounting. Prerequisite: ACCT 2402.

ACNT 1403
Introduction to Accounting I (3-3) **4 Hours**

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliation, and payroll. Co-requisite: ITSW 1404 or proficiency in spreadsheets.

ACNT 1411
Introduction to Computerized Accounting (3-3) **4 Hours**

This course presents an introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package. Prerequisite: ACNT 1403.

ACNT 1413
Computerized Accounting Applications (3-3) **4 Hours**

A study of utilizing the computer to develop and maintain accounting record keeping systems, make management decisions, and process common business applications with emphasis on utilizing a spreadsheet and/or data base package/program. The student will utilize software (i.e. general ledger, spreadsheet, database) for accounting and business applications; select appropriate software to complete a task; complete a comprehensive project that entails the major course competencies and outcomes; and analyze a relevant topic with a written and oral presentation

ACNT 2370
Petroleum Accounting (3-0) **3 Hours**

The student will acquire a basic understanding of the accounting for successful efforts and full-cost companies. Focus of the course will be in the areas of pre-drilling operations, undeveloped properties, drilling and development activities, oil and gas revenues, depreciation and amortization, tax, and joint operations. Prerequisite: ACCT 2401.

ACNT 2382, 2383
Cooperative Education-Accounting Technician (1-0-20) **3 Hours**

Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and the student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: ACCT 2401.

ACCT 2401
Principles of Accounting I (3-3) **4 Hours**

This course is designed to present a general knowledge of accounting principles and procedures for the sole proprietorship and partnership form of business organization. Topics and problems include the complete accounting cycle, accounting systems and special purpose journals, internal controls and merchandising transactions, and the preparation of financial statements in accordance with generally accepted accounting principles. The student will study short-term liquid assets, including uncollectible accounts and notes receivable; several methods of inventory valuation and their effect upon operations; current liabilities and payroll accounting, including employer payroll taxes; the acquisition, depreciation (several methods), and disposal of plant property and equipment; intangible assets; and natural resources. Also studied are the accrual and cash bases of accounting and the effects of inflation and price-level changes.

ACCT 2402
Principles of Accounting II (3-3) **4 Hours**

A continuation of ACCT 2401, this course includes the study of corporate financial accounting data for cost control and management decision making. The student is required to learn accounting methodology used by corporations to account for stocks, bonds, treasury stock, and investments. The student will learn how to prepare all the corporate financial statements. The student will use financial statement analysis to determine a firm's liquidity, profitability, and solvency, and to track trends. The student will learn the basics of manufacturing cost accounting and product costing, as well as basic planning and control tools such as break-even and marginal analysis. The course of study will include the planning and budgeting function, including cash budgeting and the use of standard costs for cost control. The student will learn the variable costing method, incremental cost analysis, and the use of present value and other techniques to analyze alternatives such as capital expenditures, make-or-buy, sales mix and other managerial accounting decision making techniques. Prerequisite: ACCT 2401.

AGRICULTURE

Dean:	Margaret Wade	125 SF	685-4615
Division Secretary:	Norma Duran	124 SF	685-4612

AGRI 1407
Agronomy (3-3) **4 Hours**

Principles and practices in the development, production, and management of field crops including plant breeding, plant diseases, soils, insect control, and weed control. Course fee.

AGRI 1419
Introductory to Animal Science (3-3) **4 Hours**

Scientific animal agriculture. Importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of beef cattle, swine, sheep, goats, and horses. Course fee.

AIR CONDITIONING, HEATING AND REFRIGERATION TECHNOLOGY

Dean:	Curt Pervier	143 T	685-4677
Faculty:	Wayne Young	191 T	685-4687
Division Secretary:		143 T	685-4676

The Air Conditioning, Heating and Refrigeration curriculum has been established on the advice and with the cooperation of employers and technicians in our community who are engaged in some phase of the air conditioning, refrigeration, or heating industry. The primary objective of this program is to train students to install and service air conditioning, refrigeration and heating equipment.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ENGL 1301

Specialty Courses **32 Semester Credit Hours**

HART 1401, HART 1407, *HART 1441, *HART 1445, *HART 2434, *HART 2442, *HART 2445, *HART 2449

Related Courses **22 Semester Credit Hours**

BMGT 1305, DFTG 1309, MCHN 1320, WLDG 1521, two approved related courses, two KINE activity courses

MINIMUM SEMESTER CREDIT HOURS = 69

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.

Oral Communication: BMGT 1305

Basic Use of Computers: DFTG 1309

Air Conditioning Service Technician Certificate

Specialty Courses **16 Semester Credit Hours**

HART 1401, HART 1407, *HART 1441, *HART 2449

MINIMUM SEMESTER CREDIT HOURS = 16

Air Conditioning and Heating Service Technician Certificate

Specialty Courses **20 Semester Credit Hours**

HART 1401, HART 1407, *HART 1441, *HART 1445, *HART 2449

MINIMUM SEMESTER CREDIT HOURS = 20

Refrigeration Service Technician Certificate

Specialty Courses **20 Semester Credit Hours**

HART 1401, HART 1407, *HART 1441, *HART 2434, *HART 2442

MINIMUM SEMESTER CREDIT HOURS = 20

Air Conditioning, Heating, and Refrigeration Service Technician Certificate

Specialty Courses **32 Semester Credit Hours**

HART 1401, HART 1407, *HART 1441, *HART 1445, *HART 2434, *HART 2442, *HART 2445, *HART 2449

MINIMUM SEMESTER CREDIT HOURS = 32

HART 1380,2380
Cooperative Education (1-0-20) **3 Hours**

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. The student is required to work for wages at least 20 hours per week in air conditioning, refrigeration or a related field.

HART 1391
Special Topics in Heating, Air Conditioning, and Refrigeration Technologies/Technicians (2-2) **3 Hours**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

HART 1401
Basic Electricity for HVAC (3-3) **4 Hours**

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation. The class will begin with basic electricity and progress through the study of transformers, power distribution, electric motors, motor controls and circuitry. The student will be introduced to the proper operation of various electrical meters and test instruments. **This course, and HART 1407 must be taken first as the prerequisite to all the HART classes.**

HART 1407
Refrigeration Principles (3-3) **4 Hours**

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety. The student will learn proper soldering and brazing techniques using oxy-acetylene and air-acetylene. The student will also be introduced to the proper use of hand tools and test instruments required in both service and installation. **This course, and HART 1401 must be taken first as the prerequisite for all the other HART courses.**

HART 1441
Residential Air Conditioning (3-3) **4 Hours**

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. This course covers proper recovery, recycle, and reclaim procedures. The student will also study the chemical make-up of refrigerants and how they affect the atmosphere. Replacement refrigerants and the problems they pose will also be covered. The student will gain a working knowledge of the various components used in air conditioning and refrigeration systems. The student will study various refrigerant oils and the type refrigerants they are designed for. Prerequisite: HART 1401 and HART 1407.

HART 1445
Gas and Electric Heating (3-3) **4 Hours**

A study of the procedures and principles used in servicing heating systems including gas fired and electric furnaces. The student will be introduced to proper testing and troubleshooting techniques. The class will cover proper wiring, gas controls, thermostats, spark ignition and venting procedures. Prerequisite: HART 1401.

HART 2434
Advanced A/C Controls (3-3) **4 Hours**

Theory and application of electrical control devices, electromechanical controls and/or pneumatic controls. This course covers the proper methods for troubleshooting electrical control devices and control circuits. The student will study the correct wiring for components such as lock out relays, oil failure controls, and thermostats. The student will be introduced to solid state controls and their functions. Prerequisite: HART 1401.

HART 2436
Air Conditioning Troubleshooting (3-3) **4 Hours**

An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. The student will use knowledge gained from previous classes or industry experience in order to improve their skill in determining system problems. Prerequisite: HART 1441 and HART 2442.

HART 2442
Commercial Refrigeration (3-3) **4 Hours**

Theory of and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines. The student will be introduced to various controls and components used in these applications. This course covers piping procedures, wiring, operation, and troubleshooting. The student will also study air cooled, water cooled, and evaporative condensers and their applications. Prerequisite: HART 1401 and HART 1407.

HART 2445
Air Conditioning Systems Design (4-0) **4 Hours**

A study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. This course covers psychrometrics and design procedures developed to select proper equipment for air conditioning systems. The student will be introduced to Manual J for heating and cooling loads. The student will also study proper duct sizing and design techniques. Prerequisite: HART 1401 or Instructor Approval. Capstone course.

HART 2449
Heat Pumps (3-3) **4 Hours**

A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. This course covers specialized refrigeration systems such as heat pumps, cascade systems, chill water systems, and gas absorption systems. The student will learn the distinctive type controls and equipment necessary for these systems. Prerequisite: HART 1401 and HART 1407.

ALCOHOL AND DRUG ABUSE COUNSELING

Dean:	Margaret Wade	125 SF	685-4615
Program Director:	Don Poage	A30 AMS	685-5577
Division Secretary:	Norma Duran	124 SF	685-4612

Midland College offers an Alcohol and Drug Abuse Counseling (DAAC) Program of study covering the 12 core functions of Alcohol and Drug Abuse Counseling. The certification program offers courses necessary to qualify as Counselor Intern with the Texas Certification Board of Alcoholism and Drug Abuse. The Associate of Applied Science Degree program offers a course of study in ADAC along with basic courses that would be applicable to a career in alcohol and drug abuse counseling. Refer to TCADA website for licensure requirements www.tcada.state.tx.us.

The function of the alcohol and drug abuse counselor includes assisting the client in recognizing substance abuse, in providing insight and motivation, providing positive reinforcement, professional guidance, and assistance and support in order to develop and/or maintain a responsible and functional lifestyle.

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Program Director or Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*). Exceptions to prerequisites require approval of Program Director. *To enroll in DAAC 2366, no more than six semester credit hours of DAAC classes may be taken from a college other than Midland College without permission of the Alcohol and Drug Abuse Counseling Program Director.

Many of the course prefixes have changed due to the implementation of the Workforce Education Course Manual. Courses previously taken should still apply to these degrees or certificates. Course prefixes and program names are listed in the index. Please check course descriptions carefully and review your schedule with your advisor prior to enrolling.

Associate of Applied Science

Core Requirements **16 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, ENGL 1302, one Mathematics course, PSYC 2301, SOCI 1306

Specialty Courses **30 Semester Credit Hours**

*DAAC 1304, *DAAC 1307, *DAAC 1309, *DAAC 1311, *DAAC 1314, *DAAC 1317, DAAC 1319, *DAAC 1341, DAAC 1371 or DAAC 1372, *DAAC 2366

Related Courses **16 Semester Credit Hours**

ENGL 1301, PSYC elective, SPCH elective, (except 2341), 7 hours of electives as approved by Program Director

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills:THEA requirements.

Oral Communication: SPCH elective

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

Certificate Option

Specialty Courses **30 Semester Credit Hours**

*DAAC 1304, *DAAC 1307, *DAAC 1309, *DAAC 1311, *DAAC 1314, *DAAC 1317, DAAC 1319, *DAAC 1341, DAAC 1371 or DAAC 1372, *DAAC 2366

MINIMUM SEMESTER CREDIT HOURS = 30

DAAC 1304
Pharmacology of Addiction (3-0) **3 Hours**
Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis is placed on pharmacological effects of tolerance, dependence/ withdrawal, cross addiction, and drug interaction. Prerequisite or Corequisite: DAAC 1319.

DAAC 1307
Addicted Family Intervention (3-0) **3 Hours**
An introduction to the family as a dynamic system focusing on the effects of addiction pertaining to family roles, rules, and behavior patterns. Discuss the impact of mood altering substances and behaviors and therapeutic alternatives as they relate to the family from a multicultural and transgenerational perspective. Prerequisite or Corequisite: DAAC 1319.

DAAC 1309
Assessment Skill of Alcohol and Other Drug Addictions (3-0) **3 Hours**
Examines procedures by which a counselor/program identifies and evaluates an individual's strengths, weaknesses, problems, and needs which will be used in the development of a treatment plan. Prepares the student to appropriately explain assessment results and individual rights to clients. Prerequisite or Corequisite: DAAC 1319.

DAAC 1311
Counseling Theories (3-0) **3 Hours**
An introduction to major theories of various treatment modalities including Reality therapy, Psycho-dynamic, grief therapy, Client-centered therapy, Rational-Emotive Therapy, cognitive-behavioral approaches such as life skills training, behavior modification, and the introduction to experiential therapies as they relate to detoxification, residential, outpatient, and extended treatment. Prerequisite or Corequisite: DAAC 1319.

DAAC 1314
Dynamics of Group Counseling (3-0) **3 Hours**
An introduction to the patterns and dynamics of group interactions across the life span. Focus includes group therapy, structure, types, stages, development, leadership, therapeutic factors, the impact of groups on the individual, group growth, and behavior. Effective group facilitation skills and techniques used to address special population issues and needs are covered. Effective case management and record keeping are addressed. Prerequisite: DAAC 1341.

DAAC 1317
Basic Counseling Skills (3-0) **3 Hours**
This course is designed to facilitate development of the basic communication skills necessary to develop an effective helping relationship with clients. Includes the utilization of special skills to assist individuals, families, or groups in achieving objectives through exploration of a problem and its ramifications; examination of attitudes and feelings; consideration of alternative solutions; and decision making. Prerequisite or Corequisite: DAAC 1319.

DAAC 1319
Introduction to Alcohol and Other Drug Addictions (3-0) **3 Hours**
Causes and consequences of addiction as they related to the individual, family, community, and society are discussed. Response alternatives regarding intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented.

DAAC 1341
Counseling Alcohol and Other Drug Addictions (3-0) **3 Hours**
This course will focus on special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client. Design and utilization of treatment planning using a treatment team approach will be introduced. Confidentiality and ethical issues will be reviewed and practiced. Prerequisite: DAAC 1317.

DAAC 1371
Cultural Awareness and Sensitivity (3-0) **3 Hours**

Cross-cultural competency skills and cultural diversity training for specific use with persons of a different race or ethnicity than the counselor. Courses and class activities will be focused on specific race-ethnicity based cultures and subcultures, reducing or ameliorating the effects of racism, and development of specific cross- cultural competencies.

DAAC 1372
Parenting for Prevention (3-0) **3 Hours**

In this course the student will focus on the development of life management skills. This orientation will enable the student to work with parents and their children regarding common issues of chemical dependency.

DAAC 2366
Practicum (1-20) **3 Hours**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Student liability insurance purchased through Midland College is required for students enrolled in DAAC 2366. Prerequisite: Successful completion of 18 semester hours of DAAC specialty courses, passing with an average of at least a 3.0 in all DAAC courses.

ANTHROPOLOGY:

(See Sociology and/or Anthropology)

ARTS

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Carol Bailey	189 AFA	685-4652
	Kent Moss	195 AFA	685-4654
	Susan Randle	191 AFA	685-4663
	Warren Taylor	187 AFA	685-4651
Division Secretary:	Lula Lee	141 AFA	685-4624

The purpose of the Arts Department is to meet the individual needs of those students pursuing professional art degrees and careers and of those students in the community who wish to explore their interests and talents for their own enjoyment and fulfillment. Students who intend to earn an advanced degree are encouraged to plan their program carefully to meet the requirements of the senior college or university to which they intend to transfer.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75
Required Core Course(s) for this degree: ARTS 1303, ARTS 1304

Suggested Courses for Field of Study **21 Semester Credit Hours**

ARTS 1304 and 18 semester credit hours of other ARTS courses including at least one course in Design, Drawing, Painting, and Sculpture or Ceramics.

MINIMUM SEMESTER CREDIT HOURS = 63

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76
Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

ARTS 1301
Art Appreciation (3-0) **3 Hours**
A general education course open to all students. This course includes design principles from the layman's point of view and critical evaluation of selected works of painting, sculpture, architecture, and industrial design related to everyday life. (5007035130) (ART 1307)

ARTS 1303
Art History I (3-0) **3 Hours**
The student surveys painting, sculpture, architecture, and the decorative arts from prehistoric times to the 14th century. This class requires extensive ability in reading and writing. (5007035230) (ART 1305)

ARTS 1304
Art History II (3-0) **3 Hours**
The student surveys painting, sculpture, architecture, and the decorative arts from the 14th century to the present. This class requires extensive ability in reading and writing. (5007035230) (ART 1306)

ARTS 1311
Design I (2-4) **3 Hours**
Emphasis is upon two-dimensional design; student experiences include the fundamentals of line, color, form, texture, shape, space, and arrangement. (5004015330) (ART 1303)

ARTS 1312
Design II (2-4) **3 Hours**
Continuation of Arts 1311 with emphasis placed on student study of the three-dimensional concepts. Prerequisite: ARTS 1311. (5004015330) (ART 1304)

ARTS 1316
Drawing I (2-4) **3 Hours**
A beginning course in which the student investigates a variety of media, techniques, and subjects. Students explore perceptual and descriptive possibilities with consideration of drawing as a developmental process and as an end in itself.

ARTS 1317
Drawing II (2-4) **3 Hours**
Expansion of Arts 1316 that allows the student to stress the expressive and conceptual aspects of drawing including the human figure within a spatial environment. Prerequisite: ARTS 1316. Course fee. (5007055230) (ART 1302)

ARTS 2311
Design III (2-4) **3 Hours**
An advanced investigation in which students explore the problems of two-dimensional form with emphasis on individual expression. (5004015330) (ART 2303)

ARTS 2316
Painting I (2-4) **3 Hours**
The student explores the potentials of painting media with emphasis on color and composition. Course fee. (5007085230) (ART 2305)

ARTS 2317
Painting II (2-4) **3 Hours**
Continuation of Arts 2316 with emphasis on individual student's expression. Prerequisite: ARTS 2316. Course fee. (5007085230) (ART 2306)

ARTS 2323
Drawing III (2-4) **3 Hours**
A life drawing course in which the student learns the structure and action of the human figure. (5007055330) (ART 2301)

ARTS 2324
Drawing IV (2-4) **3 Hours**
A continuation of Art 2323 with emphasis on the student's individual expression. Prerequisite: ARTS 2323. (5007055330) (ART 2302)

ARTS 2326
Sculpture I (2-4) **3 Hours**
An exploration of various sculptural approaches in which the student works in a variety of media including additive and subtractive techniques. Course fee. (5007095130) (ART 2307)

ARTS 2327
Sculpture II (2-4) **3 Hours**
A continuation of Arts 2326 with emphasis on student's individual expression. Prerequisite: ARTS 2326. Course fee. (5007095130) (ART 2308)

ARTS 2333
Printmaking I (2-4) **3 Hours**
An introduction for the student into the basic printmaking processes including etching, monotype, and relief. (5007105130) (ART 2313)

ARTS 2334
Printmaking II (2-4) **3 Hours**
Opportunities for specialization and experimentation by the student in printmaking processes. Prerequisite: ARTS 2333. (5007105130) (ART 2314)

ARTS 2341
Art Metals I (2-4) **3 Hours**
Basic techniques for the student working with nonferrous metals. (5007135130) (ART 2321)

ARTS 2342
Art Metals II (2-4) **3 Hours**
Further investigation by the student of advanced techniques and processes. Prerequisite: ARTS 2341. (5007135130) (ART 2322)

ARTS 2346
Ceramics I (2-4) **3 Hours**
An introduction for the student to basic ceramic processes. Course fee. (5007115130) (ART 2311)

ARTS 2347
Ceramics II (2-4) **3 Hours**
Opportunities for specialization by the student in ceramic processes. Prerequisite: ARTS 2346. Course fee. (5007115130) (ART 2312)

ARTS 2348
Digital Arts I (2-4) **3 Hours**
An introduction to graphic design principles and typography with emphasis upon digital imaging. The course enables students to explore the creation and manipulation of images with a computer. Course content includes use of digital camera, flatbed and film scanners, Adobe Photoshop software, and printer. Course fee. (50.0710.51 26)

ARTS 2349
Digital Arts II(2-4) **3 Hours**
Advanced graphic design principles and techniques with emphasis upon digital imaging. The course enables students to explore more expressive and interpretive use of imagery and to practice commercial application as well. Course increases students' exposure to software programs beyond Adobe Photoshop. Prerequisite: ARTS 2331. Course fee. (50.0710.51 26)

ARTS 2356 (ALSO COMM 1318)
Photography I (2-4) **3 Hours**
An introductory course for beginners in black and white photography. Students learn basic techniques of camera functions, film development, print processing and design fundamentals. Course fee. (5006055130) (PHOT 1301)

ARTS 2357 (ALSO COMM 1319)
Photography II (2-4) **3 Hours**
A continuation of ARTS 2356 with emphasis on photography applied to publications. Students work with more complex subjects and techniques in order to communicate their ideas through photographic images. Prerequisite: COMM 1318 or ARTS 2356. Course fee. (0904015526) (PHOT 1302)

ARTS 2366
Watercolor I (2-4) **3 Hours**
Exploration of the potentials of water based media by the student with emphasis on color and composition. Course fee. (5007085330) (ART 2309)

ARTS 2367
Watercolor II (2-4) **3 Hours**
This course is an extension of Art 2366 and subject to all the conditions of that course. Prerequisite: Arts 2366. Course fee. (5007085330) (ART 2310)

ASTRONOMY
(See Physics)

AUTOMOTIVE TECHNOLOGY

Dean:	Curt Pervier	143 T	685-4677
Faculty:	Ted Sumners	ATC	697-5863 ext. 3644
	Steve Hargrove	ATC	697-5863 ext. 3649
	Daniel Garner	ATC	697-5863 ext. 3653
Division Secretary:		143 T	685-4676

Midland College is an NATEF (ASE) Certified Master Automobile Technician Training Certification Program. The Automotive Technology Program offers a two year Associate in Applied Science Degree or Certificate programs designed to prepare students for successful completion of the ASE examinations. Technical subjects taught will include the following ASE certification areas: Electrical Systems, Electronic Controls, Brake Systems, Suspension and Steering, Heating and Air Conditioning, Engine Performance, Engine Repair, Manual Drive Trains and Axles, and Automatic Transmissions/Transaxles. Additional courses in Advanced Electronics, Advanced Engine Performance, and Shop Management will be taught to supplement the ASE certification courses.

The objective of this program is to provide a general business related education core and specific technical training that will prepare the student for successful completion of the ASE certification examinations and to position the student at the forefront of the job market in the automotive industry. High paying careers exist at all levels in the automotive industry for ASE Certified Technicians, including: dealerships, independent repair shops, chain and specialty stores, and fleet operations.

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ENGL 1301

Specialty Courses **41 Semester Credit Hours**

AUMT 1280, AUMT 1281, AUMT 1305, *AUMT 1307, *AUMT 1310, *AUMT 1316, *AUMT 1319, *AUMT 1345, *AUMT 2313, *AUMT 2317, *AUMT 2321, *AUMT 2325, *AUMT 2334, *AUMT 2437

Related Courses **12 Semester Credit Hours**

BMGT 1305, ITSC 1409, two KINE activity courses, MCHN 1320

MINIMUM SEMESTER CREDIT HOURS = 68

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.

Oral Communication: BMGT 1305

Basic Use of Computers: ITSC 1409

Basic Automotive Certificate

Specialty Courses **18 Semester Credit Hours**

AUMT 1305, *AUMT 1307, *AUMT 1310, *AUMT 1316, *AUMT 1345, *AUMT 2317

Related Courses **3 Semester Credit Hours**

MCHN 1320

MINIMUM SEMESTER CREDIT HOURS = 21

To receive the Automotive Advanced Certificate or the Automotive Management Certificate, students must first complete the Basic Automotive Certificate (21 hours).

Advanced Automotive Certificate

Specialty Courses **19 Semester Credit Hours**
*AUMT 1306, *AUMT 2313, *AUMT 2321, *AUMT 2325, *AUMT 2334, *AUMT 2437

MINIMUM SEMESTER CREDIT HOURS = 19

Automotive Management Certificate

Specialty Courses **20 Semester Credit Hours**
AUMT 2428, AUMT 2301, SPCH 1318, VHPA 1341, BMGT 1305, ITSC 1409

TOTAL SEMESTER CREDIT HOURS = 20

Diesel Certificate

Specialty Courses **22 Semester Credit Hours**
AUMT 1307, AUMT 1310, DEMR 1406, DEMR 1410, DEMR 1411, DEMR 2434

MINIMUM SEMESTER CREDIT HOURS = 22

AUMT 1280
Cooperative Education - Auto/Automotive Mechanic/Technician (1-0-8) **2 Hours**
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Two units required. Enrollment must be approved by the instructor. Capstone course.

AUMT 1281
Cooperative Education - Auto/Automotive Mechanic/Technician (1-0-8) **2 Hours**
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Two units required. Enrollment must be approved by the instructor. Capstone course.

AUMT 1305
Introduction and Theory of Automotive Technology (2-4) **3 Hours**
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, automobile maintenance, and light repair.

AUMT 1306
Automotive Engine Removal and Installation (2-4) **3 Hours**
Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 1307
Automotive Electrical Systems (2-4) **3 Hours**
An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 1310
Automotive Brake Systems (2-4) **3 Hours**
Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 1316
Suspension and Steering (2-4) **3 Hours**
Theory and operation of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 1319
Automotive Engine Repair (2-4) **3 Hours**
Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 1345
Automotive Heating and Air Conditioning (2-4) **3 Hours**
Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 2301
Automotive Management (3-1) **3 Hours**
Instruction in human relations, customer relations, and customer satisfaction. Emphasis on management techniques and building relationships between the service department and the customer.

AUMT 2313
Manual Drive Train and Axle (2-4) **3 Hours**
A study of automotive clutches, clutch operation devices, standard transmissions, transaxles and rear axles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines. May be taught manufacturer specific. Prerequisite: AUMT 1305 or instructor approval.

AUMT 2317
Engine Performance Analysis I (2-4) **3 Hours**
Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. May be taught manufacturer specific. Prerequisite: AUMT 1307 or instructor approval.

AUMT 2321
Automotive Electrical Lighting and Accessories (2-4) **3 Hours**
Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific. Prerequisite: AUMT 1307 or instructor approval.

AUMT 2325
Automatic Transmission and Transaxle (2-4) **3 Hours**
A study of the operation, hydraulic principles, and related circuits of modern automatic transmission and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific. Prerequisite: AUMT 1307 or instructor approval.

AUMT 2428
Automotive Service (2-4) **4 Hours**
Mastery of automotive vehicle service and component systems repair. Emphasis on mastering current automotive competencies covered in related theory courses. Maybe taught manufacturer specific.

AUMT 2334
Engine Performance Analysis II (2-4) **3 Hours**
Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. Prerequisite: AUMT 2317 or instructor approval.

AUMT 2437
Automotive Electronics (3-4) **4 Hours**
Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific. Prerequisite: AUMT 1307 or instructor approval.

AUMT 2455
Automotive Engine Machining (2-4) **4 Hours**
An in-depth study of precision engine rebuilding, cylinder reconditioning, and crack repair. Instruction in machines and equipment necessary to complete an engine repair. Maybe taught manufacturer specific.

DEMR 1406
Diesel Engine (2-4) **4 Hours**
An introduction to the basic principles of diesel engines and systems.

DEMR 1410
Diesel Engines Testing and Repair (2-4) **4 Hours**
An introduction to testing and repairing diesel engines including related systems specialized tools.

DEMR 1411
Diesel Engines Testing and Repair II (2-4) **4 Hours**
Coverage of testing and repairing diesel engines including related systems specialized tools.

DEMR 2434
Advanced Diesel Tune-Up and Troubleshooting (2-4) **4 Hours**
Advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach.

VHPA 1341
Auto Parts Counter Sales (3-0) **3 Hours**
Skill development in communications, sales, and merchandising of auto parts to vehicle owners and repair technicians with an emphasis on customer relations, communication, sales, and merchandising skills.

AVIATION MAINTENANCE TECHNOLOGY

Dean:	Curt Pervier	143 T	685-4677
Director:	Dennis Givens	Airport “E”	563-8952
Faculty:	Bruce King	Airport “E”	563-8952
	Travis Smith	Airport “E”	563-8952
Program Coordinator:	Karen Harris	161 T	685-4799
		MFC	684-9800

The Aviation Maintenance Technology program will reflect the continuing efforts of Midland College in its mission to prepare students for employment, in business and industry, occupational advancement, retraining, and/or pursuit of higher degrees or certification.

The Aviation Maintenance Technology program offers two certificate options. The student may elect to complete a certificate in Airframe Maintenance Technology or a certificate in Powerplant Maintenance. You must have a high school diploma or equivalent to be admitted to the certificate programs. Upon successful completion of the Aviation Maintenance Technology program, the certificate(s) earned qualifies the student to take the Federal Aviation Administration (FAA) examination for the Airframe and/or Powerplant licenses. Students must furnish their own hand tools.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Powerplant Certificate

Specialty Courses **40 Semester Credit Hours**

AERM 1203, AERM 1205, AERM 1208, AERM 1210, AERM 1251, AERM 1314, AERM 1315, AERM 1340, AERM 1357, AERM 1444, AERM 1456, AERM 2351, AERM 2352, AERM 2447

MINIMUM SEMESTER CREDIT HOURS = 40

Airframe Certificate

Specialty Courses **40 Semester Credit Hours**

AERM 1315, AERM 1208, AERM 1205, AERM 1210, AERM 1203, AERM 1314, AERM 1253, AERM 1241, AERM 1350, AERM 1247, AERM 1345, AERM 1243, AERM 1352, AERM 1349, AERM 2233, AERM 1254, AERM 2231

MINIMUM SEMESTER CREDIT HOURS = 40

AERM 1203
Shop Practices (1-4) **2 Hours**

An introduction to the correct use of hand tools and equipment, precision measurement, identification of aircraft hardware, and the fabrication of fluid lines and tubing. Emphasis on procedures for testing, heat treating, and inspection of aircraft structures.

AERM 1205
Weight and Balance (1-2) **2 Hours**

A study of the Federal Aviation Administration (FAA) required subjects relating to the weighing of aircraft, the performance of weight and balance calculations, and appropriate maintenance record entries.

AERM 1208
Federal Aviation Regulations (1-2) **2 Hours**

A course in the use and understanding of the Federal Aviation Administration and aircraft manufacturer’s publications, forms, and records; and the exercise of mechanic privileges within prescribed limitations.

AERM 1210
Ground Operations (1-4) **2 Hours**
An introductory course in fuels, servicing methods and procedures, aircraft movement, securing and operations of aircraft, external power equipment, aircraft cleaning, and corrosion control.

AERM 1241
Wood, Fabric, and Finishes (1-2) **2 Hours**
A course in the use and care of various covering materials, finishes, and wood structures including approved methods and procedures.

AERM 1243
Instruments and Navigation/Communication (1-2) **2 Hours**
A study of aircraft instruments and electronic flight instrument systems including testing and installing instruments; inspecting, checking, and troubleshooting navigation and communication systems; and inspecting and repairing antennas and electronic equipment installations.

AERM 1247
Airframe Auxiliary Systems (1-3) **2 Hours**
Topics address airframe auxiliary systems including the operation and repair of position and warning systems, cabin atmospheric control systems, ice and rain control systems for aircraft and engines, and fire detection and protection systems.

AERM 1251
Aircraft Turbine Engine Theory (1-4) **2 Hours**
Theory, history, and servicing of turbine engines to include lubrication, instrumentation, auxiliary power units, and exhaust systems.

AERM 1253
Aircraft Welding (1-2) **2 Hours**
Topics address repair procedures for steel, magnesium, brass, and aluminum materials used in aircraft assembly and selection and application of appropriate methods of welding, brazing, and soldering steel, magnesium, brass, and aluminum.

AERM 1254
Aircraft Composites (1-3) **2 Hours**
A study of the inspection and repair of composite, fiberglass, honeycomb, and laminated structural materials including doors, windows, bonded structures, and interior furnishings.

AERM 1314
Basic Electricity (2-3) **3 Hours**
A study of aircraft electrical systems and their requirements including the use of the ammeter, voltmeter, and ohmmeter; series and parallel circuits; inductance and capacitance; magnetism; converting alternating current (AC) to direct current (DC); controlling devices; maintenance and servicing of aircraft batteries; and reading and interpreting aircraft electrical diagrams to include solid state devices and logic functions.

AERM 1315
Aviation Science (2-2) **3 Hours**
Fundamentals of mathematics, physics, and drawing as they apply to aircraft principles and operations as required by the federal Aviation Administration for airframe and powerplant mechanics.

AERM 1340
Aircraft Propellers (3-3) **3 Hours**
Fundamentals of construction of propellers. Skill development in inspection, servicing, and repair of fixed-pitch, constant-speed, and feathering propellers and governing systems. Instruction in removal, balancing, and installation of propellers.

AERM 1345
Airframe Electrical Systems (2-3) **3 Hours**
A study of airframe electrical systems including installation, removal, disassembly, and repair of electrical components and related wiring.

AERM 1349
Hydraulic, Pneumatic, and Fuel Systems (2-4) **3 Hours**
Skill development in inspecting, servicing, and maintaining aircraft fluid systems including hydraulics, pneumatics, and fuel. Application of basic concepts through detailed maintenance procedures.

AERM 1350
Landing Gear Systems (2-3) **3 Hours**
Inspection, servicing, overhaul, and repair of fixed and retractable landing gear systems. In-depth coverage of systems, components, and operation.

AERM 1352
Aircraft Sheet Metal (1-8) **3 Hours**
A course in inspection and repair of sheet metal structures including forming, layout, and bending of sheet metal and identification, selection, and installation of rivets and fasteners.

AERM 1357
Fuel Metering and Induction Systems (2-4) **3 Hours**
A study of fuel metering and induction systems used on reciprocating and turbine engines including fuel metering systems, carburetors, induction systems, heat exchangers, and cooling systems.

AERM 1444
Aircraft Reciprocation Engines (3-2) **4 Hours**
A study of reciprocating engines and their development, operating principles, and theory. Instruction in engine instruments, lubricating, and exhaust systems.

AERM 1456
Aircraft Powerplant Electrical (3-4) **4 Hours**
Theory, operation, and maintenance of powerplants including electrical, ignition, starting, and fire protection systems.

AERM 2231
Airframe Inspection (1-2) **2 Hours**
A study of the materials and procedures for completing a One Hundred Hour Inspection as per Federal Aviation Regulations and manufacturers' service information. Capstone course.

AERM 2233
Assembly and Rigging (1-2) **2 Hours**
An advanced course in assembly and rigging of fixed and rotary-wing aircraft.

AERM 2351
Aircraft Turbine Engine Overhaul (2-4) **3 Hours**
Topics address inspection, disassembly, reassembly, and replacement of gas turbine engines, sections, and components and operational troubleshooting and analysis.

AERM 2352
Aircraft Powerplant Inspection (3-0) **3 Hours**
In-depth coverage of methods and procedures for completing airworthiness and conformity inspections on aircraft powerplants. Capstone course.

AERM 2447
Aircraft Reciprocating Engine Overhaul (2-8) **4 Hours**
A study of reciprocating engine overhaul including measurement and inspection procedures. Instruction in removal and installation, checks, servicing, and repair of engines.

BIOLOGY

Dean:	Margaret Wade	125 SF	685-4615
Faculty:	Lacye Escamilla	147 SF	685-5580
	Tomas Hernandez	105 SF	685-6466
	Claudia Hinds	138 SF	685-4630
	Paul Mangum	128 SF	685-4729
	Ethel Matthews	147 SF	685-4635
Lab Instructors:	Cindy Cochran	157 SF	685-4753
	Lisa Welch	150 SF	685-4728
Division Secretary:	Norma Duran	124 SF	685-4612

Courses in the Department of Biology are designed to meet the needs of undergraduate students who are preparing to enter the fields of professional biology and biological research, to teach biology, or those who wish to prepare for admission to dental and medical schools, and for training in medical technology and nursing. Courses in the department offer other students an appreciation and understanding of the concepts of biology.

The student who expects to enter a profession in dentistry, medicine, optometry, pharmacy, veterinary medicine, or some related profession which requires graduation from a specialized college should check carefully the entrance requirements for the college to which he expects to transfer after two years at Midland College.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: CHEM 1411, CHEM 1412, MATH 1314

Suggested Courses for Field of Study **8 Semester Credit Hours**

BIOL 1406 and BIOL 1407* or BIOL 1411 and BIOL 1413

Related Courses **16 Semester Credit Hours**

PHYS 1401 and PHYS 1402* or BIOL 2401 and BIOL 2402 or BIOL 2421 and BIOL 2416 or CHEM 2423* and CHEM 2425* or 8 hours foreign language courses

MINIMUM SEMESTER CREDIT HOURS = 66

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Division Dean.

BIOL 1406
General Biology I (3-3) **4 Hours**

This general biology course (first semester) is devoted to principles shared by all organisms. These principles are cell biology, energy, genetics, evolution, and ecology.

BIOL 1407
General Biology II (3-3) **4 Hours**

This general biology course (second semester) is devoted to particular organisms. Much of the emphasis is on vertebrate biology. The principles studied are diversity, plant biology, animal biology, and behavior. Dissection required. Prerequisite: BIOL 1406.

BIOL 1408
General Biology I for Non Majors (3-3) **4 Hours**
This general biology course (first semester) is devoted to principles shared by all organisms. These principles are cell biology, energy, genetics, evolution, and ecology. This course is suitable as a required lab science for non-biology majors and may not be substituted for BIOL 1406.

BIOL 1409
General Biology II for Non-Majors (3-3) **4 Hours**
This general biology course (second semester) is devoted to particular organisms. Much emphasis is on vertebrate biology. The principles studied are diversity, plant biology, animal biology, and behavior. Prerequisite: BIOL 1408. This course is suitable as a required lab science for non-biology majors and may not be substituted for BIOL 1407.

BIOL 1411
General Botany (3-3) **4 Hours**
This general biology course is devoted to the study of structure and function of plant cells, tissues, and organs. Includes an evolutionary survey and life histories of the following representative groups: algae, fungi, mosses, liverworts, ferns, and seed producing organisms. Plant reproduction and functional interactions with their environment and with humans. Selected laboratory exercises.

BIOL 1413
General Zoology (3-3) **4 Hours**
This general zoology course is devoted to the study of the principles of taxonomy, molecular biology, and ecology as they relate to animal form and function, diversity, behavior, and evolution.

BIOL 1424
Systematic Botany (3-3) **4 Hours**
Introduction to the identification, classification, and evolutionary relationships of vascular plants with emphasis on flowering plants. Includes the importance of herbaria, collection techniques, and the construction and use of taxonomic keys.

BIOL 2401
Anatomy and Physiology I (3-4) **4 Hours**
This course is designed to produce student proficiency in body organization, the skeletal system, the muscular system, and the nervous system. Laboratory work will include dissection of a mammal. Dissection required. Biology 1406 highly recommended.

BIOL 2402
Anatomy and Physiology II (3-4) **4 Hours**
This course is designed to enable students to become proficient in the following biological systems: the circulatory system with special emphasis on the blood and heart, the respiratory system, the digestive system, and the reproductive system. Laboratory work will include dissection of a mammal. Dissection required. Prerequisite: BIOL 2401.

BIOL 2416
Introductory Genetics (3-4) **4 Hours**
This course is designed to enable students to become familiar with the following topics in genetics: the physical basis and the chemical basis of heredity, the laws of heredity and variation, mitotic and meiotic cell division, and the study of human diseases that are caused by genetic defects.

BIOL 2421
Microbiology (3-4) **4 Hours**
The study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology. Prerequisite: BIOL 1406 or BIOL 2401 and CHEM 1405 or CHEM 1411 or permission of instructor.

BUILDING SCIENCE TECHNOLOGY

Dean:	Curt Pervier	143 T	685-4677
Faculty:	Jake Kemper	157 T	685-6428
Division Secretary:		143 T	685-4676

The Building Science Technology program is designed to train students for entry-level jobs in the building and construction industry. Specific areas of training include on-site experience in carpentry, concrete forming, plumbing, roofing, and exterior and interior finishing. A home is constructed from start to finish. Further instruction includes blueprint reading, study of building codes and specifications, and cabinet making.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Basic Certificate

Specialty Courses **19 Semester Credit Hours**

CNBT 1416, CNBT 1450, CNBT 1453, CNBT or WDWK elective, MCHN 1320

MINIMUM SEMESTER CREDIT HOURS = 19

Advanced Certificate

Specialty Courses **24 Semester Credit Hours**

CNBT 1305, CNBT 1342, CNBT 1346, CNBT 2381, three CNBT or WDWK electives

MINIMUM SEMESTER CREDIT HOURS = 24

CNBT 1305
Residential and Light Commercial Blueprint Reading (3-0) **3 Hours**

Blueprint reading covering the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on residential and light commercial construction.

CNBT 1342
Building Codes and Inspections (3-0) **3 Hours**

An examination of the building codes and standards applicable to building construction and inspection processes.

CNBT 1346
Construction Estimating (3-0) **3 Hours**

Fundamentals of estimating materials and labor costs in construction; blueprint; construction methods and materials.

CNBT 1402
Mechanical, Plumbing, and Electrical Systems in Construction (2-4) **4 Hours**

A presentation of the basic mechanical, plumbing, and electrical components in construction and their relationship to the overall building.

CNBT 1413
Concrete - Residential (2-6) **4 Hours**

A study of the various techniques for concrete utilization in residential and light construction.

CNBT 1416
Construction Technology I (2-6) **4 Hours**

A comprehensive course in site preparation, foundation, form work, and framing. Topics include safety; tools and equipment; basic site preparation; basic foundations and form work; and basic floor, wall, and framing methods and systems.

CNBT 1450
Construction Technology II (2-6) **4 Hours**
An intermediate course in site preparation, foundation, form work, and framing in residential and light construction. Topics include safety; tools and equipment; site preparation and layout; concrete; foundations and related form work; and floor, wall, ceiling, and roof framing methods and systems.

CNBT 1453
Construction Technology III (2-6) **4 Hours**
An intermediate course in foundation and form work, exterior trim and finish, and interior finish for residential and commercial construction. Topics include safety; tools and equipment; concrete; foundations and related form work; exterior building finish; and interior floors, walls, and ceiling finish. Capstone course.

CNBT 2381
Cooperative Education (1-0-20) **3 Hours**
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

CNBT 2439
Construction Technology IV (2-6) **4 Hours**
An advanced course in site preparation, framing, and interior finish for residential, light, and commercial construction. Topics include safety, tools and equipment, finish site work and equipment, alternate framing systems and methods, interior doors and windows, walls, and floors.

WDWK 1413
Cabinet Making (2-6) **4 Hours**
Includes the design and construction of base cabinets, wall cabinets for kitchens and bathrooms and furniture making. Emphasis on the safe use of portable and stationary power tools. Finishing techniques include proper sanding, sealing, staining, and finishing techniques.

WDWK 1491
Special Topics (2-4) **4 Hours**
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

WDWK 2451
Cabinet Making II (2-6) **4 Hours**
Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate laying, and customer and co-worker relations.

BUSINESS ADMINISTRATION

Dean:	Nancy Hart	142 T	685-4657
Faculty:	Omar Belazi	154 T	685-4659
	Sylvia Brown	124 T	685-4717
	Gavin Frantz	105 T	685-5517
	Doug Johnson	119 T	685-4665
	Adriana Lumpkin	109 T	685-4743
	Vickie Pickett	107 T	686-4204
	Andree Rosen	115a T	685-4572
Division Secretary	Yvonne Hennig	142 T	685-4656

Business administration plays an important role in the lives of all citizens. Midland College offers courses in the field of business administration to meet the needs and interests of the people of Midland. The objectives of the Business Administration Department are to make available to students courses at the freshman and sophomore levels which will transfer to the senior college of their choice; to provide training for those students who wish to develop a marketable skill for immediate employment; to provide for the needs of individuals wishing to upgrade their present skills and positions; and to provide all students with a background of business and career information for further study, further training, and citizenship. It is our aim to meet the needs of local industry by providing initial training and skill improvement courses to meet personnel needs of present industries and those industries which will locate in the Midland area in the future. There is a constant and growing demand for clerical, secretarial, and accounting personnel.

Graduates from an accredited college or university holding a baccalaureate degree may receive an associate of applied science degree upon successful completion of approximately thirty (30) semester hours of Business Administration courses and any appropriate leveling courses as determined by the Division Dean.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science

Students transferring to another institution should follow this degree plan.

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1324 (requires placement test or grade of “C” in Math 1314), SPCH 1321

Suggested Courses for Field of Study **17 Semester Credit Hours**

BUSI 1301, BUSI 2301, ACCT 2401, *ACCT 2402, ECON 2302

Related Courses **3 Semester Credit Hours**

MATH 1325

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH 1321

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

Business Administration
Suggested Degree Plan for Associate in Science
Students transferring to another institution should follow this degree plan.

FRESHMAN YEAR

First Semester		
Prefix Number	**Course Name**	**Credit Hrs.**
BUSI 1301		3
ENGL 1301		3
HIST 1301		3
MATH 1324		3
SCIENCE Elec		4
KINE Elec		1
	First Semester Total	**17**

Second Semester		
ENGL 1302 *		3
Visual and Performing Arts Elective		3
HIST 1302		3
MATH 1325		3
SCIENCE Elec		4
	Second Semester Total	**16**

SOPHOMORE YEAR

First Semester		
Prefix Number	**Course Name**	**Credit Hrs.**
ACCT 2401		4
BUSI 2301		3
ENGL (SOPH)		3
GOVT 2301		3
ECON 2301		3
	First Semester Total	**16**

Second Semester		
ACCT 2402 *		4
SPCH 1321		3
GOVT 2302		3
ECON 2302		3
	First Semester Total	**13**

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**
See Core Requirements, page 75
Required Core Course(s) for this degree: ECON 2301, ECON 2302

Specialty Courses **18 Semester Credit Hours**
BUSI 1301, BUSI 2301, BUSG 2380, BUSG 1345, BUSA 1313, BUSI 2302

Related Courses **A minimum of 36 Semester Credit Hours**
*ITSC 1409 or *BCIS 1405, *ACNT 1403, *POFT 2312, ACCT 2401, *ITSW 1404, BMGT 1303, MRKG 1311 or ACCT 2402, SPCH 1318, two specialty electives and two KINE activity courses.

MINIMUM SEMESTER CREDIT HOURS = 69

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH 1318
Basic Use of Computers: ITSW 1401 or POFI 2401

Business Administration
Suggested Degree Plan for Associate in Applied Science

FRESHMAN YEAR

First Semester Prefix Number	Course Name	Credit Hrs
BUSI 1301		3
ACNT 1403		4
ITSC 1409 or BCIS 1405		4
SPCH 1318		3
POFT 2312		3
	First Semester Total	**17**

Second Semester		
ACCT 2401		4
BUSI 2301		3
ITSW 1404		4
BMGT 1303		3
	Core Course Elective	3
	Second Semester Total	**17**

SOPHOMORE YEAR

First Semester Prefix Number	Course Name	Credit Hrs
BUSG 2380		3
BUSG 1345		3
ECON 2301		3
BUSA 1313		3
BUSI 2302		3
	KINE Elective	1
	First Semester Total	**16**

Second Semester		
ECON 2302		3
MRKG 1311 or ACCT 2402		3
	Core Course Elective	3
	Core Course Elective	3
	Business Specialty Elective	3
	Business Specialty Elective	3
	Second Semester Total	**18**

Certificate Program
Certificate in Business Administration

First Semester Prefix Number	Course Name	Credit Hrs
BUSI 1301		3
ITSC 1409 or BCIS 1405		4
ACNT 1403		4
POFT 2312		3
POFT 1325		3
	First Semester Total	**17**
Second Semester		
BUSI 2301		3
ACCT 2401		4
ITSW 1404		4
BMGT 1303		3
	Second Semester Total	**14**
Third Semester		
BUSG 2380		3
BUSG 1345		3
	Third Semester Total	**6**

General Business Certificate

Specialty Courses **12 Semester Credit Hours**

BUSI 1301, BUSI 2301, BUSG 2380, BUSG 1345

Related Courses **25 Semester Credit Hours**

*ITSC 1409 or *BCIS 1405, *ACNT 1403, *POFT 2312, POFT 1325, ACCT 2401, *ITSW 1404, BMGT 1303.

MINIMUM SEMESTER CREDIT HOURS = 37

BUSINESS COMPUTER APPLICATIONS: Prepares students for a career in a business office environment. The program provides knowledge in office practice and principles and use of the most popular office application software on the market today including Microsoft Office Suite and WordPerfect. This field of study provides the student the opportunity to take courses that will prepare the student to take the Microsoft Office Specialist certification exams.

Business Computer Applications Associate of Applied Science

General Education Core Courses **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Specialty Courses **48 Semester Credit Hours**

CPMT 1303, POFT 1429, POFT 1309, POFT 1301, POFT 1325, *ITSW 1407 or *ITSW 1410, *ITSW 1404, *ITSW 1401, *POFT 2312, *ITSW 2431 or *POFI 2401, *POFT 2431, three specialty electives

Related Courses **4 Semester Credit Hours**

*ACNT 1403

MINIMUM SEMESTER CREDIT HOURS = 67

Specialty Electives

POFT 1429, ITSC 1409, ITSW 2431, POFM 1302, POFI 2401, POFT 2401, POFI 2431, ITSW 1410, ITSE 2313, POFT 2333, POFT 2401, ACNT 1403, POFMI 2431, IMED 1291, POFM 1302, ITSW 1404, BCIS 1405, ITSW 1407, ITSW 2434, POFT 2380, HPRS 1106, LGLA 1345, LGLA 1317

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: BMGT 1305 or a SPCH course from the Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Specialty Courses

Suggested Class Sequence:

Business Computer Applications AAS

Prefix Number	Course Name	Credit Hrs
First Year		
First Semester		
CPMT 1303	Introduction to Computer Technology	3
POFT 1429	Keyboarding and Document Formatting	4
POFT 1309	Administrative Office Procedure I	3
POFT 1301	Business Communications I	3
POFT 1325	Business Machine Applications	3
	First Semester Total	**16**
Second Semester		
ITSW 1407	Introduction to Database	
or ITSW 1410	Presentation Media Software	4
ITSW 1404	Introduction to Spreadsheets	4
ITSW 1401	Introduction to Word Processing	4
	Core Course Elective	3
	Core Course Elective	3
	Second Semester Total	**18**
Second Year		
Third Semester		
ACNT 1403	Introduction to Accounting I	4
POFT 2312	Business Communications II	3
	Core Course Elective	3
	Core Course Elective	3
ITSW 2431	Advanced Word Processing	
or POFI 2401	Word Processing	
or	Specialty Elective	4
	Third Semester Total	**17**
Fourth Semester		
POFT 2431	Administrative Systems	4
	Core Course Elective	3
	Specialty Elective	3
	Specialty Elective	3
	Specialty Elective	3
	Fourth Semester Total	**16**
Program Total		**67**

Business Applications Certificate

The Business Applications Certificate Program offers a 1-year (12 months) or three semester program leading to a certificate. Students will complete a minimum of 31 hours in courses designed to prepare individuals for office careers in administrative, computer assistant, medical, or legal areas. Satisfactory completion of the program qualifies the individual to obtain employment in an office environment. The curriculum provides individuals with necessary knowledge in office practices and principles and with current microcomputer and other automated equipment in performing office tasks.

Specialty Courses **11/13 Semester Credit Hours**

ITSW 1401, POFT 1309, (POFI 2431 and IMED 1291) or (POFM 1302 and HPRS 1106) *or* (LGLA 1345 and LGLA 1317)

Related Courses **9 Semester Credit Hours**

CPMT 1303, POFT 1301, POFT 1325

Specialty Electives **9/12 Semester Credit Hours**

(3 classes one of which maybe ACNT 1403)
POFT 1429, ITSC 1409, ITSW 2431, POFM 1302, POFI 2401, POFT 2401, POFI 2431, ITSW 1410, ITSE 2313, POFT 2333, POFT 2401, ACNT 1403, POFMI 2431, IMED 1291, POFM 1302, ITSW 1404, BCIS 1405, ITSW 1407, ITSW 2434, POFT 2380, HPRS 1106, LGLA 1345, LGLA 1317

Suggested Class Sequence:

First Semester		
CPMT 1303	Introduction to Computer Technology	3
POFT 1301	Business Communications I	3
ITSW 1401	Introduction to Word Processing	4
POFT 1309	Administrative Office Procedure I	3
	First Semester Total	**13**
Second Semester		
POFT 1325	Business Machine Applications	3
	Specialty Elective	3/4
	Specialty Elective	3/4
	IT/ACNT Elective	3/4
	Second Semester Total	**12/15**
Third Semester		
	Desktop Emphasis	
POFI 2431	Administrative Systems	4
IMED 1291	Web Design I	2
or		
	Medical Emphasis	
POFM 1302	Computers in Health Care	3
HPRS 1106	Medical Terminology	1
or		
	Legal Emphasis	
LGLA 1345	Civil Litigation	3
LGLA 1317	Law Office Technology	3
	Third Semester Total	**4/6**
Program Total		**29/32**

LONG-TERM CARE CERTIFICATE

(See Long-Term Care Administration)

BMGT 1301
Supervision (3-0) **3 Hours**

A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skills are examined. The student will explain the role, characteristics, and skills of a supervisor and the principles of planning, leading, controlling, staffing, and organizing at the supervisory level. The student will identify and discuss the human skills necessary for supervision; explain motivational techniques and give examples of how they can be utilized by a supervisor; and structure a working environment which will provide a variety of ways for employees to be motivated.

BMGT 1303
Principles of Management (3-0) **3 Hours**

Concepts, terminology, principles, theory, and issues that are the substances of the practice of management. The student will explain the various theories and processes of management including its function; identify roles of leadership in business; and recognize elements of the communication process and the guidelines for organizational design. The student will interpret interpersonal roles related to work groups and demonstrate knowledge of the basic language of management.

BMGT 1305
Communications in Management (3-0) **3 Hours**

A course in the basic theory and process of communication skills necessary for the management of an organization's workforce. Upon successful completion of this course, the student will be able to explain the communication process; identify communication channels and their relationship to semantics and perception; compare and contrast the relationship of communication and management; and demonstrate competencies in verbal and written presentations.

BUSA 1313
Investments (3-0) **3 Hours**

The student will define terms related to investments; apply basic concepts and calculations to planning and control of investments; and identify analytical models used for financial decision-making. The student will develop an understanding of the time value of money, break-even analysis, cash flow, capital budgeting, sources and uses of funds, and investment decisions.

BUSG 1191
Special Topics in Business (1-0) **1 Hour**

The student will gain exposure to a variety of topics that pertain to current issues and problems in the business administration field. This course may be repeated for additional credit using a different topic.

BUSG 1291
Special Topics in Business (2-0) **2 Hours**

The student will gain exposure to a variety of topics that pertain to current issues and problems in the business administration field. This course may be repeated for additional credit using a different topic.

BUSG 1304
Personal Finance (3-0) **3 Hours**

A study of the financial problems which people ordinarily encounter in managing their family financial affairs. Topics include financial security for the family, budgeting, use of credit, home ownership, financial tangles, and savings and investment planning. The student will identify the concepts associated with the time value of money; identify the concepts associated with personal budgeting; and recognize the differences among various savings and investment programs and classes of securities. The student will identify the options for personal insurance; describe retirement and estate planning techniques; explain the benefits of owning versus renting real property; and discuss consumer protection legislation.

BUSG 1345
Principles of Finance (3-0) **3 Hours**
The student will identify the process and structures of monetary policy; relate the sources of capital to business, consumers, and government; define the time value of money and its relationship to credit; and describe the characteristics of financial intermediaries and related markets.

BUSG 1391
Special Topics in Business (3-0) **3 Hours**
The student will gain exposure to a variety of topics that pertain to current issues and problems in the business administration field. Prerequisite: 12 hours of business-related courses or permission of instructor. This course may be repeated for additional credit using a different topic.

BUSG 2309
Small Business Management (3-0) **3 Hours**
A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues. The student will describe important issues about small business; identify essential management skills required of a successful entrepreneur; and prepare a business plan.

BUSG 2380, 2381
Cooperative Education - Business, General (1-0-20) **3 Hours**
Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through work experience. This course may be repeated if topics and learning outcomes vary.

BUSI 1301
Business Principles (3-0) **3 Hours**
Students will learn business operations, will develop a business vocabulary, and will direct their thinking to the field of business best suited to their interests and talents. Students will analyze the specialized fields within the business organization, such as management, accounting, personnel, marketing, and finance. Students will also explore the role of business in modern society.

BUSI 2301
Business Law I (3-0) **3 Hours**
The student will develop an understanding of the legal framework of business and will develop an awareness of legal responsibilities and rights when dealing with persons and institutions in the business world. The student will understand the basic principles of law of torts, contracts, bailments and personal property. Special emphasis will be placed on sales contracts.

BUSI 2302
Business Law II (3-0) **3 Hours**
In this course, a continuation of BUSI 2301, the student will study commercial papers, credit, suretyship, secured transactions, bankruptcy, and reorganization. The student will develop an understanding of the agency relationship, partnerships, corporations, securities regulation, and investor protection laws.

HRPO 1311
Human Relations (3-0) **3 Hours**
Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.

IMED 1291
Special Topics in Educational/Instructional Design (2-0) 2 Hours
Instruction in web design and related graphic design issues. The student will learn how the internet functions with specific attention to the World Wide Web, and apply design techniques in the creation of graphics and other embedded elements for use in a web page.

IMED 2309
Internet Commerce (3-0) 3 Hours
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, performing on-line transactions, and generating dynamic content. Prerequisites: BUSG 1391-Special Topics: Fundamentals of Electronic Business and ITSE 2313-Web Authoring

ITSW 1401
Introduction to Word Processing (3-3) 4 Hours
An overview of the production of documents, tables, and graphics. The student will identify word processing terminology and concepts; create technical documents; format and edit documents; use simple tools and utilities; and print documents. Prerequisite: CPMT 1303 and POFT 1429 or keyboarding skills

ITSW 1404
Introduction to Spreadsheets (3-3) 4 Hours
Instruction in the concepts, procedures, and importance of electronic spreadsheets. The student will identify spreadsheet terminology and concepts; create formulas and functions; use formatting features; and generate charts, graphs, and reports. Prerequisite: POFT 1429 or keyboarding skills and POFT 1325.

ITSW 1407
Introduction to Database (3-3) 4 Hours
Introduction to database theory and the practical applications of a database. The student will identify database terminology and concepts; plan, define, and design a database; design and generate tables, forms, and reports; and devise and process queries. Prerequisite: CPMT 1303 or knowledge of software file management and keyboarding skills.

ITSW 1410
Presentation Media Software (3-3) 4 Hours
Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. The student will identify presentation media terminology and concepts; create presentations using text, visual and/or sound elements; use effective compositions and style; prepare presentations for distribution on computers or other media; and modify sequence and slide-master. Prerequisite: CPMT 1303 or knowledge of software file management and keyboarding skill and ITSW 1401 or proficiency in a word processing software application.

ITSW 2431
Advanced Word Processing (3-3) 4 Hours
Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. The student will design and create macros; use advanced formatting features; import data; and use graphic and special functions to enhance documents. Prerequisite: ITSW 1401

ITSW 2434
Advanced Spreadsheets (3-3) 4 Hours
This course is designed to provide an understanding of advanced functionality of electronic spreadsheets. The student will learn to create and design macros; use database and data analysis features; and devise solutions using linked worksheets.

MRKG 1311
Principles of Marketing (3-0) 3 Hours
Introduction to the basic marketing functions; identification of consumer and organizational needs; explanation of economics, psychology, sociological, and global issues; and description and analysis of the importance of marketing research.

POFI 2401
Word Processing (3-3) 4 Hours
Instruction in the various aspects of a word processing software package. Emphasis on the use of text editing features to produce business documents. The student will explain and discuss the concepts of word processing including operating systems and equipment; and operate a personal computer utilizing word processing functions to produce business documents. Prerequisite: POFT 1429 or keyboarding skills.

POFI 2431
Desktop Publishing for the Office (3-3) 4 Hours
In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays. The student will define desktop publishing terminology; manipulate text and graphics to create a balanced and focused layout; and create fliers, brochures, and multiple-page documents according to specified procedures.

POFM 1302
Computers in Health Care (3-0) 3 Hours
Introduction to a computerized method for the management and operation of health care information systems for various types of medical facilities. The student will describe the purpose and value of medical software; complete computerized task performance assignments; and perform required back-ups.

POFT 1301
Business Communications I (3-0) 3 Hours
Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. The student will apply the basic rules of grammar, spelling, capitalization, number usage, and punctuation; utilize terminology applicable to technical and business writing; develop proofreading and editing skills, and write effective sentences and paragraphs for business applications.

POFT 1309
Administrative Office Procedure I (3-0) 3 Hours
Study of current office procedures including telephone skills, time management, travel and meeting arrangements, mail processing, and other duties and responsibilities in an office environment. The student will develop time management techniques; manage incoming and outgoing mail; demonstrate appropriate telephone techniques; coordinate travel and meeting arrangements; and identify the basic skills of an office professional.

POFT 1325
Business Math and Machine Applications (3-1) 3 Hours
Skill development in the use of electronic calculators and business mathematical functions. Emphasis on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard. The student will utilize basic math skills; apply basic math skills to solve business application problems using an electronic calculator/keyboard; and develop speed and accuracy using spreadsheet software and/or electronic calculator/keyboard.

POFT 1429
Keyboarding and Document Formatting (3-3) 4 Hours
Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. The student will demonstrate proper keyboarding techniques including touch technique; demonstrate an acceptable level of keyboarding skills with a minimum speed of 30 word per minute(wpm) with minimum proficiency; apply proofreading and editing skills; and create basic business documents.

POFT 2312
Business Communications II (3-0) 3 Hours
Skill development in practical applications which emphasize the improvements of writing.skills necessary for effective business communications. The student will compose and produce effective business communications appropriate to industry needs; apply critical evaluation techniques to business communications; and recognize the importance of coherent, ethical communication principles in business and industry. Prerequisite: POFT 1301 or permission of instructor.

POFT 2333
Advanced Document Formatting and Skill Building (2-4) 3 Hours
Study of advanced concepts in a variety of office-simulated correspondence activities with emphasis on organization, prioritizing, decision making, composition, placement, accuracy and speed development. The student will apply mailability standards according to a specified procedure manual; use proofreading and editing skills; and implement decision-making skills. Prerequisite: POFT 1429 and POFT 2401.

POFT 2380
Cooperative Education-Administrative/Secretarial Science, General (1-0-20) 3 Hours
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through work experience. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry. Prerequisite: Two Business Applications courses.

POFT 2401
Document Formatting and Skill Building (3-3) 4 Hours
A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis on proofreading, editing, and following instructions, and key documents from various copy. The student will apply mailability standards to document production; use proofreading and editing skills; and format and produce a variety of business documents using word processing software. Prerequisite: POFT 1429, ITSW 1401, or equivalent.

POFT 2431
Administrative Systems (3-3) 4 Hours
Experience in project management and office procedures utilizing integration of previously learned skills. The student will select appropriate materials, procedures, and equipment for assigned tasks; and manage business projects using current technology, critical thinking, and problem-solving skills. Prerequisite: ITSC 1409 and ITSC 2421, ITSW 1404, ITSW 1401 and either ITSW 1407 or ITSW 1410.

CHEMISTRY

Dean:	Margaret Wade	125 SF	685-4615
Faculty:	John Anderson	127 SF	685-4620
	Glen Richardson	139 SF	685-4636
Division Secretary:	Norma Duran	124 SF	685-4612

Courses in this program are designed to fulfill the requirements for a major in chemistry. Any student who intends to transfer to another college or university is advised to consult the college catalog and the transfer requirements of that school. Different schools and different departments may have special conditions that might affect the choice of courses.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1316 or higher, PHYS 2425, PHYS 2426

Suggested Courses for Field of Study **16 Semester Credit Hours**

CHEM 1411, CHEM 1412*, CHEM 2423*, CHEM 2425*

Related Courses **8 Semester Credit Hours**

MATH 2413*, MATH 2414*, MATH 2415*

MINIMUM SEMESTER CREDIT HOURS = 66

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

CHEM 1405
Introductory Chemistry (3-4) **4 Hours**

This survey course for non-science majors will enable these students to comprehend the fundamental concepts of chemistry and will fulfill four credit hours of the lab science requirement. (CHEM 1409)

CHEM 1411
General Inorganic Chemistry I (3-4) **4 Hours**

This course will enable students to become proficient in stoichiometry, chemical equations, atomic structure, chemical bonding, reactions, gas laws, liquids and solids, and solutions. A knowledge of algebra is needed. (CHEM 1401)

CHEM 1412
General Inorganic Chemistry II (3-4) **4 Hours**

This course will enable students to become proficient in acid-base theory, oxidation-reduction reactions, chemical kinetics, aqueous equilibria, electrochemistry, and organic chemistry. Prerequisite: CHEM 1411. (CHEM 1402)

CHEM 2423
Organic Chemistry I (3-4) **4 Hours**

This course will enable students to become proficient in the reactions and mechanisms of aliphatic and aromatic hydrocarbons, and their derivatives. Prerequisite: CHEM 1412. (CHEM 2401)

CHEM 2425
Organic Chemistry II (3-4) **4 Hours**

This course will enable students to become proficient in the reactions and mechanisms of alcohols, phenols, ethers, aldehydes and ketones, carboxylic acids, and amines. Prerequisite: CHEM 2423. (CHEM 2402)

CHILD CARE AND DEVELOPMENT

Dean:	Becky Hammack	209a DFH	685-4600
Director:	Rita Stotts	HGC	685-4574
Division Secretary:	Kay Floyd	209b DFH	685-4600

The Child Care and Development Program offers students an in-depth study of children. The curriculum is designed to develop basic skills, attitudes, and competencies necessary for working effectively with children in group settings. Students learn by observing and participating in the on going activities of the Midland College Helen L. Greathouse Children's Center and Manor Park Child Care Center. The Helen L. Greathouse Children's Center is accredited by the National Association for the Education of Young Children. The Centers provide the necessary lab experiences which are required for all child development courses.

The Early Childhood Education field of study curriculum consists of TECA 1303, The Family and the Community; TECA 1311, Introduction to Early Childhood; TECA 1318, Nutrition, Health and Safety; and TECA 1354, Child Growth and Development. This set of courses can be taken by a student at Midland College and must be accepted in transfer to satisfy the lower division requirements for Early Childhood Education majors at any Texas public institution of higher learning. In addition to the TECA courses, a student may complete the required core requirements in order to receive an academic transfer certificate. These courses partially fulfill the requirements for a baccalaureate degree in Early Childhood Education from Texas public universities.

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate in Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ENGL 1301, GOVT 2301 or GOVT 2302, PSYC 2301

Specialty Courses **44 Semester Credit Hours**

CDEC 1223, CDEC 1313, CDEC 1319, CDEC 1321, CDEC 1356, CDEC 1357, CDEC 1358, CDEC 1359, CDEC 2315, CDEC 2341, *CDEC 2366, TECA 1303, TECA 1311, TECA 1318, TECA 1354

Related Courses **7 Semester Credit Hours**

SPCH 1318, ITSC 1191, PSYC 2308

MINIMUM SEMESTER CREDIT HOURS = 66

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements.

Oral Communication: SPCH 1318

Basic Use of Computers: ITSC 1191

Basic Skills Certificate

Specialty Courses **23 Semester Credit Hours**

CDEC 1223, CDEC 1313, CDEC 1319, CDEC 2315, TECA 1303, TECA 1311, TECA 1318, TECA 1354

Related Courses **6 Semester Credit Hours**

PSYC 2301, *PSYC 2308

MINIMUM SEMESTER CREDIT HOURS = 29

Enhanced Skills Certificate

Specialty Courses **9 Semester Credit Hours**
CDEC 1396, CDEC 2326, *CDEC 2328

MINIMUM SEMESTER CREDIT HOURS = 9

Academic Transfer Certificate

Core Requirements **42 Semester Hours**
See Core Requirements, page 75

Suggested Courses for Field of Study **12 Semester Credit Hours**
TECA 1303, TECA 1311, TECA 1318, TECA 1354

MINIMUM SEMESTER CREDIT HOURS = 54

CDEC 1223
Observation and Assessment (1-2-0) **2 Hours**
A study of the observation techniques of child development assessment skills and techniques of children.

CDEC 1313
Curriculum Resources for Early Childhood Programs (2-2-0) **3 Hours**
Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children.

CDEC 1319
Child Guidance (2-2-0) **3 Hours**
An exploration of guidance strategies for promoting prosocial behaviors in children. Emphasis on positive guidance principles and techniques, family involvement and cultural influences. Practical application through direct participation with children.

CDEC 1321
The Infant and Toddler (2-2-0) **3 Hours**
A study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality caregiving routines, appropriate environments, materials and activities, teaching/guidance techniques and observation methods.

CDEC 1356
Emergent Literacy for Early Childhood (2-2-0) **3 Hours**
An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum.

CDEC 1357
Math and Science for Early Childhood (2-2-0) **3 Hours**
An exploration of principles, methods, and materials for teaching young children math and science concepts through discovery and play.

CDEC 1358
Creative Arts for Early Childhood (2-2-0) **3 Hours**
An exploration of principles, methods, and materials for teaching young children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking.

CDEC1359
Children with Special Needs (2-2-0) **3 Hours**
A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, educational intervention, available resources, referral processes, the advocacy role and legislative issues.

CDEC1396
Special Topics in Administration of Programs for Children (2-4-0) 3 Hours
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

CDEC 2315
Diverse Cultural/Multilingual Education (2-2-0) 3 Hours
An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children.

CDEC 2326
Administration of Programs for Children I (2-4-0) 3 Hours
A practical application of management procedures for early care and education programs, including a study of planning, operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication.

CDEC 2328
Administration of Programs for Children II (2-4-0) 3 Hours
An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management advocacy, professionalism, fiscal analysis and planning parent education/partnerships, and technical applications in programs. Prerequisite: CDEC 2326.

CDEC 2341
The School Age Child (2-2-0) 3 Hours
A study of appropriate age (5 to 13 years) programs, including an overview of development, appropriate environments, materials and activities, teaching/guidance techniques and observation methods.

CDEC 2366
Practicum in Child Development and Early Childhood (0-0-21) 3 Hours
A basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. Prerequisite: Director approval.

TECA 1303
Family and the Community (3-0-0) 3 Hours
A study of the relationship between the child, family, community, and childhood educators, including a study of parent education and involvement, family and community, lifestyles, child abuse, and current family life issues.

TECA 1311
Introduction to Early Childhood Education (3-0-0) 3 Hours
An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics and current issues.

TECA 1318
Nutrition, Health, and Safety (3-0-0) 3 Hours
A study of nutrition, health, and safety including community health, universal health precautions, and legal implications. Practical application of these principles in a variety of settings.

TECA 1354
Child Growth and Development (3-0-0) 3 Hours
A study of the principles of child growth and development from conception through adolescence. Focus on physical, cognitive, social, and emotional domains of development.

COMMUNICATION

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Kent Moss	195 AFA	685-4654
	Bob Templeton	183 AFA	685-4655
Lab Instructor:	Karen Lanier	185 AFA	685-4768
Division Secretary:	Lula Lee	141 AFA	685-4624

Communication courses give a practical foundation in basic communication skills necessary for admittance to a senior college major program in journalism or mass communications. A variety of courses is offered including mass communications, reporting, editing, feature and editorial writing, photography, public relations, and advertising. The program also includes the active production of school publications.

As electives for non-communication majors, these courses serve as outlets for creative talent and school service and enable students to become more discerning consumers of the mass media.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: One English literature course (Humanities)

Suggested Courses for Field of Study **14 Semester Credit Hours**

Two hours of COMM lab courses, COMM 1307, COMM 2311, COMM 2315, and one course from the following: COMM 1318, COMM 1335, COMM 2305, COMM 2327, COMM 2332 and COMM 2339

Related Courses **6-11 Semester Credit Hours**

For an Associate of Arts, add 6-8 semester credit hours of Modern Language courses and an English literature course. For an Associate of Science, add 6 semester credit hours of electives.

MINIMUM SEMESTER CREDIT HOURS = 62-67

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

COMM 1129, 1130, 2129, 2130
Publications (0-4) **1 Hour**

Working experience in publications. Students are required to be on the staff of at least one of the official college publications and to work under supervision a minimum of four hours weekly. Course fee. (0904015406) (JOUR 1101, 1102, 2101, 2102)

COMM 1307
Introduction to Mass Communications (3-0) **3 Hours**

A survey of American mass communication functions with emphasis on development and current trends of print media, broadcasting, advertising, and public relations. Students are encouraged to become critical media consumers as well as to explore career possibilities in mass communications. Course fee. (0904035106) (JOUR 1300)

COMM 1318 (ALSO ARTS 2356)
Photography I (2-4) **3 Hours**

An introductory course for beginners in black and white photography. Students learn basic techniques of camera functions, film development, print processing and design fundamentals. Course fee. (5006055126) (PHOT 1301)

COMM 1319 (ALSO ARTS 2357)
Photography II (2-4) **3 Hours**
A continuation of Communication 1318 with emphasis on photography applied to publications. Students work 0 with more complex subjects and techniques in order to communicate their ideas through photographic images. Prerequisite: COMM 1318. Course fee. (5006055226) (PHOT 1302)

COMM 1335
Survey of Radio/Television (3-0) **3 Hours**
Study of the development, regulation, economics, social impact, and industry practices in broadcasting and cable communication. Includes non-broadcast television, new technologies, and other communication systems. Course fee. (0904035206)

COMM 2305
News Editing (3-3) **3 Hours**
A course in which copy editing, rewriting, proofreading, headline writing, and layout are emphasized. Lab work on newspaper and/or magazine required. Prerequisite: COMM 2309. Course fee. (0904015306) (JOUR 1302, COMM 2310)

COMM 2311
News Gathering and Writing (3-3) **3 Hours**
A study of fundamental news gathering and writing in which the students learn the evaluation of news, news gathering problems, and techniques, writing leads, organizing stories, and overcoming grammatical and structural problems. Lab work on newspaper staff required. Course fee. (0904015306) (JOUR 1301, COMM 2309)

COMM 2315
News Gathering and Writing II (3-0) **3 Hours**
A course in which the student learns to write newspaper and magazine feature and editorial material with emphasis on marketing of articles and research methods for article writing. Students study philosophy of news selection, ethics of communication, and responsibility in reporting. Work on the student newspaper or magazine is required. Prerequisite: COMM 2311 or consent of instructor. Course fee. (0904015806) (JOUR 2304, COMM 2311)

COMM 2327
Principles of Advertising (3-0) **3 Hours**
An overview of the broad field of advertising. This course acquaints students with the role of advertising in the American economy and society. Students study TV, radio, print advertising functions, and support advertising forms such as direct mail, transit, and outdoor media. Students create ads as part of an advertising campaign project. Course fee. (0902015126) (JOUR 2305)

COMM 2332
Radio/Television News (3-0) **3 Hours**
Preparation and analysis of news styles for the electronic media. Course fee. (0904025206)

COMM 2339
Writing for Radio, Television, & Film (3-0) **3 Hours**
Introduction to basic script formats, terminology, and writing techniques, including the writing of commercials, public service announcements, promotions, news, documentary, and fictional materials. Course fee. (0904025106)

COMPUTER GRAPHICS TECHNOLOGY (DRAFTING)

Dean:	Curt Pervier	143 T	685-4677
Faculty:	Joseph Nye	ATC	697-5863 ext. 3614
Division Secretary:		143 T	685-4676

The Computer Graphics program is designed to teach students the schematic symbols and codes common to the universal language of graphics. The student will develop graphic skills applicable to practical problems in design, estimating, inspection, and illustration of complex assemblies of electrical, mechanical and scientific equipment. The program will provide students with organized learning experiences, including theory, use of computer graphic equipment, laboratory and shop work as each relates to the production of working drawings.

A graduate of the Computer Graphics program will find excellent opportunities for employment in the field of process piping, structural, architectural, machine, mapping and desktop publishing. The state of the art experience provided by the computer graphics curriculum will give the graduate the extra edge needed for placement and/or advancement.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ENGL 1301

Specialty Courses **36 Semester Credit Hours**

*DFTG 1302, DFTG 1305 , *DFTG 1309, *DFTG 2340, eight specialty electives

Related Courses **14 Semester Credit Hours**

BMGT 1305, MCHN 1320, two KINE activity courses, and six hours of approved related electives.

MINIMUM SEMESTER CREDIT HOURS = 65

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.

Oral Communication: BMGT 1305

Basic Use of Computers: Specialty courses.

Basic Computer Graphics Certificate

Specialty Courses **18 Semester Credit Hours**

*DFTG 1302, DFTG 1305, *DFTG 1309, *DFTG 2340, and two DFTG electives

MINIMUM SEMESTER CREDIT HOURS = 18

Students who complete the Basic Computer Graphics Certificate (18 hours) can choose from the following options.

Desktop Publishing Certificate

Specialty Courses **6 Semester Credit Hours**

GRPH 1359, ARTC 1313

MINIMUM SEMESTER CREDIT HOURS = 24

Architectural Graphics Certificate

Specialty Courses **6 Semester Credit Hours**
*DFTG 1317, *DFTG 2331

MINIMUM SEMESTER CREDIT HOURS = 24

Exploration Graphics Certificate

Specialty Courses **6 Semester Credit Hours**
*DFTG 2321, *DFTG 2330 or 2371

MINIMUM SEMESTER CREDIT HOURS = 24

Piping Certificate

Specialty Courses **6 Semester Credit Hours**
*DFTG 2323, *DFTG 2345

MINIMUM SEMESTER CREDIT HOURS = 24

Computer Integrated Manufacturing Certificate

Specialty Courses **21 Semester Credit Hours**
*DFTG 1309, MCHN 1308, MCHN 1319, MCHN 1320, RBTC 2235, RBTC 2447, RBTC 2345

MINIMUM SEMESTER CREDIT HOURS = 21

ARTC 1313
Digital Publishing I (2-4) **3 Hours**
The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout.

DFTG 1302
Introduction to Technical Animation and Rendering (2-4) **3 Hours**
This course introduces the basic terminology and concepts associated with the development of computer modules used in technical computer animation. Topics include basic animation principles, model creation, light sources, camera positioning, rendering as well as importing and modification of external files. Course projects reflect current practices in the architectural, engineering, or construction disciplines. Prerequisite: DFTG 2340 Software: 3D Studio, VIZ Capstone Course

DFTG 1305
Technical Drafting (2-4) **3 Hours**
Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes.

DFTG 1309
Basic Computer-Aided Drafting (2-4) **3 Hours**
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Corequisite: DFTG 1305. Software: AUTOCAD 2004

DFTG 1317
Architectural Drafting - Residential (2-4) **3 Hours**
Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. Prerequisite: DFTG 1309. Software: AUTOCAD 2004, Architectural Desktop 2004

DFTG 1341
Intermediate Technical Animation and Rendering (2-4) **3 Hours**
Procedures in the manipulation and control of lights, cameras, materials, texturing and rendering techniques used in technical animation; topics include introductory keyframing and lens effects principles. Prerequisite: DFTG 1302, Software: 3D STUDIO, VIZ

DFTG 1391
Special Topics in Drafting (2-4) **3 Hours**
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

DFTG 2302
Machine Drafting (2-4) **3 Hours**
Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. Prerequisite: DFTG 1309. Software: AUTOCAD 2004

DFTG 2306
Machine Design (2-4) **3 Hours**
Theory and practice of design. Projects in problem-solving, including press fit, bolted and welded joints, and transmission components. Prerequisite: DFTG 2302 Software: AUTOCAD 2004, Inventor

DFTG 2319
Intermediate Computer-Aided Drafting (2-4) **3 Hours**
A continuation of practices and techniques used to basic computer-aided drafting emphasizing advanced dimensioning techniques, the development and use of prototype drawings, construction of pictorial drawings, construction of 3 dimensional drawings, interfacing 2d and 3d environments and extracting data. Prerequisite: DFTG 1309 Software: AUTOCAD 2004

DFTG 2321
Topographical Drafting (2-4) **3 Hours**
Plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. Develop map data using specific software. Prerequisite: DFTG 1309 Software: AUTOCAD 2004

DFTG 2323
Pipe Drafting (2-4) **3 Hours**
A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrated through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. Prerequisite: DFTG 1309 Software: AUTOCAD 2004

DFTG 2330
Civil Drafting (2-4) **3 Hours**
An in-depth study of drafting methods and principles used in public works civil engineering. Prerequisite: DFTG 2321 Software: AUTOCAD 2004, Civil Series/GIS

DFTG 2331
Advanced Technology In Architectural Design & Drafting (2-4) **3 Hours**
Use of Architectural specific software to execute the elements required in designing standard architecture exhibits utilizing custom features to create walls, windows and specific design requirements for construction in residential and light commercial architecture. Prerequisite: DFTG 1371 Software: Architectural Desktop

DFTG 2340
Solid Modeling/Design (2-4) **3 Hours**
A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work .Prerequisite: DFTG 1309 Software: AUTOCAD 2004

DFTG 2345
Advanced Pipe Drafting (2-4) **3 Hours**
A continuation of pipe drafting concepts building on the basic principles acquired in pipe drafting, process flow diagrams; solve design implementation problems; apply appropriate codes and standards. Prerequisite DFTG 2323 Software: AUTOCAD 2004, CADWORX and P&ID

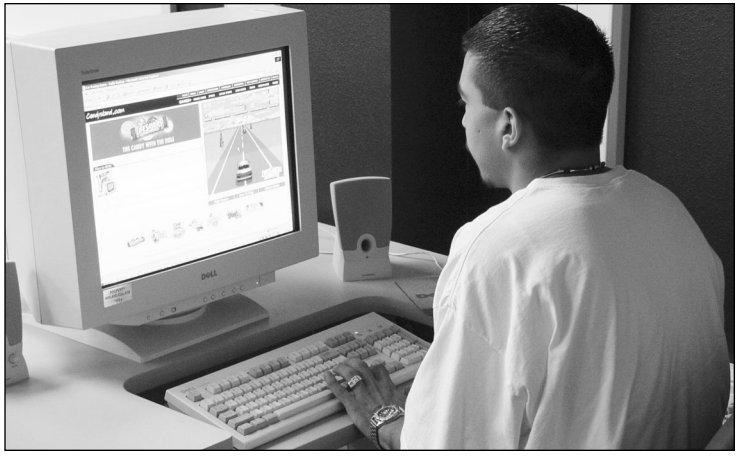
DFTG 2371
Exploration Graphics (2-4) **3 Hours**
An advanced course dealing with the techniques involved in plotting surveyor's notes, traverses, profiles, isometric sections, advanced projections, cross sections, and subsurface contours. The student will have the skill and knowledge to properly reproduce and display exploration data on a map while using a CAD system. Prerequisite: DFTG 1309 and 2321. Software: AUTOCAD 2004, Survey, Map and Civil Design

DFTG 2380 & 2381
Cooperative Work Experience, I, II (1-0-20) **3 Hours**
This course is a study of the basic career-related activities encountered in the area of Drafting. The individual is required to work for wages in a Drafting trade area for at least 20 hours per week under the supervision of the college and employer. Seminar meets one hour per week. Prerequisites: Approval of Dean and concurrent enrollment in a Drafting-related course.

GRPH 1359
Object Oriented Computer Graphics (2-4) **3 Hours**
Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use of the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included.

MCHN 1308
Basic Lathe (2-4) **3 Hours**
An introduction to the common types of lathes. Emphasis on basic parts, nomenclature, lathe operations, safety, machine mathematics, blueprint reading, and theory.

MCHN 1319
Manufacturing Materials and Processes (2-4) **3 Hours**
A basic study of various materials used in the metals industry and the chemical, physical, and mechanical properties of various metals. Emphasis on manufacturing processes, including casting, forming, machining, and molding.



MCHN 1320
Precision Tools and Measurement (3-0) **3 Hours**
An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools.

RBTC 2235
NC/CNC Programming (1-4) **2 Hours**
A study of the principles and concepts of numerical control through computer applications, specifically in the area of programming for the control of machine tools in CIM.

RBTC 2345
Robot Application, Set-up, and Testing (2-4) **3 Hours**
A capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance.

RBTC 2447
Computer Integrated Manufacturing (2-6) **4 Hours**
The principles of computer integrated manufacturing, including case studies and implementation of process control techniques. CAD/CAM, operations, software, and networking for CIM systems.

COMPUTER INFORMATION SYSTEMS

(See Information Technology)

CO-OPERATIVE WORK EXPERIENCE

Dean & Director:	Nancy Hart	142T	685-4657
Division Secretary:	Yvonne Hennig	142T	685-6447

The co-operative work experience program at Midland College allows vocational-technical students to combine classroom knowledge with on-the-job experience. Students attend seminars on a variety of work-related topics and work as an intern in local businesses and government offices. The classroom topics include interviewing, career development, time management, and resume preparation. Students also discuss applied ethics problems. The internship part of the course is individually designed by the student's supervisor and a faculty coordinator. The course requires 320 hours of on-the-job training (approximately 20 hours per week). Enrollment is flexible; students may start the course at any time during the semester with the consent of the program director.

Co-operative work experience may count towards a degree in the following programs. See individual programs for detailed course descriptions.

Accounting (ACNT 2382, 2383)
Air Conditioning, Heating and Refrigeration (HART 1380, 2380)
Building Science Technology (CNBT 2381)
Business (BUSG 2380, 2381)
Automotive Technology (AUMT 1280)
Computer Graphics (DFTG 2380, 2381)
Computer Maintenance (CPMT 2380)
Law Enforcement (CJSA 1382, 2382)
Information Technology (ITNW 1380)
Legal Assistant/Paralegal (LGLA 2380, 2381)
Business Computer Applications (POFT 2380)
Fire Protection Technology (FIRT 2380)

CRIMINAL JUSTICE

Dean:	Nancy Hart	142 T	685-4657
Faculty:	Robert Peetz *rpeetz@midland.edu*	174 T	685-4685
Division Secretary:	Yvonne Hennig	142 T	685-6447

Policing a community is one of the most complex responsibilities any governmental agency faces. Today's police officers, and those of the future, must be intelligent, articulate, mature, and knowledgeable about social and political conditions. They must understand legal issues, human nature, social problems and attitudes that differ from their own. Becoming a police officer is best accomplished through a combination of education and training. During training, individuals learn specific job-related skills. The goal of a college program, on the other hand, is to provide an intensive educational experience that develops ideas and promotes creative scholarship. Higher education has two important roles in police work: to carry education beyond the classroom in ways that encourage reform; and encourage a more humanistic approach to police work. To accomplish this goal and fulfill these roles, Midland College offers structured degree options designed to challenge students, facilitate learning, promote critical thinking and problem solving skills, and provide an impetus for life-long learning.

The Associate in Science (AS) option is designed for students wishing to pursue a baccalaureate degree with a major, or minor, in criminal justice or a related field. Students may elect to focus on law enforcement or corrections. The Associate of Applied Science (AAS) option focuses on law enforcement, and is designed for students desiring a two-year college degree. This option has a greater concentration of criminal justice courses, and fewer academic courses, than the AS option. A certificate in law enforcement is also offered for students who need to document certain course work but do not need or desire a degree.

This is a Tech-Prep program that provides students with opportunities to gain advanced technical skills. Students may receive college credit for approved courses taken during high school. High school students should discuss this option with their counselor. Others may contact the program coordinator at Midland College for information.

The courses listed below are suggested for students who wish to earn an Associate of Science degree at Midland College. An official degree plan must be filed before graduation. For additional information on degree plans, contact the program coordinator or Dean listed above.

The Texas Higher Education Coordinating Board has designated five courses in the Criminal Justice Field of Study (CJ FOS). These courses, identified below, comprise a core of courses that are guaranteed to transfer to upper-level institutions and apply towards a baccalaureate degree in criminal justice. The transferability of other courses is within the discretion of the upper-level institution. Implementation of the CJ FOS does not affect the number of courses or credit hours required for completing a degree or certificate at Midland College.

Associate of Science

Students transferring to another institution should follow this degree plan.

Core Requirements **38 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1314, PSYC 2301, SOCI 2301, SPCH 1311

Criminal Justice Field of Study **21 Semester Credit Hours**

Required: CRIJ 1301, CRIJ 1306, CRIJ 1310, CRIJ 2313, and CRIJ 2328 and any two of the following: CRIJ 1307, CRIJ 1313, CRIJ 2301, CRIJ 2314, CRIJ 2323

Related Courses **5 Semester Credit Hours**

One KINE activity course, one course from the Natural Sciences section of the Approved Core Courses, page 76

MINIMUM SEMESTER CREDIT HOURS = 64

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH 1311
Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

LAW ENFORCEMENT

The Associate in Applied Science - Law Enforcement (AAS) option serves a dual purpose. It gives students greater flexibility in course work, having more electives than the AS option. Also, a student who takes the proper courses, as described below, may be eligible to take the examination for licensure as a Texas Peace Officer (see note below). Eligibility is determined by the Texas Commission on Law Enforcement.

Graduates from an accredited college or university holding a baccalaureate degree may receive an Associate in Applied Science Degree in Criminal Justice upon successful completion of thirty (30) semester hours of criminal justice courses, and by appropriate leveling courses as determined by the Dean. Students interested in the program should contact either the Dean or the Criminal Justice Coordinator.

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**
See Core Requirements, page 75
Required Core Course(s) for this degree: ENGL 1302, GOVT 2301, PSYC 2301, SOCI 1301

Specialty Courses **36 Semester Credit Hours**
Required (CJ Field of Study): CRIJ 1301, CRIJ 1306, CRIJ 1310, CRIJ 2313, CRIJ 2328;
Plus the following: CRIJ 2314, CRIJ 2323, CJSA 2323; 4 specialty course electives.

Related Courses **14 Semester Credit Hours+**
ENGL 1301, SPCH 1311, GOVT 2302, one non-major elective, KINE 1101, KINE 1101 (may be repeated for credit).

MINIMUM SEMESTER CREDIT HOURS = 65

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH 1311
*Basic Use of Computers: The student must demonstrate the ability to use computers. The requirements can be met by ITSC 1409 or testing, college or high school course. All course work must be approved by the Dean.

NOTE: Licensed peace officers seeking the AAS degree may be awarded credit for the following courses: CJLE 1506, CJLE 1512, CJLE 1518, CJLE 1524. This credit applies only towards the AAS - Law Enforcement degree option.Individuals seeking a peace officer license through the academic alternative must earn the Associate of Applied Science - Law Enforcement Degree and meet the following requirements: Complete the following courses with a grade of B or better: CRIJ 1301, CRIJ 1306, CRIJ 1307, CRIJ 1310, CRIJ 2314, CRIJ 2323, CRIJ 2328; complete the following courses with a grade of B or better after having completed the sequence of CRIJ courses: CJLE 1506, CJLE 1512, CJLE 1518, and CJLE 1524; prior to enrolling in the CJLE courses submit to a background check including fingerprinting, criminal history, driving history and military history (if applicable) (§ 215.40, TCLE Rules). Individuals not qualified to become Texas Peace Officers may not enroll in these courses.

Law Enforcement Certificate

Specialty Courses **21 Semester Credit Hours**

Required: (CJ Field of Study): CRIJ 1301, CRIJ 1306, CRIJ 1310, CRIJ 2313, CRIJ 2328;

Plus any two CRIJ/CJCR/CJSA/CJLE courses. Other courses may be substituted with approval of the Program Coordinator and Division Dean.

Related Courses **5 Semester Credit Hours***

GOVT 2301, KINE 1101, KINE 1101 (may be repeated for credit).

*The student must demonstrate the ability to use computers. The requirements can be met by ITSC 1409, testing, or a college or high school course. All course work must be approved by the Dean.

MINIMUM SEMESTER CREDIT HOURS = 26

CJLE 1506
Basic Peace Officer I (4-6) **5 Hours**

Introduction to fitness and wellness, history of policing, professionalism and ethics, United States Constitution and Bill of Rights, criminal justice system, Texas Penal Code, Texas Code of Criminal Procedure, civil process, and stress management

CJLE 1512
Basic Peace Officer II (4-6) **5 Hours**

Basic preparation for a new peace officer. Covers field note taking, report writing, "use of force" law and concepts, problem solving, multiculturalism, professional policing approaches, patrol procedures, victims of crime, family violence, MHMR, crowd management, HAZMAT, and criminal investigation

CJLE 1518
Basic Peace Officer III (4-6) **5 Hours**

Basic preparation for a new peace officer. Covers laws pertaining to controlled substances, crowd management, personal property, and crime scene investigation.

CJLE 1524
Basic Peace Officer IV (4-6) **5 Hours**

Basic preparation for a new peace officer. Covers laws directly related to police field work. Topics include Texas Transportation Code, intoxicated driver, Texas Penal Code, elements of crimes, Texas Family Code, Texas Alcoholic Beverage Code, and civil liability. Requires the demonstration and practice of the skills of a police officer including patrol, driving, traffic stop skills, use of force, mechanics of arrest, firearm safety, and emergency medical care. Also includes study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations.

CJSA 1382, 2382
Cooperative Education - Criminal Justice Studies (1-0-20) **3 Hours**
Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Specific learning objectives directly related to a technical discipline guide the student through the paid work experience.

CJSA 1393
Special Topics in Criminal Justice Studies (3-0) **3 Hours**
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of students.

CJSA 2323
Criminalistics (3-0) **3 Hours**
Theory and practice of crime scene investigation. Topics include report writing, blood and other body fluids, document examination, etchings, casts and molds, glass fractures, use of microscope, and firearms identification.

CRIJ 1301 (CJSA 1322)
Introduction to Criminal Justice (3-0) **3 Hours**
Introduction to the criminal justice system, including the history and philosophy of criminal justice, the definition of crime, its nature and impact, the components of the criminal justice system, and an introduction to law and legal concepts. (CJSA 1322)

CRIJ 1306 (CJSA 1313)
Courts Systems and Practices (3-0) **3 Hours**
An examination of the role of the judiciary in the criminal justice system. Topics include the structure of the Texas court system, prosecution of offenders, the right to counsel, pretrial release, grand jury process, adjudication of crimes, rules of evidence and sentencing.

CRIJ 1307 (CJSA 1312)
Crime in America (3-0) **3 Hours**
The study of crime problems and theories in historical perspective. Topics include social and other factors affecting crime, the impact of crime on society, crime trends, social character of specific crimes, and crime prevention.

CRIJ 1310 (CJSA 1327)
Fundamentals of Criminal Law (3-0) **3 Hours**
A study of the nature of criminal law. Topics include the philosophical and historical development of law, major definitions and concepts, classifications of crime and penalties, and criminal responsibility.

CRIJ 1313 (CJSA 1317)
Juvenile Justice Systems (3-0) **3 Hours**
A study of the juvenile justice process. Topics include specialized juvenile law and the roles of the juvenile court, police agencies, correctional agencies, and theories concerning delinquency.

CRIJ 2301 (CJCR 2324)
Community Resources in Corrections (3-0) **3 Hours**
Overview of diversionary practices and treatment programs available to offenders in a local context. Topics include selected recognized models and future trends in community treatment.

CRIJ 2313 (CJCR 1307)
Correctional Systems and Practices (3-0) **3 Hours**
A study of the role of corrections in the criminal justice system. Topics include organization and theory of correctional systems, institutional operations, alternatives to institutionalization, treatments and rehabilitation, and current and future issues.

CRIJ 2314 (CJSA 1342)
Criminal Investigation (3-0) **3 Hours**
Study of the investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, and trial preparation.

CRIJ 2323 (CJSA 2300)
Legal Aspects of Law Enforcement (3-0) **3 Hours**
Exploration of police authority. Topics include responsibilities and constitutional restraints, law of arrest, search and seizure, and police liability.

CRIJ 2328 (CJSA 1359)
Police Systems and Practices (3-0) **3 Hours**
Exploration of the profession of police officers. Topics include organization of law enforcement systems, police discretion, ethics, police-community interaction, and current and future issues.

LGLA 1349
Constitutional Law (3-0) **3 Hours**
This course provides an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Topics include separation of powers and balances, governmental structures and processes, and individual rights in relation to government.

DEVELOPMENTAL STUDIES

Coordinator:	Peggy Wood	112 SF	685-4667
Assistant Coordinator:	James E. Fuller	114 SF	685-4625
Developmental ESL:	Mike Makowsky	136 T	685-5593

DVLP 0190
Strategic Studies (1-0) **1 Hour**

DVLP 0290
Strategic Studies (2-0) **2 Hours**

DVLP 0390
Strategic Studies (3-0) **3 Hours**

The Strategic Studies courses are especially recommended for students who have been out of school for several years, for students who have failed one or more sections of THEA/COMPASS, or for those students who have been placed on scholastic probation or scholastic enrollment restriction.

Strategic Studies is a course designed to teach students how to enhance their prospects of being successful in college. The techniques that are taught include general-purpose learning strategies such as note taking, organization, time management, identifying and learning methods of avoiding procrastination, reading/comprehension, attention/listening, problem solving and critical thinking, encoding and retrieval, test taking, test preparation, tests/test anxiety, group and cooperative learning, memory, motivation, writing and proofing. In addition, content specific strategies include English, general science, chemistry, business, philosophy, political science, history, and psychology. Computer related activities and instruction complement traditional methods of instruction. The course may be taken in one credit hour or two credit hour modules on a flexible entry basis. (3201015235)

DVLP 0393
Developmental ESL: Speaking and Listening (3-3) 3 Hours
This course is designed to develop basic English conversational skills in American cultural, employment, academic, and day-to-day situations for the beginning ESL student. Pronunciation, vocabulary, and simple sentence patterns will be emphasized. Lab assignments will be individualized. (3201085512)

DVLP 0394
Developmental ESL: Reading and Vocabulary (3-3) 3 Hours
This course is designed to develop basic reading comprehension, vocabulary, and study skills for non-native speakers of English and to prepare them for success in college. Lab assignments will be individualized. (3201085612)

DVLP 0395
Developmental ESL: Grammar and Writing (3-3) 3 Hours
This course is designed to develop basic writing skills, including Standard English usage, and the application of grammar for non-native speakers of English in preparation for both academic and every-day writing. Lab assignments will be individualized. (3201085712)

DVLP 0396
Developmental ESL: Composition (3-3) 3 Hours
This course is designed to develop skills in expository writing and to prepare the advanced ESL student for college level composition. Vocabulary building, writing, literature, diction, and logical thinking will be emphasized. Lab assignments will be individualized. Open only to non-native speakers. (3201085412)

For additional developmental courses, see:

English (ENGL 0370 and ENGL 0170, ENGL 0371 and ENGL 0171, ENGL 0280, ENGL 0181, ENGL 0182)

Mathematics (Math 0190, MATH 0191, MATH 0389, MATH 0390, MATH 0391)

Reading (READ 0370 and READ 0170, READ 0371 and READ 0171, READ 0180, READ 0181, READ 0182)

DIAGNOSTIC MEDICAL SONOGRAPHY

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Elizabeth Brown	A35 AMS	685-5572
Division Secretary:	Kay Floyd	209b DFH	685-4600

Diagnostic Medical Sonography is an allied health specialty utilizing high frequency sound waves to aid in the diagnosis of disease. Sonographers are important members of the diagnostic imaging team. The sonographer works independently to obtain appropriate images of anatomy and pathology and conveys this information to physicians to assist in the care and treatment of patients.

The Diagnostic Medical Sonography program is designed to provide the necessary education through academic instruction and professional training to develop advanced medical imaging skills and prepare the graduate for employment in the field of sonography. Applicants with prior associate in applied science degrees in radiography, respiratory care, nuclear medicine and/or nursing are eligible for an advanced technical certificate.

A class is admitted each fall. Applicants are encouraged but not required to complete as many non-sonography courses as possible prior to entering the program. Accepted students must take all sonography courses in sequential order and must pass all required courses with a minimum grade of "C".

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, BIOL 2402, MATH 1314, PSYC 2301, SPCH 1318

Specialty Courses **41 Semester Credit Hours**

DMSO 1302, DMSO 1360, * DMSO 1361, DMSO 1405, *DMSO 1442, *DMSO 2345, DMSO 2351, *DMSO 2353, *DMSO 2354, *DMSO 2405, *DMSO 2460, *DMSO 2461

Related Courses **8 Semester Credit Hours**

PHYS 1401, ENGL 1301 or POFT 1302, ITSC 1191

MINIMUM SEMESTER CREDIT HOURS = 69

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements

Oral Communication: SPCH 1318

Basic Use of Computers: ITSC 1191

Diagnostic Medical Sonography Certificate

Specialty Courses **41 Semester Credit Hours**

DMSO 1302, DMSO 1360, *DMSO 1361, DMSO 1405, *DMSO 1442, *DMSO 2345, DMSO 2351, *DMSO 2353, *DMSO 2354, *DMSO 2405, *DMSO 2460, *DMSO 2461

Related Courses **7 Semester Credit Hours**

PHYS 1401, MATH 1314

MINIMUM SEMESTER CREDIT HOURS = 48

Course Progression

The following is the required sequence of sonography courses in the Diagnostic Medical Sonography program.

First Year, Spring Semester
DMSO 1302, DMSO 1405, DMSO 1360
First Year, Summer Semester
DMSO 1361, DMSO 2405
Second Year, Fall Semester
DMSO 1442, DMSO 2353, DMSO 2460
Second Year, Spring Semester
DMSO 2345, DMSO 2351, DMSO 2354, DMSO 2461

ADMISSION REQUIREMENTS

The Midland College Diagnostic Medical Sonography program has a limited enrollment based on specific admission criteria. For information regarding the admission criteria call the Health Sciences Division office. Each prospective student will be counseled by sonography program faculty as scheduled through the Health Sciences office.

A physical examination and current immunizations are required after admission but prior to beginning sonography courses. Health insurance is required. Students must be certified in cardiopulmonary resuscitation (CPR).

DMSO 1302
Basic Ultrasound Physics (3-0-0) **3 Hours**
Basic acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams.

DMSO 1360
Clinical I (0-0-15) **3 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

DMSO 1361
Clinical II (0-0-18) **3 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: DMSO 1360.

DMSO 1405
Sonography of Abdominopelvic Cavity (3-2-0) **4 Hours**
Detailed study of normal and pathological abdominal and pelvic structures as related to scanning techniques, patient history, and laboratory data, transducer selection, and scanning protocols.

DMSO 1442
Intermediate Ultrasound Physics (3-3-0) **4 Hours**
A continuation of the study of acoustical physics. Topics include interaction of ultrasound with tissues, the mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects and image artifacts. Methods of Doppler flow analysis may be introduced. Prerequisite: DMSO 1302.

DMSO 2345
Advanced Sonography Practices (3-0-0) **3 Hours**
Advanced sonographic procedures and special topics. Review of previously covered material is included. Vascular methodology, case studies, and film critique are discussed.

DMSO 2351
Doppler Physics (3-0-0) **3 Hours**
This course emphasizes Doppler and hemodynamic principles relating to arterial and venous imaging and testing.

DMSO 2353
Sonography of Superficial Structures (3-0-0) **3 Hours**
Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history, and laboratory data, transducer selection, and scanning protocols. Prerequisite: DMSO 2405

DMSO 2354
Neurosonology (3-0-0) **3 Hours**
Detailed study of normal and pathological neonatal head structure. Vascular methodology will be discussed. Prerequisite: DMSO 2353.

DMSO 2405
Sonography of Obstetrics/Gynecology (4-1-0) **4 Hours**
Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Prerequisite: DMSO 1405.

DMSO 2460
Clinical III (0-0-23) **4 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: DMSO 1361.

DMSO 2461
Clinical IV (0-0-22) **4 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: DMSO 2450.

DRAFTING

(See Computer Graphics Technology)

DRAMA

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	David Allen	130 AFA	686-4205
Division Secretary:	Lula Lee	141 AFA	685-4624

The Midland College student in theatre has an opportunity to study, work, and perform with a staff of professionals. All aspects of both the academic and the production aspects of theatre are studied in depth, and students are given the opportunity to practically apply their studies by participating in Midland College and Midland Community Theatre productions. All phases of theatre production are explored in a healthy, supportive, and artistic environment. The course of study enables the student to be properly prepared for more advanced study.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: DRAM 2361, DRAM 2362, one Enlish Literature course (Humanities)

Suggested Courses for Field of Study **13 Semester Credit Hours**

DRAM 1330, DRAM 1351, DRAM 1120, DRAM, 1121, DRAM 2120, DRAM 2121 and a choice of DRAM 1310, DRAM 1352*, DRAM 2336 and DRAM 2366

Related Courses **9-11 Semester Credit Hours**

For Associate of Arts, ENGL 2307 (Play writing) and 6-8 semester credit hours of Modern Language courses.

For Associate of Science, ENGL 2307 (Play writing), three additional hours of Drama, and three hours of electives.

MINIMUM SEMESTER CREDIT HOURS = 64-66

Graduates of this program must demonstrate general education competencies as follows:

Reading Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

DRAM 1120, 1121, 2120, 2121
Rehearsal and Performance I, II, III, IV (0-3) **1 Hour**

This is a practicum course that is designed to provide students with hands-on practical experience in theatre. Students will be assigned to specific duties as either a cast or crew member for productions at Midland College and Midland Community Theatre. Work hours can be tailored to an individual's particular schedule. Students may repeat this course for up to four hours credit. (500501230)

DRAM 1310
Theatre Appreciation (3-0) **3 Hours**

This course is an introduction to theatre, designed to give students an understanding and appreciation for theatre as an art form and career choice. Students will study theatre practice and dramatic literature from various genres and periods and view at least one live performance. (5005015130)

DRAM 1330
Introduction to Technical Theatre (3-0) **3 Hours**
This course covers all basic areas of the art of stagecraft, including elementary drafting, scenic construction, carpentry, lighting, material selection and application, properties, costumes, sound, and elementary design. (5005025130)

DRAM 1351
Acting I (3-0) **3 Hours**
Students are introduced to the basic skills and techniques of acting that are developed with individual work in the use of mind, body, and voice. Exercises in improvisation, relaxation, and open scenes illustrate and stress the importance of the working process. (5005035130)

DRAM 1352
Acting II (3-0) **3 Hours**
This course is a continuation of Acting I with further development of mind, body, and voice. Students will also learn the process of character analysis through the preparation and performance of scenes from plays. Prerequisite: DRAM 1351 or permission of the instructor. (5005035130)

DRAM 2336
Voice and Movement (3-0) **3 Hours**
This course focuses on understanding the application of the performer's use of the voice and body as effective creative instruments of effective communication. It encourages an awareness of the need for vocal proficiency and teaches techniques to improve speaking and mobility on stage. (5005035230)

DRAM 2361
History of the Theatre I (3-0) **3 Hours**
This course covers the history of the theatre from the earliest times through the Renaissance, examining different aspects of the theatre such as historical staging and techniques, styles of acting, social and cultural context of drama, and themes and genres of plays produced. (5005055130)

DRAM 2362
History of the Theatre II (3-0) **3 Hours**
This course is a continuation of History of the Theatre I, covering the time period from the Renaissance to the present. (5005055130)

DRAM 2366
Introduction to Film (3-0) **3 Hours**
This course is an introduction to cinema, designed to give students an understanding and appreciation for cinema as an art form. Students will study the visual, aural, dramatic narrative, sociological, and historical elements of cinema. Students will study the terminology and techniques of filmmaking and will study various genres by viewing films. Course fee. (5006025130)

ECONOMICS

Dean:	Nancy Hart	142 T	685-4657
Faculty:	Omar Belazi	154 T	685-4656
	Chloice Shofner	153 T	685-4611
Division Secretary:	Yvonne Hennig	142 T	685-6447

ECON 2301
Principles of Economics I (3-0) **3 Hours**

The student will study macroeconomic concepts as they relate to the aggregate economy. Topics will include the public sector, GDP measurements, the Federal Reserve System, inflation and unemployment, and the different approaches to public policy. (ECON 2301)

ECON 2302
Principles of Economics II (3-0) **3 Hours**

The students will study microeconomic theory and the operation of individual firms and industries. Topics will include supply and demand, opportunity costs, the concept of utility, cost curves and revenue curves, and the various forms of business organizations. (ECON 2302)

EDUCATION

Dean:	William Morris	141a AFA	685-4640
Division Secretary:	Monica Sosa	141 AFA	685-4640

Public institutions in the state of Texas do not offer baccalaureate degrees in Education. Elementary and secondary teachers must have a "major" in an academic field combined with course work in professional education courses. The course of study below is suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science or Associate of Arts

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75
Required Core Course(s) for this degree: MATH 1314*

Suggested Courses for Field of Study **6 Semester Credit Hours**

PSYC 2308, EDUC 1301

Related Courses **14 Semester Credit Hours**

For an Associate of Science add 14 semester credit hours of "field of study" electives; for Associate of Arts add 6-8 semester credit hours of Modern Language courses and an English literature course, and 3-5 semester credit hours of "field of study" electives.

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

"Field of study" electives will depend on the grade level of certification sought.

Suggested:

6 additional hours in Mathematics, Beginning or Intermediate Spanish, Physical Science, Principles of Geography, Children with Special Needs, Principles and Practices of Multi-cultural Education

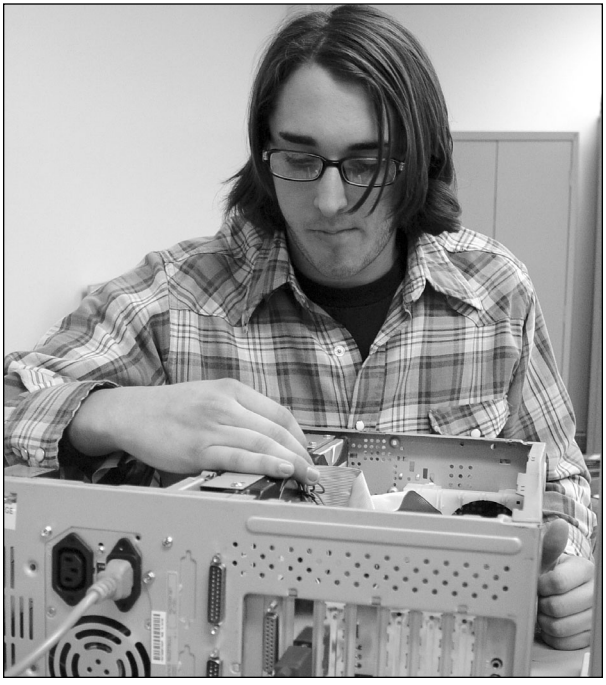
Since teacher certification requires a “major” other than Education, please contact one of the following Deans for academic advising. An official degree check should be completed the semester before graduation.

Social Studies: Anthropology, Education, Government/Political Science, History, Kinesiology/Physical Education, Philosophy, Psychology, Sociology
William Morris *141a AFA* *685-4640*
Language Arts and the Fine Arts: Art, Drama, English, Journalism, Modern Languages, Music, Speech
William G. Feeler *141b AFA* *685-4626*
Math and Sciences: Biology, Chemistry, Geology/Earth Sciences, Mathematics, Physics
Margaret Wade *125 SF* *685-4615*
Early Childhood Education:
Becky Hammack *209a DHS* *685-4600*
General Business: Economics, Computer Information Systems
Nancy Hart *142 T* *685-4657*
Industrial Arts:
Curt Pervier *143 T* *685-4677*

EDUC 1301
Introduction to Education (3-0) **3 Hours**
This course is designed to provide students with an orientation to the profession of teaching. It explores and investigates the theories, foundations, social roles, structures, and current trends and issues in education. It discusses the characteristics of effective teachers and diversity among learners.

ELECTRONICS TECHNOLOGY

(See Information Technology)



EMERGENCY MEDICAL SERVICES

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Kim Willis	A32 AMS	685-5571
Division Secretary:	Kay Floyd	209b DFH	685-4600

Emergency Medical Services is a Health Science profession recognized by the American Medical Association. A competent member of this profession will recognize, assess, and manage medical emergencies under the direction of a physician and primarily provide pre-hospital emergency care to acutely ill patients by ambulance service and secondarily in other appropriate settings (such as hospitals). Midland College offers an Associate Degree (2 years) or individualized courses preparing students to write the Texas Department of Health examination for Basic Emergency Medical Technician (EMT) after the first six (6) semester hours and the Texas Department of Health exam for EMT-Paramedic after completion of EMT training and an additional 16 semester hours (12 months) of course work.

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, BIOL 2402, ENGL 1301, PSYC 2301

Specialty Courses **43 Semester Credit Hours**

EMSP 1260, EMSP 1261, *EMSP 1262, EMSP 1356, EMSP 1438, *EMSP 1455, EMSP 1501, EMSP 2135, *EMSP 2160, EMSP 2243, EMSP 2248, *EMSP 2261, EMSP 2430, EMSP 2434, *EMSP 2544

Related Courses **5 Semester Credit Hours**

HPRS 1106, ITSC 1191, SPCH 1318

MINIMUM SEMESTER CREDIT HOURS = 68

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements.

Oral Communication: SPCH 1318

Basic Use of Computers: ITSC 1191

Emergency Medical Technician Certificate

Specialty Courses **7 Semester Credit Hours**

EMSP 1260, EMSP 1501

Related Courses **9 Semester Credit Hours**

BIOL 2401, *BIOL 2402, HPRS 1106

MINIMUM SEMESTER CREDIT HOURS = 16

Intermediate Certificate

Specialty Courses **19 Semester Credit Hours**

EMSP 1261, *EMSP 1262, EMSP 1356, EMSP 1438, *EMSP 1455, EMSP 2434

MINIMUM SEMESTER CREDIT HOURS = 19

Paramedic Certificate

Specialty Courses **43 Semester Credit Hours**

EMSP 1260, EMSP 1261, *EMSP 1262, EMSP 1356, EMSP 1438, *EMSP 1455, EMSP 1501, EMSP 2135, *EMSP 2160, EMSP 2243, EMSP 2248, EMSP 2261, EMSP 2430, EMSP 2434,* EMSP 2544

MINIMUM SEMESTER CREDIT HOURS = 43

Course Progression

The following is the required sequence of paramedic courses in the Emergency Medical Services program.

First Semester (Summer)
EMSP 1261, EMSP 1356, EMSP 1438
Second Semester (Fall)
EMSP 1262, EMSP 1455, EMSP 2434, EMSP 2544
Third Semester (Winter Interim)
EMSP 2248
Fourth Semester (Spring)
EMSP 2160, EMSP 2135, EMSP 2243, EMSP 2261, EMSP 2430

ADMISSION REQUIREMENTS

The Emergency Medical Services Program has a limited enrollment based on specific admission criteria. For information regarding the admission criteria, see the program brochure or the Emergency Medical Services Program Director.

EMSP 1260
EMT Clinical (0-0-9) **2 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical experience is an unpaid learning experience. Corequisite: EMSP 1501.

EMSP 1261
Paramedic Clinical I (0-0-6) **2 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical experience is an unpaid learning experience. Corequisite: EMSP 1356 and 1438.

EMSP 1262
Paramedic Clinical II (0-0-6) **2 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical experience is an unpaid learning experience. Prerequisite: EMSP 1261. Corequisite: EMSP 1455, 2434 and 2544.

EMSP 1356
Patient Assessment and Airway Management (2-2-0) **3 Hours**
A detailed study of the knowledge and skills required to perform patient assessment and airway management. Corequisites: EMSP 1261 and 1438.

EMSP 1438
Introduction to Advanced Practice (3-1-0) **4 Hours**
An exploration of the foundations necessary for mastery of the advanced topics of clinical practice out of the hospital. Corequisites: EMSP 1261 and 1356.

EMSP 1455
Trauma Management (2-2-0) **4 Hours**
A detailed study of the knowledge and skills in the assessment and management of patients with traumatic injuries. Corequisites: EMSP 1262, 2434, and 2544.

EMSP 1501
Emergency Medical Technician - Basic (4-4-0) **5 Hours**
Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. Corequisite: EMSP 1260.

EMSP 2135
Advanced Cardiac Life Support (0-2-0) **1 Hour**
Skill development for professional personnel practicing in critical care units, emergency departments, and paramedic ambulances. Establishes a system of protocols for management of the patient experiencing cardiac difficulties. Corequisites: EMSP 2160, 2243, 2261 and 2430.

EMSP 2160
Paramedic Clinical III (0-0-5) **1 Hour**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical experience is an unpaid learning experience. Prerequisite: EMSP 1262. Corequisite: EMSP 2135, 2243, 2261 and 2430.

EMSP 2243
Assessment Based Management (2-0-0) **2 Hours**
The capstone course of the Emergency Medical Services Program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. Corequisites: EMSP 2160, 2135, 2261 and 2430.

EMSP 2248
Emergency Pharmacology (2-0-0) **2 Hours**
A comprehensive course covering all aspects of the utilization of medications in treating emergency situations. Course is designed to compliment Cardiology, Special Populations, and Medical Emergency courses.

EMSP 2261
Paramedic Clinical IV (0-0-6) **2 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical experience is an unpaid learning experience. Corequisite: EMSP 2160, 2135, 2243, and 2430.

EMSP 2430
Special Populations (4-0-0) **4 Hours**
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. Corequisites: EMSP 2160, 2135, 2243, and 2261.

EMSP 2434
Medical Emergencies (3-2-0) **4 Hours**
A detailed study of the knowledge and skills in the assessment and management of patients with medical emergencies. Corequisites: EMSP 1262, 1455, and 2544.

EMSP 2544
Cardiology (3-2-0) **5 Hours**
A detailed study of the knowledge and skills in the assessment and management of patients with cardiac emergencies. Corequisites: EMSP 1262, 1455 and 2434.

HPRS 1106
Medical Terminology (1-0-0) **1 Hour**
A study of common medical terminology, word origin, structure, and application.

ENGINEERING

(See Physics)

ENGLISH

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Russell Goodyear	118 SF	685-4605
	Pamela Howell	119 SF	685-4628
	Melissa Jackson	131 AFA	685-6458
	Terry Jolliffe	197 AFA	686-5568
	Glenda Lindsey-Hicks	107 SF	685-4627
	Karen Pape	232 LRC	685-4561
	Rebecca Watson	108 SF	685-4632
	Lynda Webb	134 T	685-4639
	Mary Williams	144 AFA	685-4631
Division Secretary:	Lula Lee	141 AFA	685-4624

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: one English Literature course (Humanities)

Suggested Courses for Field of Study **6 Semester Credit Hours**

Two (2) English literature courses.

Related Courses **14-17 Semester Credit Hours**

For an Associate of Arts, one elective and 14 semester credit hours of Modern Language courses. For an Associate of Science 14 semester credit hours of electives.

MINIMUM SEMESTER CREDIT HOURS = 62-65

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

ENGL 0170
Developmental Writing Lab I (0-1) **1 Hour**

A lab course conducted through varied instructional techniques (audio/visual programs, workbook, handouts, computer instruction, and tutorial help) and designed to identify writing deficiencies and improve skills necessary to college academic work and to provide enrichment opportunities. To be taken in conjunction with ENGL 0370. Course fee. (3201085312) (0190)

ENGL 0171
Developmental Writing Lab II (0-1) **1 Hour**

A lab course conducted through varied instructional techniques (audio/visual programs, workbook, handouts, computer instruction, and tutorial help) and designed to identify writing deficiencies and improve skills necessary to college academic work and to provide enrichment opportunities. To be taken in conjunction with ENGL 0371. Course fee. (3201085312)

ENGL 0181
Intermediate Writing II (0-1) **1 Hour**

Required for student taking ENGL 1301 under the "C" or better option. Student must make a "C" in this course and a "C" in ENGL 1301 to fulfill college writing readiness requirement.

ENGL 0280
Intermediate Writing I (0-2) **2 Hours**
A writing-intensive lab course designed to prepare the student for college writing readiness. Prerequisite is ENGL 0371/0371. Course fee. (3201085312)

ENGL 0370
Developmental Writing I (3-0) **3 Hours**
A course designed to assist students to become more proficient in grammar, mechanics, expository writing, vocabulary, and critical reading. ENGL 0170 Developmental Writing Lab I is required with this course. Course fee. (3201085312) (0390)

ENGL 0371
Developmental Writing II (3-0) **3 Hours**
A course designed to offer more advanced assistance to students needing to become more proficient in grammar, mechanics, expository writing, vocabulary, and critical reading. ENGL 0171 Developmental Writing Lab II is required with this course. Course fee. (3201085312) (0391)

ENGL 1301
Composition and Rhetoric (3-0) **3 Hours**
A course designed to help students develop reading and writing skills by studying diction, syntax, paragraph development, grammar, vocabulary and essay organization and by writing expository paragraphs and essays. Prerequisite: 220+ THEA score, 70+/6 Compass score, or successful completion of developmental education sequence. Corequisite: ENGL 0181, when taken as culmination of developmental education sequence. Course fee. (2304015112)

ENGL 1302
Composition and Literature (3-0) **3 Hours**
A course designed to enable students to further their composition skills by writing multiparagraph essays, including a research paper; to write logically; and to read, research, analyze, and discuss the literary genres of poetry, short fiction, and drama. Prerequisite: ENGL 1301. Course fee. (2304015112) (ENGL 1302)

ENGL 1312
Workplace Composition (3-0) **3 Hours**
A course in which students will develop writing skills and learn the literature of the workplace. The course will have three components: writing letters, writing reports, and reading technical literature. In each component, students will study rhetoric and grammar, develop editing skills, and practice research techniques. Course fee. (2311015112)

ENGL 2307
Creative Writing (3-0) **3 Hours**
A course designed to enable students to investigate and discuss the creative process, to study and practice techniques of creative writing, and to read, analyze, discuss, and write two or more of the following: narrative essays, poems, short stories, and researched reviews/abstracts. Prerequisite: ENGL 1301. Course fee. (2305015112) (ENGL 2307)

ENGL 2308
Advanced Studies in Creative Writing (3-0) **3 Hours**
An advanced course designed to enable students to investigate and discuss the creative process, to study and practice techniques of creative writing, and to read, analyze, discuss, and write one or more of the following: narrative essays, poems, short stories, and plays. Prerequisite: ENGL 1301. Course fee. (2303015312)

ENGL 2311
Technical Writing (3-0) **3 Hours**
A course designed to enable students to organize and prepare basic technical materials in the following areas: abstracts; proposals; technical descriptions; instructional processes; informational processes; technical definitions; progress reports; formal technical reports; graphics; and, business correspondence; also, to enable students to analyze audience and report orally. Prerequisite: ENGL 1301. Course fee. (2311015112) (ENGL 2303)

ENGL 2314
Technical & Business Writing I (3-0) **3 Hours**
First semester of a study designed to enable students to organize and prepare materials for college-level scientific, technical, or business writing. Prerequisite: ENGL 1301. Course fee. (2311015112)

ENGL 2315
Technical & Business Writing II (3-0) **3 Hours**
Second semester of a study designed to enable students to organize and prepare materials for college-level scientific, technical, or business writing. Prerequisite: ENGL 2314. Course fee. (2311015112)

ENGL 2321
Masterworks of British Literature (3-0) **3 Hours**
The study of longer significant works of British literature, including study of movements, schools, or periods. Prerequisite: ENGL 1302. Course fee. (2308015112)

ENGL 2322
Literature of England I (3-0) **3 Hours**
A course designed to enable students to develop a historical perspective on the development of ideas and literary techniques by studying major authors, works, and trends in English literature from the Old English Period through the Neo-classical Age. Students will develop their critical thinking, research, and writing skills. Prerequisite: ENGL 1302. Course fee. (2308015112) (ENGL 2305)

ENGL 2323
Literature of England II (3-0) **3 Hours**
A course designed to enable students to develop a historical perspective on the development of ideas and literary techniques by studying major authors, works, and trends in English literature from the late 18th century through the 20th century. Students will develop their critical thinking, research and writing. Prerequisite: ENGL 1302. Course fee. (2308015112) (ENGL 2306)

ENGL 2326
Masterworks of American Literature (3-0) **3 Hours**
A course designed to permit intensive study of six to ten masterpieces of American literature from the nineteenth and twentieth centuries. Prerequisite: ENGL 1302. Course fee. (2307015112) (ENGL 2312)

ENGL 2327
Survey of American Literature I (3-0) **3 Hours**
A course designed to acquaint the student with the varied works of American literature from the Colonial Period through 1865 within the historical and multicultural influences that shaped those works. Students will discuss, research, and write about literature from the period. Prerequisite: ENGL 1302. Course fee. (2307015112) (ENGL 2309)

ENGL 2328
Survey of American Literature II (3-0) **3 Hours**
A course designed to acquaint the student with the varied works of American literature from 1865 to the present within the historical and multicultural influences that shaped those works. Students will discuss, research, and write about literature from the period. Prerequisite: ENGL 1302. Course fee. (2307015112) (ENGL 2310)

ENGL 2331
Multicultural Literature (3-0) **3 Hours**
A course designed to enable students through reading assignments, class discussion, and written analyses to develop critical skills and to research writers and developments in English translations of literatures other than those of the United States and Western Europe. Prerequisite: ENGL 1302. Course fee. (2303015212)

ENGL 2332
Masterpieces of the Western World I (3-0) **3 Hours**
A course designed to enable students to read, view, listen to, analyze, and discuss significant works from the ancient world through the Renaissance and further their research and writing skills. Prerequisite: ENGL 1302. Course fee. (2303015212) (ENGL 2301)

ENGL 2333
Masterpieces of the Western World II (3-0) **3 Hours**
A course designed to enable students to read, view, listen to, analyze, and discuss significant works in the major periods of the Western literary tradition since 1600 – Neo-classicism, Romanticism, Realism/Naturalism, Modern/Contemporary – and further their research and writing skills. Prerequisite: ENGL 1302. Course fee. (2303015212) (ENGL 2302)

ENGL 2342
Forms of Literature I (3-0) **3 Hours**
The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Prerequisite: ENGL 1302. Course fee. (2303015112)

ENGL 2343
Forms of Literature II (3-0) **3 Hours**
The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Prerequisite: ENGL 1302. Course fee. (2303015112)

FIRE PROTECTION TECHNOLOGY

Dean:	Curt Pervier	143 T	685-4677
Director:	Marion “Ollie” Oliver	156 T	685-4663
Division Secretary:		143 T	685-4676

The constant changes and growing complexities of modern living and environment have created a demand for college training in the fire service field. Excellent opportunities for qualified graduates exist with municipal fire departments, insurance inspection agencies, industrial safety, the U.S. Forest Service and the U.S. Department of Defense.

Midland College offers a degree in Applied Science in Fire Protection Technology by successful completion of a two-year program. This program of study is designed to meet the needs of personnel currently employed in fire service positions and those desiring preparation for employment.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Fire Science Firefighter
Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ENGL 1301

Specialty Courses **33 Semester Credit Hours**

FIRS 1329, FIRS 1391, FIRS 1401, FIRS 1407, FIRS 1413, FIRS 1419, FIRS 1423, FIRS 1433, and FIRT 1353

Related Courses **20 Semester Credit Hours**

HRPO 1311, ITSC 1409, BMGT 1305, EMSP 1260, EMSP 1501, and one related course elective

MINIMUM SEMESTER CREDIT HOURS = 68

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.

Oral Communication: BMGT 1305

Basic Use of Computers: ITSC 1409

Fire Science Fire Administrator
Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Specialty Courses **33 Semester Credit Hours**

FIRT 1309, FIRT 1335, FIRT 1331, FIRT 1353, 2 FIRT electives, FIRT 1349, FIRT 2331, FIRT 1392, FIRT 2351, FIRT 2380

Related Courses **17 Semester Credit Hours**

ENGL 1312, ITSC 1409, BMGT 1305, EMSP 1260, EMSP 1501

MINIMUM SEMESTER CREDIT HOURS = 65

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.
Oral Communication: BMGT 1305
Basic Use of Computers: ITSC 1409

Firefighter Certificate

Specialty Courses **27 Semester Credit Hours**
FIRS 1401, FIRS 1407, FIRS 1413, FIRS 1419, FIRS 1423, FIRS 1329, FIRS 1433

MINIMUM SEMESTER CREDIT HOURS = 27

Fire Administrator Certificate

Specialty Courses **12 Semester Credit Hours**
FIRT 1309, FIRT 1349, FIRT 1353, FIRT 2351

Related Courses **10 Semester Credit Hours**
BMGT 1301, EMSP 1260, EMSP 1501

MINIMUM SEMESTER CREDIT HOURS = 22

Fire Investigator Certificate

Specialty Courses **15 Semester Credit Hours**
FIRT 1301, FIRT 1307, FIRT 1329, FIRT 1338, FIRT 1315

Related Courses **3 Semester Credit Hours**
SPCH 1315

MINIMUM SEMESTER CREDIT HOURS = 18

Fire Inspector Certificate

Specialty Courses **15 Semester Credit Hours**
FIRT 1303, FIRT 1315, FIRT 1329, FIRT 1338, FIRT 1353

MINIMUM SEMESTER CREDIT HOURS = 15

The courses labeled “FIRS”, also known as the Fire Academy, are seven classes that have limited enrollment based on special admission requirements criteria. For more information regarding this criteria please consult brochure or the Director of Fire Protection Technology.

FIRS 1391
Special Topics in Fire Science/Firefighting (3-0) **3 Hours**
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

FIRS 1401
Firefighter Certification I (3-3) **4 Hours**
An introduction to firefighter safety and development. Topics include Texas Commission on Fire Protection Rules and Regulations, firefighter safety, fire science, personal protective equipment, self contained breathing apparatus, and fire reports and records. Lab required. *****This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.*****

FIRS 1407
Firefighter Certification II (2-4) **4 Hours**
The study of basic principles and skill development in handling fire service hose and ladders. Topics include the distribution system of water supply, basic building construction, and emergency service communication, procedures, and equipment. Lab required. Prerequisite: FIRS 1401. ***This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.***

FIRS 1413
Firefighter Certification III (2-4) **4 Hours**
General principles of fire apparatus, pump operations, fire streams, and public operations as they relate to fundamental development of basic firefighter skills. Lab required. Prerequisite: College entrance level math skills, FIRS 1407. ***This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.***

FIRS 1419
Firefighter Certification IV (2-4) **4 Hours**
A study of equipment, tactics, and procedures used in forcible entry, ventilation, salvage, and overhaul. Preparation for certification as a basic firefighter. Lab required. Prerequisite: FIRS 1413. ***This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.***

FIRS 1423
Firefighter Certification V (2-4) **4 Hours**
The study of ropes and knots, rescue procedures and techniques, and hazardous materials. Preparation for certification as a basic firefighter. Lab required. Prerequisite: FIRS 1419. ***This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.***

FIRS 1329
Firefighter Certification VI (2-2) **3 Hours**
The study of fire inspection techniques and practices, public transportation, fire cause determination. Topics include fire protection systems, wildland fire, and pre-incident planning, preparation for certification as a basic firefighter. Lab required. Prerequisite: FIRS 1423. ***This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.***

FIRS 1433
Firefighter Certification VII (2-4) **4 Hours**
An in-depth study and practice of simulated emergency operations and hands-on five fire training exercises, incident command procedures, and combined operations using proper extinguishing methods. Emphasis on safety. Lab required. Prerequisite: FIRS 1329. ***This course may be offered only by institutions licensed as a Fire Academy by the Texas Commission on Fire Protection.***

FIRT 1301
Fundamentals of Fire Protection (3-0) **3 Hours**
Study of the philosophy, history and fundamentals of public and private fire protection. Topics include statistics of fire and property loss, agencies involved in public and private protection, legislative development, departmental organization, training , and staffing.

FIRT 1303
Fire and Arson Investigation I (3-0) **3 Hours**
In-depth study of basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination.

FIRT 1307
Fire Prevention Codes and Inspections (3-0) **3 Hours**
Study of local building and fire prevention codes. Emphasis on fire prevention inspections, practices, and procedures.

FIRT 1309
Fire Administration I (3-0) **3 Hours**
Introduction to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer.

FIRT 1315
Hazardous Materials I (3-0) **3 Hours**
Study for the chemical characteristics and behavior of various materials. Topics include storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation.

FIRT 1323
Building Codes (3-0) **3 Hours**
Survey of model codes used nationally to develop understanding of the interrelationships of building construction, occupancy, and related safety issues. Topics include Underwriters Laboratory (UL) listings and Factory Mutual (F.M.) Approvals.

FIRT 1329
Building Codes and Construction (3-0) **3 Hours**
Examination of building codes and requirements, construction types, and building materials. Topics include walls, floorings, foundations, and various roof types and the associated dangers of each.

FIRT 1331
Firefighting Strategies and Tactics I (3-0) **3 Hours**
Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of manpower and equipment to mitigate the emergency.

FIRT 1335
Introduction to Industrial Fire Protection (3-0) **3 Hours**
Specific concerns and safeguards related to business and industrial organization and development, plan/layout, fire prevention programs, extinguishing factors and techniques, hazardous situations, and prevention methods.

FIRT 1338
Fire Protection Systems (3-0) **3 Hours**
Study of fire detection, alarm, and extinguishing systems.

FIRT 1345
Hazardous Materials II (3-0) **3 Hours**
In-depth study of mitigation practices and techniques to effectively control hazardous material spills and leaks.

FIRT 1347
Industrial Fire Protection (3-0) **3 Hours**
Study of industrial emergency response teams and specific concerns related to business and industrial facilities.

FIRT 1349
Fire Administration II (3-0) **3 Hours**
In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies.

FIRT 1353
Legal Aspects of Fire Protection (3-0) **3 Hours**
Study of the rights, duties liability concerns, and responsibilities of public fire protection agencies while performing assigned duties.

FIRT 1391
Special Topics in Fire Protection and Safety Technology/Technician (3-0) **3 Hours**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

FIRT 1392
Special Topics in Fire Services Administration (3-0) **3 Hours**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

FIRT 2331
Firefighting Strategies and Tactics II (3-0) **3 Hours**

Continuation of Firefighting Strategies and Tactics I. Emphasis on use of incident command in large scale command problems and other specialized fire problems. Prerequisite: Firefighting Strategies and Tactics I.

FIRT 2333
Fire and Arson Investigation II (3-0) **3 Hours**

Continuation of Fire and Arson Investigation I. Topics include reports, court room demeanor, and expert witnesses. Prerequisite: Fire and Arson Investigation I

FIRT 2345
Hazardous Materials III (3-0) **3 Hours**

Continuation of Hazardous Materials II. Topics include radioactive materials and radiation; poisons and toxicology; cryogenics; oxidizers; corrosives; flammable solids; hazards of Class A fuels, plastics, and organic and inorganic peroxides and water reactivity; and polymerization and polymerizing substances. Prerequisite: Hazardous Material I and II.

FIRT 2351
Company Fire Officer (3-0) **3 Hours**

A capstone course covering fire ground operations and supervisory practices. Includes performance evaluation of incident commander, safety officer, public information officer, and shift supervisor duties.

FIRT 2380
Cooperative Education-Fire Protection and Safety Technology/Technician (1-20) **3 Hours**

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: Assigned by college. Capstone course.

GEOGRAPHY

Dean:	William Morris	141a AFA	685-4640
Division Secretary	Monica Sosa	141 AFA	685-4640

GEOG 1303:
World Regional Geography (3-0) **3 Hours**

The study of major world geographical regions with emphasis on prevailing social and environmental conditions and developments. Included are emerging conditions and trends and the awareness of diversity. Course content may include one or more regions. (45.701.53 25)

GEOLOGY

Dean:	Margaret Wade	125 SF	685-4615
Faculty:	Fred Wetendorf	193 T	685-4686
Division Secretary:	Norma Duran	124 SF	685-4612

An associate degree in geology is designed to acquaint the student with the processes, applications, and techniques of earth science. The degree is suitable for someone who intends to complete a bachelor's degree in geology or a related field like oceanography, meteorology, geophysics, or environmental science. Students who seek a degree in science education at either the elementary or secondary level may wish to emphasize geology in their degree plans.

For non-majors, geology courses offer a greater understanding of the world that enhances one's appreciation of surface features, environmental concerns, resource utilization, and the grandeur of immense changes through time.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75
Required Core Course(s) for this degree: CHEM 1411 AND CHEM 1412, MATH 1314, PHYS 1401, PHYS 1402

Suggested Courses for Field of Study **16 Semester Credit Hours**

GEOL 1403, GEOL 1404*, GEOL 2407, GEOL 2409*

Related Courses **7 Semester Credit Hours**

MATH 1316*, MATH 2413*, MATH 2414*

MINIMUM SEMESTER CREDIT HOURS = 65

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: THEA requirements.
Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76
Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

GEOL 1403
Physical Geology (3-3) **4 Hours**
This course is designed to enable students to become familiar with the geologic features and processes of the earth. This is a foundation course for geology majors, and may also be taken by non-majors for lab science requirement.

GEOL 1404
Historical Geology (3-3) **4 Hours**
This course is designed to enable students to become familiar with the geologic history of the earth. This is a foundation course for geology majors and may be taken by non-majors for lab science requirement. Prerequisite: GEOL 1403 or consent of instructor.

GEOL 1405
Environmental Science (3-3) **4 Hours**
The study of environmental science is interdisciplinary. During the semester, the student will be presented with scientific information concerning the environment and the historical, social, political, and economic ramifications of environmental conflict. The course is suitable as an elective course in a science curriculum or as a required lab science for someone who is not majoring in science.

GEOL 2407
Field Methods in Geology (2-4) **4 Hours**
Collection of field data, interpretation and construction of geological and topographic maps, and examination of petrologic systems in a field (exposed) or subsurface setting. Prerequisite: GEOL 1403 or consent of instructor.

GEOL 2409
Mineralogy and Petrology (3-3) **4 Hours**
This course is designed to enable students to learn the properties of crystal systems, to identify and classify selected minerals in hand specimens, and to learn the rock association, mode of occurrence, and industrial uses of material. Prerequisites: GEOL 1403 and 1404.

GOVERNMENT/POLITICAL SCIENCE

Dean:	William Morris	141a AFA	685-4640
Faculty:	Fernando Almaguer	181 AFA	685-4739
	Jerry Franks	125 SF	685-4607
	Terry Gilmour	116 SF	685-4608
	Casey Hubble	115 SF	685-4606
Division Secretary:	Monica Sosa	141 AFA	685-4640

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Associate of Science

Core Requirements **42 Semester Credit Hours**
See Core Requirements, page 75
Required Core Course(s) for this degree: ECON 2301 or PSYC 2301 or SOCI 1301

Suggested Courses for Field of Study **12 Semester Credit Hours**
GOVT 2304, HIST 2321, HIST 2322, PHIL 2306

Related Courses **8-11 Semester Credit Hours**
For an Associate of Science add 8 semester credit hours of electives; for Associate of Arts add 6-8 semester credit hours of Modern Language courses and an English literature course.

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76
Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

GOVT 2301
Federal and State Government I (3-0) **3 Hours**
This course is a comparative investigation of state and federal government. It covers the foundation and development of the constitutions of the United States and Texas (federalism), local governments, political parties, and interest groups. (4510025142)

GOVT 2302
Federal and State Government II (3-0) **3 Hours**
In this class students will study the legislative, executive (including the bureaucracy), and judicial systems of the U.S. and Texas, and selected problems of public policy. (4510025142)

GOVT 2304
Introduction to Political Science (3-0) **3 Hours**
This course is the introduction to the study of political science as a discipline-political philosophy, the theory and organization of the modern state, comparative political systems, and international relations. (4510015242)

GOVT 2320
Minority Issues (3-0) **3 Hours**
"Minority Issues" examines current minority group issues and problems associated with the policies and programs of public and private agencies that impact the family, education, religion, politics and the economy. (4511015342) Also SOCI 2320.

GOVT 2389
Local Government Internship (3-4) **3 Hours**
This course is designed to integrate on-campus study with practical hands-on experience in local government. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of local government.

HEALTH INFORMATION TECHNOLOGY

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Betty Dodson	A33 AMS	685-5573
Division Secretary:	Kay Floyd	209b DFH	685-4600

This program is designed to prepare students to work with medical records in hospitals, insurance companies, law firms, physicians' offices, long-term care agencies , rehabilitation centers and psychiatric and other health care facilities. The graduate will maintain, organize, analyze and generate health information for patient treatment, reimbursement, planning, quality assessment and research to ensure quality health care through quality information.

New classes begin each summer and courses must be taken sequentially for progression in the program. Applicants are encouraged (but not required), to complete support courses, such as Anatomy and Physiology, prior to entering the program. To be eligible for graduation from the Health Information Technology program, the student must complete the prescribed courses with a minimum grade of "C", have a cumulative grade point average of 2.0, pass a written final exit exam, satisfy all college financial obligations, and return all school property. Requirements to write the credentialing exam include written application, payment of fees, certification by the Program Director, and graduation from the program.

Upon successful completion of the requirements, the student will be awarded an Associate of Applied Science degree in Health Information Technology. This program is fully accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the Council on Accreditation of the American Health Information Management Association (AHIMA). Students completing this competency-based two year program will be eligible to apply to write the national qualifying examination for certification as a Registered Health Information Technician (RHIT). Certificate options are available in Coding and Medical Transcription.

The degree and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Speciality courses must be taken in sequence. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, BIOL 2402, ENGL 1301, PSYC 2301

Specialty Courses **38 Semester Credit Hours**

*HITT 1166, HITT 1249, HITT 1253, HITT 1255, HITT 1305, *HITT 1345, HITT 1401, HITT 1441, HITT 2149, *HITT 2166, *HITT 2239, HITT 2343, *HITT 2435, *HPRS 2301, *MRMT 1311

Related Courses **13 Semester Credit Hours**

ITSC 1409, POFM 1302, SPCH 1318, ENGL 1302

MINIMUM SEMESTER CREDIT HOURS = 68

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements.

Oral Communication: SPCH 1318

Basic Use of Computers: ITSC 1409

Coding Certificate

Specialty Courses **26 Semester Credit Hours**
HITT 1167, HITT 1249, HITT 1253, HITT 1305, HITT 1345, HITT 1401, HITT 1441, *HITT 2435, *HPRS 2301

Related Courses **15 Semester Credit Hours**
BIOL 2401, *BIOL 2402, ITSC 1409, POFM 1302

MINIMUM SEMESTER CREDIT HOURS = 41

Medical Transcription Certificate

Specialty Courses **18 Semester Credit Hours**
HITT 1249, HITT 1253, HITT 1305, *HPRS 2301, *MRMT 1407, *MRMT 2433

Related Courses **14 Semester Credit Hours**
BIOL 2401, *BIOL 2402, ENGL 1301, *ENGL 1302

MINIMUM SEMESTER CREDIT HOURS = 32

Course Progression

The following is the required sequence of health information technology courses in the Associate of Applied Science degree plan.

First Year, Summer Semester
HITT 1249, HITT 1305
First Year, Fall Semester
HITT 1401
First Year, Spring Semester
HITT 1166, HITT 1225, HITT 1345, HPRS 2301
Second Year, Fall Semester
HITT 1253, HITT 1441, MRMT 1311
Second Year, Spring Semester
HITT 2149, HITT 2166, HITT 2239, HITT 2343, HITT 2435

HITT 1166
Field Experience I (0-0-10) **1 Hour**
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: HITT 1305, HITT 1401. Corequisite: HITT 1255, HITT 1345 and HPRS 2301.

HITT 1167
Field Experience - Coding (0-0-7) **1 Hour**
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: HITT 1305, HITT 1401 and HITT 1441. Corequisite: HITT 1345 and HITT 2435.

HITT 1249
Pharmacology (2-0-0) **2 Hours**
An overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. Corequisite: BIOL 2401.

HITT 1253
Legal and Ethical Aspects of Health Information (2-0-0) **2 Hours**
Concepts of confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information.

HITT 1255
Health Care Statistics (2-0-0) 2 Hours
General principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data. Prerequisite: HITT 1401.

HITT 1305
Medical Terminology (3-0-0) 3 Hours
Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures.

HITT 1345
Health Care Delivery Systems (3-0-0) 3 Hours
Introduction to organization, financing, and delivery of health care services, accreditation, licensure, and regulatory agencies. Prerequisite: HITT 1401.

HITT 1401
Health Data Content and Structure (4-0-0) 4 Hours
Introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health related information. Instruction in delivery and organizational structure to include content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens.

HITT 1441
Coding and Classification Systems (3-3-0) 4 Hours
The application of basic coding rules, principles, guidelines, conventions and the assigning of appropriate codes will be covered in this course. Prerequisite: HITT 1305 and BIOL 2401.

HITT 2149
RHIT Competency Review (0-2-0) 1 Hour
This capstone course reviews health information technology competencies, skills, and knowledge base pertinent to the technology and relevant to the professional development of the student.

HITT 2166
Field Experience II (0-0-10) 1 Hour
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: HITT 1166.

HITT 2239
Health Information Organization and Supervision (2-0-0) 2 Hours
Principles of organization and supervision of human, fiscal, and capital resources. Prerequisite: BMGT 1301.

HITT 2343
Quality Assessment and Performance Improvement (2-3-0) 3 Hours
Study of the many facets of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality improvement functions, quality tools, utilization management, risk management, and medical staff data quality issues. Prerequisite: HITT 1401.

HITT 2435
Coding and Reimbursement Methodologies (3-3-0) 4 Hours
Development of advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding perspective payment systems and methods of reimbursement. Prerequisite: HITT 1441.

HPRS 2301
Pathophysiology (3-0-0) 3 Hours
Study of the pathology and general health management of disease and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. Prerequisite: BIOL 2401, BIOL 2402, and HITT 1305.

MRMT 1311
Computers in Health Care (2-2-0) **3 Hours**
Introduction to the concepts of computer technology related to health care and the tools and techniques for collecting, storing, and retrieving health care data. Prerequisite: ITSC 1409.

MRMT 1407
Medical Transcription Fundamentals (2-6-0) **4 Hours**
Fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy. Prerequisite: 50 wpm typing speed; HITT 1305, BIOL 2401.

MRMT 2433
Advanced Medical Transcription (2-6-0) **4 Hours**
Production of advanced reports of physician dictation with increasing speed and accuracy including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Prerequisite: MRMT 1407.

HEALTH CAREERS FIELD OF STUDY

Dean:	Becky Hammack	209a DFH	685-4600
Division Secretary:	Kay Floyd	209b DFH	685-4600

Midland College has programs in numerous health career fields. Further, courses that prepare students for entry into these programs as well as into programs offered by the Texas Tech University Health Sciences Center (TTUHSC) are available. Several of these courses meet requirements of multiple programs allowing students to maintain several options while seeking program acceptance. The common course requirements for Midland College Programs as well as for TTUHSC programs are listed below.

Health career programs have limited enrollment based on specific admission criteria. Students seeking acceptance into any of these programs should seek advice from the the Health Sciences Division and Veterinary Technology Program. Completion of admission requirements and common program requirements maximizes opportunities for program acceptance. Texas Tech is responsible for accepting students into the TTUHSC Programs.

All Health careers programs with the exception of Veterinary Technology require the following courses: BIOL 2401 and BIOL 2402.

In addition to the above, the following table denotes courses which are required in several of the health careers programs.

Program	English 1301	Visual and Performing Arts/ Humanities Elective	Biology 2421	Speech 1318
Health Careers Field of Study	X	X	X	
Associate Degree Nursing	X	X	X	
Diagnostic Medical Sonography	X			X
Emergency Medical Services	X	X		X
Health Information Technology	X			X
Radiography	X	X		X
Respiratory Care	X	X	X	X
Veterinary Technology	X	X	X	X

Please refer to catalog sections entitled Diagnostic Medical Sonography, Emergency Medical Services, Health Information Technology, Nursing- Associate Degree, Nursing-Vocational, Radiography, Respiratory Care, and Veterinary Technology for additional information regarding these programs.

HEALTH CAREERS FIELD OF STUDY ASSOCIATE DEGREE

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; contact the Dean whose name is listed above. Note that some courses have prerequisites denoted by an asterisk (*).

Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, 2402, MATH 1314, PSYC 2301, SPCH 1315

Related Courses **26 Semester Credit Hours**

BIOL 1406, *BIOL 1407, BIOL 2421, MATH 1342, CHEM 1411, *CHEM 1412, ENGL 2311

MINIMUM SEMESTER CREDIT HOURS = 68

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH 1315.

Basic Use of Computers: Evaluation of high school transcript, testing, or POFI elective.

HEALTH SCIENCES

Dean:	Becky Hammack	209a DFH	685-4600
Division Secretary:	Kay Floyd	209b DFH	685-4600

HPRS 1106
Medical Terminology (1-0-0) **1 Hour**

A study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures. The course is taught in a self-paced format.

HPRS 1201
Introduction to Health Professions (2-0-0) **2 Hours**

An overview of the roles of the various members of the health care system, educational requirements, and issues affecting the delivery of health care.

HISTORY

Dean:	William Morris	141a AFA	685-4640
Faculty:	Todd Houck	142 AFA	685-4645
	Wayne McClure	121 SF	685-4609
	Jerry Mills	122 SF	685-4692
Division Secretary:	Monica Sosa	141 AFA	685-4640

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four- year college. An official degree plan should be filed the semester before graduation; please contact the dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ANTH 2351 or ECON 2301 or PSYC 2301 or SOCI 1301

Suggested Courses for Field of Study **6 Semester Credit Hours**

HIST 2321, HIST 2322

Related Courses **12-14 Semester Credit Hours**

For an Associate of Science add 14 semester credit hour of electives, for an Associate of Arts add 6-8 semester credit hours of Modern Language course, an English literature course and elective(s)

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

HIST 1301
United States History To 1877 (3-0) **3 Hours**

This course is a survey of U.S. history from the beginnings through Reconstruction. It includes such topics as the European heritage, the colonies in North America, the creation and development of the American nation, and the sectional differences that led to the Civil War and Reconstruction. (45.0802.5125)

***HIST 1302**
United States History Since 1877 (3-0) **3 Hours**

This class is a survey of U.S. history from Reconstruction to the present. Topics include the development of the West, the growth of big business and its accompanying problems, American imperialism, the causes and results of World Wars I and II, and the post war world. (45.0802.5125)

HIST 1316
History of Christianity (3-0) **3 Hours**

This course is an historical survey of the development of Christianity and its role in world history, from its origins to the present time covering theological and institutional issues. Course may be taken for either credit or non credit. Also PHIL 1316. (3802015135)

****HIST 2301**
Texas History (3-0) **3 Hours**

This class covers the history of Texas from pre Columbian times to the present. Topics will include native American cultures, colonization by Europeans, the Texas Republic, the Civil War, and modern Texas. Emphasis will be given to the roles of ethnic groups and women. (45.0802.5225)

HIST 2321
World Civilizations I (3-0) **3 Hours**
This class surveys the origin and development of civilizations in Asia, Africa, Europe, and the Americas from the beginning to c. 1500. Material stresses the origin and development of political, economic, and religious institutions. The class also covers the theory and practice of historical research. (45.0801.5325)

HIST 2322
World Civilizations II (3-0) **3 Hours**
This course continues the development of world civilizations in response to Western expansion from c. 1500. Topics stress imperialism, nationalism, revolution, and rise of science. The class also covers the theory and practice of historical research. (4508015342)

HIST 2380
Mexican-American History (3-0) **3 Hours**
This class is a general survey of the experience of Americans of Mexican ancestry in the development of American society. The class will emphasize Native American and Spanish culture along with political, economic, and social events. (45.1101.53.25)

HIST 2381
African-American History (3-0) **3 Hours**
This class is a general survey of the experience of African Americans from their African origins to the present. This class will emphasize the role of slavery, segregation, and the civil rights movement in the development of American society. (45-1101.53.25)

*May be taken before 1301.

**May be substituted for one semester of U.S. History.

HUMANITIES

Deans:	William G. Feeler	141b AFA	685-4626
	William Morris	141a AFA	685-4640
Faculty:	David Allen	130 AFA	686-4205
	Russell Goodyear	125 SF	685-4607
Division Secretaries:	Lula Lee	141 AFA	685-4624
	Monica Sosa	141 AFA	685-4640

HUMA 1301
Humanities I (3-0) **3 Hours**
"Humanities I" invites students to expand their appreciation of the cultural side of human experience on the premise that a complete education should stimulate the intellect as well as provide skills and job training. This course will offer selected, interrelated topics in philosophy, literature, religion, and the arts and sciences from ancient times to about the year 1500. Coverage will be interdisciplinary and multi cultural, and will include readings, various media, and performance. (2401035135)

HUMA 1302
Humanities II (3-0) **3 Hours**
"Humanities II" complements Humanities I by inviting students to expand their appreciation of the cultural side of human experience still further on the premise that a complete education must stimulate the intellect as well as provide skills and job training. This course will offer selected and varying topics in philosophy, literature, religion, and the arts and sciences from about 1500 to the present. Coverage will be interdisciplinary and multi cultural, and will include readings, various media, and performance. THERE IS NO PREREQUISITE FOR THIS COURSE. (2401035135)

HUMA 2323
World Cultures and Societies (3-0) **3 Hours**
"World Cultures and Societies" is the study of variations among contemporary societies throughout the world. Emphasis is on the historical roots and implications of current sociocultural diversity. Examples will come from a variety of specific societies within a regional context. Students can receive credit for either HUMA 2323 or ANTH 2351, but not both. (4502015342) Also ANTH 2323.

INFORMATION TECHNOLOGY

Dean:	Nancy Hart	142 T	685-4657
Faculty Director:	James Draper	116 T	685-4660
Faculty:	Sylvia Brown	124 T	685-4743
	Bill Clarkson	118 T	685-5508
	Terry Dummer	120 T	685-6457
	Gavin Frantz	105 T	685-5517
	Doug Johnson	119 T	685-4665
	Adriana Lumpkin	109 T	685-4743
	Vickie Pickett	107 T	686-4204
Lab Instructors:	Roy McGowen	101 T	685-5563
	Nancy Scharf	110 T	685-4672
	Raquel Segovia	149 T	685-4786
Division Secretary:	Yvonne Hennig	142 T	685-6447

The Information Technology program offers the student four main areas of study. These areas are: Computer Maintenance, Data Management, Computer Networking, and Computer Programming. A description of each area is listed below along with a list of courses that are required for all degrees and certificates, and a suggested class sequence to aid the student in planning out their semesters Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Information Technology is a Tech-Prep program that provides students with opportunities to gain advanced technical skills. High school students may receive college credit for approved courses taken during high school. High school students should discuss this option with their high school counselor. Others may contact the department head at Midland College for information.

BUSINESS COMPUTER APPLICATIONS
(See Business Administration section)

1. COMPUTER MAINTENANCE ELECTRONICS: Provides the student with the understanding and the skills to work with the complex components of electronics and computer technology, including the repair, maintenance, and upgrading of personal computers. Special emphasis is placed on the introduction of new methodology and technical advances, which enables the student to understand and apply this knowledge to current industry practices.

Information Technology/Computer Maintenance and Electronics
Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**
See Core Requirements, page 75
Required Core Course(s) for this degree: MATH 1314

Specialty Courses . . . . . 47 Semester Credit Hours
ITSC 1409, CPMT 1303, ITCC 1402, CETT 1409, ITSC 1407, CETT 1425, ELMT 2339, ITNW 1454, ITSY 2400,*CPMT 2445, three 3 hr specialty electives.

Related Courses . . . . . 6 Semester Credit Hours
ENGL 1301 or POFT 1302, SPCH 1318 or BMGT 1305

MINIMUM SEMESTER CREDIT HOURS = 68

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH 1318 or BMGT 1305.
Basic Use of Computers: Specialty courses.

Suggested Class Sequence:

Information Technology-Computer Maintenance & Electronics

First Year		
First Semester		
Prefix Number	**Course Name**	**Credit Hrs**
ITSC 1409	Integrated Software Applications I	4
CPMT 1303	Introduction to Computer Technology	3
ITCC 1402	Local Area Networks & Protocols: CISCO I	4
ENGL 1301	Composition & Rhetoric	
or POFT 1302	Business Communications I	3
CETT 1409	DC-AC Circuits	4
	First Semester Total	**18**
Second Semester		
ITSC 1407	UNIX Operating System I	4
CETT 1425	Digital Fundamentals	4
	Specialty Elective	3
SPCH 1318	Interpersonal Communications	
or BMGT 1305	Communications in Management (ORC)	3
	Core Course Elective	3
	Second Semester Total	**17**
Second Year		
Third Semester		
MATH 1314	College Algebra (MNS)	3
ELMT 2339	Advanced Programmable Logic Controls	3
ITNW 1454	Implementing and Supporting Servers	4
	Specialty elective	3
	Core Course Elective	3
	Third Semester Total	**16**
Fourth Semester		
ITSY 2400	Operating System	4
CPMT 2445	Computer Systems Troubleshooting	4
	Specialty Elective	3
	Two Core Courses electives	6
	Fourth Semester Total	**17**
Program Total	**68**	

Basic Computer Maintenance/Electronics Certificate

Specialty Courses . . . . . 18 Semester Credit Hours
ITSC 1409, CPMT 1303, ITCC 1402 CETT 1409, one three- or four-hour specialty course elective.

MINIMUM SEMESTER CREDIT HOURS = 18

Suggested Class Sequence:

Information Technology-Basic Computer Maintenance/Electronics Certificate

First Year First Semester Prefix Number	Course Name	Credit Hrs
ITSC 1409	Integrated Software Applications I	4
CPMT 1303	Introduction to Computer Technology	3
ITCC 1402	Local Area Networks Design & Protocols:	4
CETT 1409	DC-AC Circuits	4
	Specialty Elective	3
	First Semester Total / Program Total	**18**

Advanced Computer Maintenance/Electronics Certificate

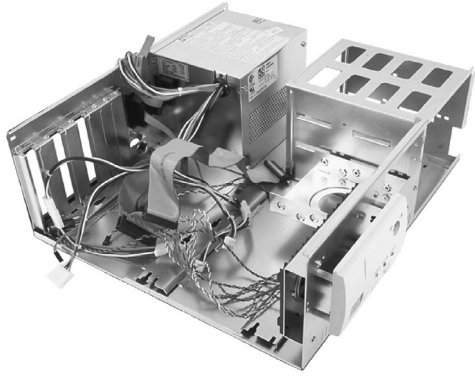
Specialty Courses . . . . . .38 Semester Credit Hours
ITSC 1409, CPMT 1303, ITCC 1402 CETT 1409, *CPMT 2445, CETT 1425, ITNW 1454, ITSC 1407, ITSY 2400, one 3 hr specialty elective.

MINIMUM SEMESTER CREDIT HOURS = 38

Suggested Class Sequence:

Information Technology-Advanced Computer Maintenance/Electronics Certificate

First Year First Semester Prefix Number	Course Name	Credit Hrs
ITSC 1409	Integrated Software Applications I	4
CPMT 1303	Introduction to Computer Technology	3
ITCC 1402	Local Area Networks Design & Protocols	4
CETT 1409	DC-AC Circuits	4
ITSC 1407	UNIX Operating System I	4
	First Semester Total	**19**
Second Semester		
CPMT 2445	Computer Systems Troubleshooting	4
CETT 1425	Digital Fundamentals	4
ITNW 1454	Implementing and Supporting Servers	4
ITSY 2400	Operating System Security	4
	Specialty Elective	3
	Second Semester Total	**9**
Program Total	**38**	



2. DATA MANAGEMENT: Prepares individuals to work with business to design, implement, and administer databases. Students will be exposed to a variety of database development, programming, and query techniques. In addition, special courses in e-commerce are offered in conjunction with the business administration department.

Information Technology/Data Management
Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1314, MATH 1324

Specialty Courses . . . . . 42 Semester Credit Hours

ITSC 1409, ITSE 1191, *ITSE 1431, *COSC 1420, CPMT 1303, *ITSE 1445, ITSE 2409, ITSC 1407, *ITSE 2446, *ITSE 2447, BCIS 2390, ITSE 2313.

Related Courses . . . . . 13 Semester Credit Hours

ENGL 1301 or POFT 1302, BUSI 1301, BMGT 1305 or SPCH 1318, ACCT 2401 or ACNT 1403.

MINIMUM SEMESTER CREDIT HOURS = 70

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: BMGT 1305 or SPCH 1318

Basic Use of Computers: Specialty courses.

Suggested Class Sequence:

Information Technology-Data Management AAS

First Year		
First Semester		
Prefix Number	**Course Name**	**Credit Hrs**
ITSC 1409	Integrated Software Applications I	4
BUSI 1301	Business Principles	3
ITSE 1191	Special Topics: Intro Programming Logic (This class can be waived by IT dept)	1
ITSE 1431	Intro to Visual Basic Programming	
or COSC 1420	Fundamentals of Computer Programming	4
CPMT 1303	Introduction to Computer Technology	3
ITSE 1445	Intro Oracle	
or ITSE 2409	Introduction to Database Programming	4
	First Semester Total	**19**
Second Semester		
ENGL 1301	Composition & Rhetoric	
or POFT 1302	Business Communications I	3
	Core Course Elective	3
MATH 1314	College Algebra (MNS)	3
ITSC 1407	UNIX Operating System I	4
ITSE 2446	Oracle Applications Development	
or ITSE 2447	Advanced Database Programming	4
	Second Semester Total	**17**

Second Year		
Third Semester		
BMGT 1305	Communications in Management	
or SPCH 1318	Interpersonal Communication (ORC)	3
COSC 1420	Fundamentals of Computer Programming	
or ITSE 1431	Intro to Visual Basic Programming	4
MATH 1324	Business Math I (MNS)	3
ITSE 1445	Intro Oracle	
or ITSE 2409	Introduction to Database Programming	4
	Core Course Elective	3
	Third Semester Total	**17**
Fourth Semester		
ACCT 2401	Principles of Accounting I	
or ACNT 1403	Intro to Accounting	4
BCIS 2390	System Analysis and Design	3
ITSE 2313	Web Authoring	3
ITSE 2446	Oracle Applications Development	
or ITSE 2447	Advanced Database Programming	4
	Core Course Elective	3
	Fourth Semester Total	**17**
Program Total	**70**	

Data Management Certificate

Specialty Courses . . . . . 33 Semester Credit Hours
ITSC 1409, ITSE 1191, *ITSE 1431 or *COSC 1420, CPMT 1303, ITSE 1445 or ITSE 2409, ITSC 1407, *BCIS 2390, ITSE 2446 or *ITSE 2447, ITSE 2313, one three or four-hour specialty elective.

MINIMUM SEMESTER CREDIT HOURS = 33

Suggested Class Sequence:

Information Technology-Data Management Certificate

First Year		
First Semester		
Prefix Number	**Course Name**	**Credit Hrs**
ITSC 1409	Integrated Software Applications I	4
ITSE 1191	Spec Topics: Intro Programming Logic (This class can be waived by IT dept)	1
ITSE 1431	Intro to Visual Basic Programming	
or COSC 1420	Fundamentals of Computer Programming	4
CPMT 1303	Introduction to Computer Technology	3
ITSE 1445	Intro Oracle	
or ITSE 2409	Introduction to Database Programming	4
	First Semester Total	**16**
Second Semester		
ITSC 1407	UNIX Operating System I	4
BCIS 2390	Systems Analysis	3
ITSE 2446	Oracle Applications Development	
or ITSE 2447	Advanced Database Programming	4
ITSE 2313	Web Authoring	3
	Specialty Elective	3
	Second Semester Total	**17**
Program Total	**33**	

3. NETWORKING: Prepares the student to understand, install, and troubleshoot networks. The student will have the opportunity to take courses that will prepare them to take professional certification exams, including CISCO Systems (Network Associate's exam), Microsoft (MCSE/MCSA exams for Windows 2000 Professional and Windows 2000 Server) and NOVELL.

Information Technology/Networking
Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1314

Specialty Courses . . . . . 38 Semester Credit Hours

ITSC 1409, ITCC 1402, CPMT 1303, *ITCC 1406, ITNW 1454, *ITCC 1442, ITSC 1407, ITSY 2400, *ITCC 1446, one 3 hr *specialty elective,

Related Courses . . . . . 14 Semester Credit Hours

CETT 1409, CETT 1425, ENGL 1301 or POFT 1302, SPCH 1318 or BMGT 1305.

MINIMUM SEMESTER CREDIT HOURS = 67

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH 1318 or BMGT 1305.

Basic Use of Computers: Specialty courses.

Suggested Class Sequence:

Information Technology-Networking AAS

Prefix Number	Course Name	Credit Hrs
First Year		
First Semester		
ITSC 1409	Integrated Software Applications I	4
ENGL 1301	Composition & Rhetoric	
or POFT 1302	Business Communications I	3
ITCC 1402	Local Area Networks Design & Protocols	4
CPMT 1303	Introduction to Computer Technology	3
	Core Course Elective	3
	First Semester Total	**17**
Second Semester		
ITCC 1406	Basic Router Configuration: CISCO 2	4
CETT 1409	DC-AC Circuits	4
SPCH 1318	Interpersonal Communications	
or BMGT 1305	Communications in Management (ORC)	3
ITNW 1454	Implementing and Supporting Servers	4
	Core Course Elective	3
	Second Semester Total	**18**
Second Year		
Third Semester		
ITCC 1442	Local Area Management (LAN): CISCO 3	4
CETT 1425	Digital Fundamentals	4
MATH 1314	College Algebra (MNS)	3
ITSC 1407	UNIX Operating System I	4
	Core Course Elective	3
	Third Semester Total	**18**

Fourth Semester

ITSE 2417	Operating System	4
ITCC 1446	Wide Area Management (WAN): CISCO 4	4
	Specialty Elective	3
	Core Course Elective	3
	Fourth Semester Total	**14**

Program Total 67

Networking Certificate

Specialty Courses . . . . . 34 Semester Credit Hours
ITSC 1409, CPMT 1303, one 3 hr specialty elective, ITCC 1402, ITSC 1407, ITSY 2400, ITNW 2405, ITNW 1454, *ITCC 1406.

MINIMUM SEMESTER CREDIT HOURS = 34

Suggested Class Sequence:

Information Technology-Networking Certificate

First Year
First Semester

Prefix Number	Course Name	Credit Hrs
ITSC 1409	Integrated Software Applications I	4
CPMT 1303	Introduction to Computer Technology	3
	Specialty Elective	3
ITCC 1402	Local Area Networks Design & Protocol	4
ITSC 1407	UNIX Operating System I	4
	First Semester Total	**18**

Second Semester

ITSY 2400	Operating System Security	4
ITNW 2405	Network Administration for Novell Netware	4
ITNW 1454	Implementing and Supporting Servers	4
ITCC 1406	Basic Router Configuration: CISCO 2	4
	Second Semester Total	**16**

Program Total 34

4. PROGRAMMING: Provides the student with an opportunity to develop programming skills using three of the most popular languages in use today, "C," Visual Basic, and Java. Beginning and advanced topics are taught. In addition, specialty topics are offered, including Web page design using tools such as Microsoft Front Page and Dreamweaver.

Information Technology/Programming
Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1314

Specialty Courses . . . . . 52 Semester Credit Hours

ITSE 1191, *ITSE 1431, *COSC 1420, CPMT 1303, ITSE 2409, ITSE 1445, ITSC 1409, *ITSE 2449, *COSC 2420, ITSC 1407, ITSE 2313, * BCIS 2390, ITNW 1454, two 3 hr specialty electives

Related Courses . . . . . 3 Semester Credit Hours

SPCH 1318

MINIMUM SEMESTER CREDIT HOURS = 70

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH 1318

Basic Use of Computers: Specialty courses

Suggested Class Sequence:

Information Technology-Programming AAS

Prefix Number	Course Name	Credit Hrs
First Year		
First Semester		
ITSE 1191	Special Topics Intro Programming Logic (This class can be waived by IT dept)	1
ITSE 1431	Intro to Visual Basic Programming	
or COSC 1420	Fundamentals of Computer Programming	4
CPMT 1303	Introduction to Computer Technology	3
ITSE 2409	Introduction to Database Programming	
or ITSE 1445	Intro Oracle	4
ENGL 1301	Composition & Rhetoric	3
	Core Course Elective	3
	First Semester Total	**18**
Second Semester		
ITSC 1409	Integrated Software Applications I	4
ITSE 2449	Advanced Visual Basic Programming	
or COSC 2420	C Programming II	4
SPCH 1318	Interpersonal Communication (ORC)	3
MATH 1314	College Algebra (MNS)	3
	Specialty Elective	3
	Second Semester Total	**17**
Second Year		
Third Semester		
COSC 1420	Fundamentals of Computer Programming	
or ITSE 1431	Intro to Visual Basic Programming	4
ITSE 1445	Intro Oracle	
or ITSE 2409	Introduction to Database Programming	4
ITSC 1407	UNIX Operating System I	4
ITSE 2313	Web Authoring	3
	Core Course Elective	3
	Third Semester Total	**18**

Fourth Semester		
COSC 2420	C Programming II	
or ITSE 2449	Advanced Visual Basic Programming	4
BCIS 2390	System Analysis and Design	3
ITNW 1454	Implementing and Supporting Servers	4
ENGL 2311	Technical Writing	3
	Specialty Elective	3
	Fourth Semester Total	**17**

Program Total 70

Programming Certificate

Specialty Courses . . . . . 30 Semester Credit Hours
ITSC 1409, ITSE 1191, CPMT 1303, *ITSE 1431, *COSC 1420, *COSC 2420, *ITSE 2449, ITSE 2313, ITSC 1407 or ITNW 1454, one 3 hr specialty elective.

MINIMUM SEMESTER CREDIT HOURS = 30

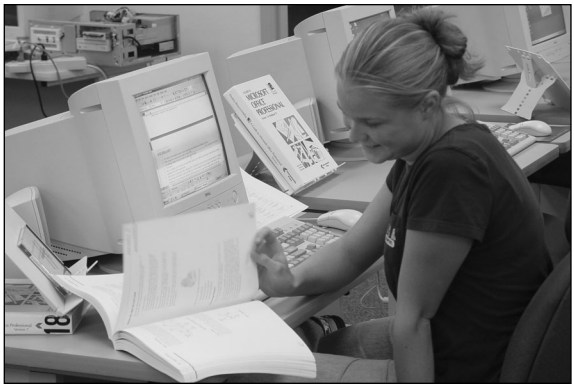
Suggested Class Sequence:

Information Technology Programming Certificate

First Year

Prefix Number	**Course Name**	**Credit Hrs**
First Semester		
ITSC 1409	Integrated Software Applications I	4
ITSE 1191	Special Topics Intro Programming Logic (This class can be waived by IT dept)	1
CPMT 1303	Introduction to Computer Technology	3
ITSE 1431	Intro to Visual Basic Programming	4
COSC 1420	Fundamentals of Computer Programming	4
	First Semester Total	**16**
Second Semester		
COSC 2420	C Programming II	4
ITSE 2449	Advanced Visual Basic Programming	4
ITSE 2313	Web Authoring	3
ITSC 1407	UNIX Operating System I	
or ITNW 1454	Implementing and Supporting Servers	4
	Specialty Elective	3
	Second Semester Total	**17**

Program Total 33



BCIS 1405
Business Computer Applications (3-3) **4 Hours**
Computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. This course is designed for business majors who plan to transfer to a four year school.

BCIS 2390
Systems Analysis & Design (3-0) **3 Hours**
Analysis of business information needs and preparation of specifications and requirements for appropriate data system solutions. Includes instruction in information requirements analysis, specification development and writing, prototype evaluation, and network application interfaces (can be used in place of ITSE 1350).

CETT 1409
DC-AC Circuits (3-3) **4 Hours**
Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. The student will analyze DC and AC circuits from simple to complex; construct and make measurements for DC and AC circuits from simple to complex; utilize a multimeter and oscilloscope and describe the difference between two AC signals that are 120 degrees out of phase; and describe an AC signal with respect to voltage, current, and power as seen across a parallel resistive circuit.

CETT 1425
Digital Fundamentals (3-3) **4 Hours**
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits.

CETT 1441
Solid State Circuits (3-3) **4 Hours**
A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Prerequisite: CETT 1409

CETT 2380
Cooperative Education-Computer Engineering Technology/Technician (1-0-20) **3 Hours**
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience directly related to a technical discipline, specific learning objectives guide the student through work experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: 12 semester credit hours.

COSC 1420
"C" Programming I (3-3) **4 Hours**
Introduction to computer programming in the "C" programming language. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files. Co-requisite: ITSE 1191 or consent of instructor.

COSC 1430
Computer Programming (3-3) **4 Hours**
Introduction to computer programming in various programming languages. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files.

COSC 2420
"C" Programming II (3-3) **4 Hours**
Further applications of programming techniques in the "C" programming language. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course. Prerequisite: COSC 1420.

COSC 2430
Advanced Structured Languages (3-3) **4 Hours**
Further applications of programming techniques. Topics may include file access methods, data structures and modular programming, program testing and documentation, and other topics not normally covered in an introductory computer programming course.

CPMT 1303
Introduction to Computer Technology (3-1) **3 Hours**
A fundamental computer course that provides in-depth explanation of the procedures to utilize hardware and software. Emphasis on terminology, acronyms, and hands-on activities.

CPMT 2380
Cooperative Education-Computer Maintenance Technology/Technician (1-0-20) **3 Hours**
Career related activities encountered in the students area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through work experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: 12 semester credit hours.

CPMT 1445 (replaced by CPMT 1303)

CPMT 2445
Computer Systems Troubleshooting (3-3) **4 Hours**
Principles and practices involved in computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment. The student will develop hardware and software troubleshooting techniques and perform procedures used in troubleshooting. Prerequisites: CPMT 1303, ITSC 1407 and ITNW 1454

ELMT 2339
Advanced Programmable Logic Controllers (2-4) **3 Hours**
Advanced concepts in programmable logic controllers including advanced processors, programming and interfacing techniques, and specialized applications. The student will describe, demonstrate, and apply intermediate and advanced processors, programming and interfacing techniques, and specialized applications. Prerequisite: CETT 1409 and CPMT 1303 or permission of instructor.

IMED 2309
Internet Commerce (3-0) **3 Hours**
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, performing on-line transactions, and generating dynamic content. Prerequisites: BUSG 1391-Special Topics: Fundamentals of Electronic Business and ITSE 2313 Web-Authoring.

ITCC 1402
Local Area Networks Design and Protocols: Cisco 1 (3-3) **4 Hours**
Skill development in the design and installation of local area networks to ensure optimal throughput. Topics include cabling, cable closets, management devices, selection, and installation of network devices, protocols, and subnetting. The student will identify the seven layers of the OSI model and describe the functions of each; describe the proper selection of network cable and devices; perform structured cable installation, install a local area network (LAN) and configure network devices and nodes; define the five steps of data encapsulation, and identify the functions of the TCP/IP network-layer protocol.

ITCC 1406
Basic Router Configuration: Cisco 2 (3-3) **4 Hours**
An introduction to Cisco basic router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of the configuration, backup of router configuration files, routing protocols, and the use of security features. The student will configure and manage routers and subnets utilizing TCP/IP protocol and router protocol RIP, backup and restore router configurations, upgrade router operating systems, create and configure routers to manage subnets, and install security measures on routers. Prerequisite: ITCC 1402.

ITCC 1442
Local Area Management (LAN): Cisco 3 (3-3) **4 Hours**
Skill development in managing traffic in local area networks (LAN) and in the management of network devices for LANs. This course includes configuring of routers for IPX protocol, filtering traffic in an IPX environment, and identifying and resolving network congestion problems. The student will configure router for networks in the IPX environment; describe and implement local area network (LAN) segmentation bridges, switches, and routers; identify and solve network congestion problems. Prerequisite: ITCC 1406.

ITCC 1446
Wide Area Management (WAN) : Cisco 4 (3-3) **4 Hours**
An introduction to wide area networking (WAN) services and management. The student will describe, differentiate and select wide area network (WAN) services; configure and monitor wide area network (WAN) services; encapsulate wide area network (WAN) data; and identify the use of ISDN and HDLC. Prerequisite: ITCC 1442.

ITMC 1441 (replaced by ITNW 1448)

ITMC 2430 (replaced by ITNW 1454)

ITNW 1380
Cooperative Education-Business Systems
Networking and Telecommunications (1-0-20) **3 Hours**
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through work experience. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry. Prerequisite: 12 semester credit hours.

ITNW 1448
Implementing and Supporting Client Operating Systems (3-3) **4 Hours**
Skills development in the management of client as desktop operating systems. Install and configure network clients; set up users, groups, policies, and profiles; configure hardware components and applications; set up and maintain a logon security and security for files and printers; configure clients in multiple environments including Microsoft, TCP/IP, and Novell Networks. Implement dial up networking and tune system performance. The operating system used in the course is Windows 2000 Professional. Note: This class replaces ITMC 1441.

ITNW 1453
Supporting Network Server Infrastructure (3-3) **4 Hours**
Skills development in installing, configuring, managing and supporting a network infrastructure, automate Internet Protocol (IP) assignment using DHCP, configure DNS services, configure and support remote access to a network; configure network security, and integrate network services for Windows. Prerequisites: ITSC 1407 and ITNW 1454.

ITNW 1454
Implementing and Supporting Servers (3-3) 4 Hours
A course in the development of skills necessary to implement, administer, and troubleshoot information systems that incorporate Windows Based Servers in a networked computing environment. Configure peripherals and devices; set up servers for various client computers; configure directory replication; manage licensing, user groups accounts, user profiles, system policies, and profiles. Administer remote servers and disk resources; create and share resources; implement permissions and security; implement fault-tolerance data storage measures and configure servers for interoperability with various network operating systems servers. Install and configure Remote Access Service (RAS). Identify and monitor performance bottlenecks and resolve configuration problems. Operating system used Windows 2000 Advanced Server. Prerequisite: knowledge of operating systems. Note: This class replaces ITMC 2430.

ITNW 2405
Network Administration for Novell NetWare (3-3) 4 Hours
Preparation to effectively manage a Novell NetWare network. Topics include network components, user accounts and groups, network file systems, file system security, and network printing. The student will describe the components of a local area network and their relationship; create and administer user accounts and groups; plan and set up network file systems; create effective file system security; and implement and administer network printing. Prerequisite: ITSW 1407 and ITNW 1154 or ITNW 1448 or permission of the instructor.

ITSC 1191
Special Topics in Computer and Information Sciences (1-0) 1 Hour
The Student will learn to use the Internet including performing simple searches, learn how to use the Microsoft Office Suite of application software, and learn how to organize files and folders.

ITSC 1407
UNIX Operating System I (3-3) 4 Hours
A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts. The student will demonstrate proper use of basic UNIX commands; define and apply terminal emulation; use the system editor to create script files; create and manage user accounts; and effectively manage the user file system.

ITSC 1409
Integrated Software Applications I (3-3) 4 Hours
Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. The student will use word processing, spreadsheet, database, and/or presentation media software; and demonstrate ability to apply integration techniques and produce combined documents.

ITSC 2421
Integrated Software Applications II (3-3) 4 Hours
Continued study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. The student will use word processing, spreadsheet, database, and/or presentation media software; apply integration techniques and produce combined documents; and explain the process of integrating between applications. Prerequisite: ITSC 1409.

ITSC 2437
UNIX Operating System II (3-3) **4 Hours**

Advanced study of the UNIX operating system. Includes advanced concepts of system management and communication, the installation and maintenance of software, network security, and data integrity issues. The student will perform a successful UNIX system installation; analyze the performance of a UNIX operating system; demonstrate an under-standing of basic network concepts using TCP/IP; and explain concepts of data integrity and system security. Prerequisite: ITSC 1407.

ITSE 1191
Special Topics in Computer Programming
(Introduction to Programming Logic) (1-0) **1 Hour**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends.

ITSE 1350
System Analysis and Design (3-0) **3 Hours**

Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. The student will use system design tools; exhibit knowledge of all phases of the system design life cycle; demonstrate prototype concepts; differentiate tools used for project management; and develop documentation for each phase of the system life. Prerequisite: ITSC 1409 and ITSE 2409.

ITSE 1380, 2380
Cooperative Education-
Data Processing Technology/Technician (1-0-20) **3 Hours**

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry. Prerequisite: 12 semester credit hours.

ITSE 1431
Introduction to Visual BASIC Programming (3-3) **4 Hours**

Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. The student will use structured programming techniques; develop correct executable programs; create appropriate documentation; and create applicable graphical user interfaces. Co-requisite: ITSE 1191 or consent of instructor.

ITSE 1445
Introduction to Oracle SQL and PL/SQL (3-3) **4 Hours**

An introduction to the design and creation of relational databases. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL) and Procedure Language (PL). The student will write Structured Query Language (SQL) statements using Oracle; select and sort data; and produce reports with SQL Plus. The student will create and manage tables which include constraints; create Views and other database objects; and develop procedures and functions using PL/SQL.

ITSE 2313
Web Authoring (3-0) **3 Hours**
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. The student will create functional web pages and supporting elements using current authoring tools; and maintain web pages and supporting elements. This course will use Microsoft FrontPage and DreamWeaver software.

ITSE 2409
Introduction to Database Programming (3-3) **4 Hours**
Application development using database programming techniques emphasizing database structures, modeling, and database access. The student will develop database applications using a structured query language; create queries and reports from database tables, and create appropriate documentation.

ITSE 2437
Assembly Language Programming (3-3) **4 Hours**
Comprehensive coverage of low-level computer operations and architecture. Includes design, development, testing, implementation, and documentation of programs; language syntax; data manipulation; input/output devices and operations; and file access. The student will explain the interaction between machine-level operations and computer architecture; develop correct executable programs; create appropriate documentation; and incorporate appropriate input/output and file handling. Co-Requisite: ITSE 1191 or consent of instructor.

ITSE 2446
Oracle Applications Development - Forms I (3-3) **4 Hours**
Skill development in the use of Forms in a Developer/2000 environment. Topics include the use of Object Navigator and Virtual Graphics System (VGS), Layout Editor and Menu options. The student will describe the main components in a Form application; retrieve, display, modify, and store data using the forms operator interface; create a basic Form; create and modify triggers using PL/SQL; create usable objects and codes in PL/SQL; create and modify basic tabular reports. Prerequisite: ITSE 1445.

ITSE 2447
Advanced Database Programming (3-3) **4 Hours**
Application development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. The student will develop complex database applications using a structured query language; incorporate security and error trapping; and develop menu-driven database systems. Prerequisite: ITSE 2409 and ITSE 1431 or permission of instructor.

ITSE 2449
Advanced Visual BASIC Programming (3-3) **4 Hours**
Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures and modular programming, program testing and documentation. The student will develop correct, well documented programs containing complex data structures; incorporate complex input/output file handling techniques; develop graphical user interfaces to other software applications; and integrate external programs and libraries with Visual Basic applications. Prerequisite: ITSE 2409 and ITSE 1431 or permission of instructor.

ITSY 2400
Operating System Security (3-3) **4 Hour**
Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards.

KINESIOLOGY/PHYSICAL EDUCATION

Dean:	William Morris	141a AFA	685-4640
Program Director:	Ann Leach	119 PE	685-4579
Faculty:	Erica Elder	147 PE	685-4650
	Shanon Hays	137 PE	685-4577
	Sonya Mikeska	Training Room PE	685-4715
	Delnor Poss	112 PE	685-4576
	Steve Ramharter	140 PE	685-5561
	Tommy Ramos	132 PE	685-4701
Division Secretary:	Monica Sosa	141 AFA	685-4640

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 1406, BIOL 1407 or BIOL 2401, BIOL 2402, MATH 1314*, MATH 1332*

Suggested Courses for Field of Study **11 Semester Credit Hours**

KINE 1301

Two (2) KINE activity courses

Choice of two depending on career goals: KINE 1304, KINE 1306, KINE 1321, or KINE 2356

Related Courses **9-14 Semester Credit Hours**

For an Associate of Science add 9 semester credit hours of electives; for an Associate of Arts add 6-8 semester credit hours of Modern Language courses and one English literature course.

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

ACTIVITY COURSES

Kinesiology/Physical Education **activity classes** at Midland College are designed to supplement the overall education experience through the development and measurement of the skills involved. Classes also include strategies and concepts as they relate to those activities. Students are allowed a maximum of 4 semester credit hours in activity courses toward their degree. Kinesiology/Physical Education majors are allowed a maximum of 8 semester credit hours toward their degree. Each course number may be taken twice for credit.

"Physical Fitness" as a part of the overall Kinesiology offering is designed to develop in the student a holistic approach to living. Specifically these courses cover the components of cardiorespiratory conditioning, muscular strength, endurance training, flexibility development, nutrition and weight control, and other related topics. (3601085128)

KINE 1100, 2100	**KINE 1101, 2101**	**KINE 1102, 2102**	**1 Hour**
Physical Fitness: Coed (0-3)	**Physical Fitness: Women (0-3)**	**Physical Fitness: Men (0-3)**	
(3601085128)	(3601085128)	(3601085128)	

KINE 1103, 2103
Physical Fitness:
Circuit Weight Training (0-3)
(3601085128)

KINE 1104, 2104
Physical Fitness:
Walk/Jog (0-3)
(3601085128)

KINE 1105, 2105
Physical Fitness:
Individualized (0-3)
(3601085128)

1 Hour

KINE 1108, 2108
Step Aerobics (0-3)
(3601085128)

KINE 1109, 2109
Kick-boxing Aerobics (0-3)
(3601085128)

KINE 1110, 2110
Water Aerobics (0-3)
(3601085128)

1 Hour

KINE 1113, 2113
Yoga (0-3)
(360185128)

KINE 1115, 2115
Swimming (0-3)
(360105128)

KINE 1117, 2117
Aikido (0-3)
(360105128)

1 Hour

KINE 1118, 2118
Tae Kwon Do (0-3)
(306105128)

KINE 1119, 2119
Judo (0-3)
(3601085128)

KINE 1120, 2120
Self Defense (0-3)
(3601085128)

1 Hour

KINE 1123, 2123
Gymnastics (0-3)
(3601085128)

KINE 1125, 2125
Basketball (0-3)
(3601085128)

KINE 1126, 2126
Bowling (0-3)
(3601085128)

1 Hour

KINE 1127, 2127
Golf (0-3)
(3601085128)

KINE 1128, 2128
Racquetball (0-3)
(3601085128)

KINE 1129, 2129
Soccer (0-3)
(3601085128)

1 Hour

KINE 1130, 2130
Tennis (0-3)
(3601085128)

KINE 1131, 2131
Volleyball (0-3)
(3601085128)

1 Hour

KINE 1151
Scuba (1-2) **1 Hour**

Students in this class will be instructed in the use of SCUBA equipment and practice their skills in deep water. There may be an out of town trip to open water. Prerequisite: Demonstrated swimming skills. (3601085328)

KINE 1171, 2171
Athletic Training Practicum (0-3) **1 Hour**

This course is the practical application of the skills for athletic trainers. Prerequisite is admission to the Athletic Trainers Program or consent of the instructor. Corequisite KINE 2356 may be taken more than once for credit. (3105015128)

KINE 1172, 2172
Men's
Basketball (0-3)
(3601085128)

KINE 1173, 2173
Women's)
Basketball (0-3)
(3601085128)

KINE 1174, 2174
Varsity
Softball (0-3)
(3601085128)

1 Hour

KINE 1175, 2175
Varsity Baseball (0-3)
(3601085128)

KINE 1176, 2176
Varsity Golf (0-3)
(3601085128)

KINE 1177, 2177
Varsity Volleyball (0-3)
(3601085128)

1 Hour

KINE 1178, 2178
Drill Dance &
Cheerleading (0-3)
(3601085128)

1 Hour

KINE 1301
Introduction to Physical Education, Fitness, and Sport (3-0) 3 Hours
"Introduction to PEFS" is the study of the aims, objectives, curriculum, and historical/philosophical orientation of Kinesiology. Students will also gain knowledge of career opportunities in the field. (3105015228)

KINE 1304
Personal and Community Health (3-0) 3 Hours
"Personal and Community Health" is the investigation of the "wellness" of individual body organs and systems, and of public health organizations, and services. (5103015116)

KINE 1306
First Aid (3-0) 3 Hours
Instruction in and practice of first aid techniques. (5115045316)

KINE 1308
Sports Officiating I (2-2) 3 Hours
"Sports Officiating" covers athletic supervisory organizations as well as the methods and techniques of officiating football, volleyball, and basketball. The lab component will consist of game observation, some actual game officiating, and personal physical conditioning. (1202045109)

KINE 1309
Sports Officiating II (2-2) 3 Hours
This course is the continuation of "Sports Officiating I." The students study athletic supervisory organizations as well as the methods and techniques of officiating basketball, softball and baseball, and soccer. They will also study the organization of tournaments. The lab component will consist of game observation, some actual game officiating, and personal physical conditioning. (1202045109)

KINE 1321
Sports Studies (3-0) 3 Hours
This course is designed for students to explore sports and athletic programs. Material covers the theories of organization, administrative supervision, management, and development of athletic program. (310506128)

The following courses, KINE 1136 - 1141, are introductions to the theories and techniques of coaching specific sports.

KINE 1136	**KINE 1137**	**KINE 1138**	**1 Hour**
Coaching	**Coaching**	**Coaching**	
Baseball (1-0)	**Basketball (1-0)**	**Football (1-0)**	
(310506128)	(310506128)	(310506128)	
KINE 1139	**KINE 1140**	**KINE 1141**	**1 Hour**
Coaching	**Coaching**	**Coaching**	
Soccer (1-0)	**Softball (1-0)**	**Volleyball (1-0)**	
(310206128)	(310206128)	(310506128)	

KINE 1331
Physical Education for Elementary School (3-0) 3 Hours
This course covers programs for teaching and performing Kinesiology activities for elementary school children. (3101015128)

This course covers programs for teaching and performing Kinesiology activities for:

KINE 2356
The Prevention and Care of Athletic Injuries (3-0) 3 Hours
This course is the study of the role of the athletic trainer in the prevention and care of physical problems common to participation in athletics and sports. Included are discussions of assessment, preventive techniques and treatment, decision making, rehabilitation, record keeping, materials and equipment, and ethical behavior. (51030105316)

LEGAL ASSISTANT

Dean:	Nancy Hart	142 T	685-4657
Faculty:	Andree Rosen	115a T	686-4572
Division Secretary:	Yvonne Hennig	142 T	685-6447

The legal assistant curriculum was developed to qualify men and women for positions as assistants or aides to the legal profession. Upon completion of this curriculum, the legal assistant graduate will qualify to work under the supervision of a lawyer and may perform such duties as investigation, case screening and evaluation, detail work pertaining to probate matters, searching public records and court files, office management, accounting, library service, preparation of legal memoranda, servicing and filing of legal documents and preparing legal forms.

A graduate from an accredited college or university holding a baccalaureate degree may receive an AAS Degree upon successful completion of approximately thirty-four (34) semester hours of specialty and any appropriate leveling courses as determined by the Division Dean.

This is a Tech-Prep program that provides students with opportunities to gain advanced technical skills. High school students may receive college credit for approved courses taken during high school. High school students should discuss this option with their high school counselor. Others may contact the department head at Midland College for information.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ECON ELECTIVE OR PSYC 2301, GOVT 2301, GOVT 2302

Specialty Courses **36 Semester Credit Hours**

LGLA 1311, LGLA 1313, LGLA 1317, LGLA 1301, LGLA 1345, LGLA 2305, LGLA 2331, LGLA 2335, four specialty electives.

Related Courses **18 Semester Credit Hours**

POFT 1309, POFT 1429 or *ITSW 1401, POFT 1301 or ENGL 1301, BUSI 2301, LGLA 2305, ACNT elective, two KINE activity courses

MINIMUM SEMESTER CREDIT HOURS = 69

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: LGLA 2305.

Basic Use of Computers: POFT 1429, *ITSW 1401 or LGLA 1317

Beginning Legal Technician Certificate

Specialty Courses **9 Semester Credit Hours**

LGLA 1311, LGLA 1313, LGLA 1345

Related Courses **10 Semester Credit Hours**

POFT 1309, POFT 1429 or *ITSW 1401, POFT 1301 or ENGL 1301

MINIMUM SEMESTER CREDIT HOURS = 19

National Association of Legal Assistants (NALA)

In the semester prior to graduation, students become eligible to take the NALA Certified Legal Assistant Examination (CLA). Full-time students and/or those taking all legal assistant courses may qualify for student membership in national organizations and other professional paralegal associations.

LGLA 1301
Legal Research and Writing (3-0) **3 Hours**
This course provides a working knowledge of the fundamentals of effective legal research and writing. Topics include law library techniques, computer-assisted legal research, briefs, and legal memoranda.

LGLA 1311
Introduction to Law (3-0) **3 Hours**
This course provides an overview of the law and the legal systems. Topics include legal concepts, procedures, terminology and current issues in law. The student will develop a legal vocabulary and explain fundamental legal concepts and systems.

LGLA 1313
Introduction to Paralegal Studies (3-0) **3 Hours**
This course provides an overview of the paralegal profession including ethical obligations, regulation, professional trends and issues, and the paralegal's role in assisting the delivery of legal services. The student will develop a legal vocabulary; explain the ethical obligations of the legal professional, particularly the paralegal; explain the paralegal's role in assisting the delivery of legal services; and discuss topics relating to the paralegal profession.

LGLA 1317
Law Office Technology (3-0) **3 Hours**
This course introduces computer technology and its application within the law office. Topics include the use of computer technology in the delivery of legal services with particular emphasis on the paralegal's role. The student will explain the use of personal computer applications in the law office and demonstrate the ability to use computer technology to assist in the delivery of legal services.

LGLA 1343
Bankruptcy (3-0) **3 Hours**
This course presents fundamental concepts of bankruptcy law and procedures with emphasis on the paralegal's role. Topics include individual and business liquidation and reorganization.

LGLA 1345
Civil Litigation (3-0) **3 Hours**
This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post trial phases of litigation. The student will define and properly use terminology relating to civil litigation; locate, describe, and analyze sources of law relating to the civil litigation process; describe the role and ethical obligation of the paralegal in civil litigation; and draft documents commonly used in civil litigation.

LGLA 1349
Constitutional Law (3-0) **3 Hours**
This course provides an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Topics include separation of powers, check and balances, governmental structures and process, and individual rights in relation to government. The student will define and properly use terminology relating to constitutional law locate, describe, analyze other sources of law relating to constitutional law; and analyze the U.S. constitution and its amendments.

LGLA 1353
Wills, Trusts and Probate Administration (3-0) **3 Hours**

This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. The student will define and properly use terminology relating to wills, trusts, and probate administration; locate, describe, and analyze sources of law relating to wills, trusts, and probate administration; describe the role and ethical obligations of the paralegal in wills, trusts, and probate administration; and draft documents commonly used in wills, trusts, and probate administration.

LGLA 1355
Family Law (3-0) **3 Hours**

This course presents fundamental concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship. The student will define and properly use terminology relating to family law; locate, describe, and analyze sources of law relating to family law; describe the role and ethical obligations of the paralegal in family law; and draft documents commonly used in family law.

LGLA 1391
Special Topics in Paralegal/ Legal Assistant (3-0) **3 Hours**

Topic address recently identified current events, skills, knowledge, and/or attitudes and behavior pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends.

LGLA 2239
Certified Legal Assistant Review (2-0) **2 Hours**

This course provides a review of the mandatory and optional topics covered in the Certified Legal Assistant Examination administered by the National Association of Legal Assistants. The student will demonstrate knowledge of the subject matter areas covered in the Certified Legal Assistant Examination.

LGLA 2303
Torts and Personal Injury Law (3-0) **3 Hours**

This course presents fundamental concepts of tort law with emphasis on the paralegal's role. Topics include intentional torts, negligence, and strict liability. The student will define and properly use terminology relating to tort law; describe the role and ethical obligations of the paralegal in tort law; and draft documents commonly used in tort law.

LGLA 2305
Interviewing and Investigating (3-0) **3 Hours**

This course is a study of the principles, methods, and investigating techniques utilized to locate, gather, document, and manage information. Emphasis on developing interviewing and investigative skills to prepare the paralegal to communicate effectively while recognizing ethical problems. The student will demonstrate an understanding of how to prepare for and conduct an interview with a client and /or witness in preparation for the dispute resolution process; identify and explore sources of information required to resolve legal disputes; and understand the ethical obligations of the lawyers and paralegal in interviewing and investigation.

LGLA 2309
Real Property (3-0) **3 Hours**

This course presents fundamental concepts of real property law with emphasis on the paralegal's role. Topics include the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents. The student will define and properly use terminology relating to real property; locate, describe, and analyze sources of law relating to real property; describe the role and ethical obligation of the paralegal regarding real property transactions; and draft documents commonly used in real property transactions.

LGLA 2315
Oil and Gas Law (3-0) **3 Hours**

This course presents fundamental concepts of oil and gas law including the relationship between landowners and oil and gas operators, government regulations, and documents used in the industry. The student will define and properly use terminology relating to oil and gas law; describe the role and ethical obligations of legal professionals in oil and gas law; and draft documents commonly used in oil and gas law.

LGLA 2331
Advanced Legal Research and Writing (3-0) **3 Hours**

This course builds upon skills acquired in prior legal research and writing courses including computerized research techniques and preparation of complex legal documents such as briefs, legal office memoranda, and citation forms. The student will analyze complex legal research strategies to resolve those issues and apply effective research strategies to resolve those issues and report the result in an acceptable written legal format.

LGLA 2335
Advanced Civil Litigation (3-0) **3 Hours**

This course provides opportunities to implement advanced civil litigation techniques and builds upon skills acquired in prior civil litigation courses. The student will analyze complex fact situations; identify appropriate legal issues; research applicable sources of law; formulate theories; and generate appropriate litigation documents.

LGLA 2370
Oil and Gas Documents (3-0) **3 Hours**

This course presents an in-depth examination of documents used in the petroleum industry, leases and other legal documents. This course is designed for students who have completed a course in basic oil and gas law or land administration or who are familiar with land administration practice and procedure.

LGLA 2380 OR 2381
Cooperative Education - Paralegal/Assistant (1-0-20) **3 Hours**

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through work experience. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry.

LONG TERM CARE ADMINISTRATION

Dean:	Becky Hammack	209a DFH	685-4589
Program Director:	Beverly Prichard	228 DFH	685-6440
Faculty:	Ed Penz	210 DFH	685-6408
HSCE Specialist:	Julie Costilla	228a DFH	685-6486

Midland College is approved by the Texas Department of Human Services, Long Term Care Credentialing to offer the five courses and the internship program to those seeking to become Licensed Nursing Home Administrators in the State of Texas. Five courses are offered via the internet and are available through the Midland College website (*www.midland.edu*) using the Blackboard program. For details regarding the internship through Midland College call 685-6440.

In order to become a Licensed Long Term Care Administrator in the State of Texas, an individual must possess a bachelors degree, complete the five academic courses and the 1,000 clock hour internship, make application to the state and successfully pass the National Association of the Board of Examiners for Nursing Home Administrators (NAB) exam.

Certificate

Specialty Courses **31 Semester Credit Hours**

LTCA 1311, LTCA 1312, LTCA 1313, LTCA 2288, LTCA 2289, LTCA 2688, LTCA 2314, LTCA 2315, LTCA 2689

Related Courses **10 Semester Credit Hours**

BUSI 1301, ACCT 2401 or ACNT 1403, BMGT 1301

MINIMUM SEMESTER CREDIT HOURS = 41

LTCA 1311
Introduction to Long Term Care Administration (3-0-0) **3 Hours**

An overview of the long-term health care industry. Includes a survey of the history and philosophy of nursing facility administration. Provides an introduction to and application of regulatory standards. Specializations within the long term health care industry are discussed.

LTCA 1312
Resident Care in the Long Term Care Facility (3-0-0) **3 Hours**

A study of the delivery of quality services to residents of long-term health care facilities. An overview of the methods for assessing and implementing strategies to promote quality resident care. A presentation of philosophical and ethical considerations.

LTCA 1313
Organization and Management of Long Term Care Facilities (3-0-0) **3 Hours**

An overview of the functional organizational structures common to long-term health care facilities. An examination of the departments in long-term care facilities, chain of command, personnel, regulatory requirements, quality indicators, and the role of the long-term care administrator.

LTCA 2288
Internship I (0-0-8) **2 Hours**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

LTCA 2289
Internship II (0-0-8) **2 Hours**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

LTCA 2314
Long Term Care Law (3-0-0) **3 Hours**
An examination of the types and sources of law relating to the long-term care industry. A study of federal, state and local statues and regulations affecting the long-term care industry.

LTCA 2315
Financial Management of a Long Term Care Facility (3-0-0) **3 Hours**
A study of the techniques and strategies for gathering and using financial information to make decisions in the long term care facility. An examination of budget processes, accounting principles, financial statements, and inventory controls. Topics include the special accounting requirements of Medicare, Medicaid, and other third-party payment systems.

LTCA 2688
Internship III (0-0-24) **6 Hours**
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

LTCA 2689
Internship IV (0-0-24) **6 Hours**
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

MATHEMATICS

Dean:	Margaret Wade	125 SF	685-4615
Faculty:	Margie Carrillo	138 T	685-6449
	Michael Dixon	138 SF	685-4630
	Sonia Ford	137 SF	685-4525
	Kay Hodge	103 SF	685-4621
	Gena Nicholson	138 T	685-4682
	Linda Penny	140 SF	685-4622
	David Truitt	106 SF	685-4616
	Laura Van Husen	138 T	685-4633
	Karen Vest	138D T	685-4680
Division Secretary:	Norma Duran	124 SF	685-4612

There are four main objectives of the Department of Mathematics: to provide a sound curriculum for students who wish to pursue a career in mathematics or mathematical education, to provide adequate training for students in science, engineering, and occupational technical programs; to provide math courses to satisfy general degree requirements; and to provide developmental courses to prepare students for college level work.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1314

Suggested Courses for Field of Study **15 Semester Credit Hours**

MATH 1316*, MATH 2413* (2313), MATH 2414* (2314), MATH 2415* (2315), MATH 2320*

Related Courses **8 Semester Credit Hours**

8 semester credit hours of science or math in addition to core courses.

MINIMUM SEMESTER CREDIT HOURS = 65

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

MATH 0190
Mathematical Calculations (0-1) **1 Hour**

This course is designed to support MATH 0390 and MATH 0391. Tutorial help, computer-assisted instruction and video tapes are available to support this class. Math 0190 is a corequisite of Math 0390 and for MATH 0391. This course is repeatable as required.

MATH 0191
Mathematical Calculations THEA CLASS (0-2) **1 Hour**

This course is designed to provide a review of mathematical concepts necessary to pass the THEA test. Students should have a math THEA score between 220 and 229. This course is not designed to take the place of appropriate leveling or remediation courses. Computer assisted instruction, tutorial help, THEA lectures, and video tapes are available to support this class. Students are required to take the THEA test at the end of the semester. This course may not be taken more than two times. Course fee.

MATH 0389
Basic Mathematics (2-2) **3 Hours**

This course is designed to develop and review the arithmetic and pre-algebra skills of students. It may be taken either as a terminal course or as a preparatory course for Math 0390. The topics to be covered are addition, subtraction, multiplication, and division of numbers and fractions, decimals, ratio and proportion, percent, exponents, square roots, measures, and introductory algebra concepts. Course fee.

MATH 0390
Introductory Algebra (3-0) **3 Hours**

This course is designed to enable students requiring leveling work in algebra to develop and review their algebraic skills in preparation for Math 0391. This introductory algebra course will permit students to become more proficient in the areas of basic arithmetic operations, fundamental algebraic operations, simple factoring, exponents, radicals, the solving of linear and quadratic equations, and word problems. Corequisite: MATH 0190. Requires successful score on math placement test or "C" or greater in Math 0290 or 200 on THEA. Course fee.

MATH 0192, 0193, 0194, 0195
FLEX Introductory Algebra (0-1) **1 Hour**

These four modules are equivalent to MATH 0390 and corequisite lab, MATH 0190. These are self-paced classes that must be completed in sequence. Students are allowed to compress or expand the amount of material completed in a semester. We suggest that students work at least four hours a week in the lab for at least four weeks to complete one of the modules. When the sequence is completed, the student will have four hours of credit comparable to those acquired in MATH 0390 and corequisite lab. Computer assisted instruction, tutorial help, THEA lectures, and video tapes are available to support these classes.

This Introductory Algebra sequence will permit students to become more proficient in areas of basic arithmetic operations, fundamental algebraic operations, simple factoring, exponents, radicals, the solving of linear and quadratic equations, and word problems. Requires successful score on math placement test or "C" or greater in MATH 0290 or 200 on THEA. Course fee.

MATH 0391
Intermediate Algebra (3-0) **3 Hours**

This course is intermediate in difficulty between the introductory and college algebra courses and is designed to bridge the gap between the courses. This course will enable students to become proficient in factoring, solving quadratic equations and systems of equations, working with conic sections, and functions Corequisite: MATH 0190. Prerequisite: Requires a "C" or greater in MATH 0390 or "P" in MATH 0192-0195 (FLEX Introductory Algebra sequence) or a satisfactory score on an algebra placement test or 230 on THEA. Course fee.

MATH 0196, 0197, 0198, 0199
FLEX Intermediate Algebra (0-1) **1 Hour**

These four modules are equivalent to MATH 0391 and corequisite lab, MATH 0190. These are self-paced classes that must be completed in sequence. Students are allowed to compress or expand the amount of material completed in a semester. We suggest students work at least four hours a week in the lab for at least four weeks to complete one of the modules. When the sequence is completed, the student will have four hours of MATH 0391 credit comparable to those acquired in MATH 0390 and corequisite lab. Computer assisted instruction, tutorial help, THEA lectures, and video tapes are available to support this class. Prerequisite: Requires a "C" or greater in MATH 0391, MATH 0390, or "P" in MATH 0192-0195 (FLEX Introductory Algebra sequence) or a satisfactory score on an algebra placement test or 230 on THEA.

This Intermediate Algebra sequence is "intermediate" in difficulty between introductory and college algebra courses. This sequence includes a study of relations, functions, inequalities, factoring, polynomials, rational expressions, and quadratics. This sequence will permit students to become familiar with complex numbers, and to solve systems of linear and non-linear equations and inequalities, and to continue a study of word problems. Course fee.

MATH 1314
College Algebra (3-0) **3 Hours**
This course is designed to enable students to become proficient in the following algebraic topics: polynomials, rational expressions, exponents, radicals, linear equations and inequalities, quadratic equations, exponential and logarithmic equations, systems of equations, and binomial expansion. Prerequisite: Requires a “C” or greater in MATH 0391 or a satisfactory score on an algebra placement test or 270 on THEA course fee. (MATH 1301)

MATH 1316
Trigonometry (3-0) **3 Hours**
This course is designed to enable students to become proficient in trigonometric and inverse trigonometric functions, the solution of triangles, identities, trigonometric equations, complex numbers, and logarithms. Prerequisite: Requires a “C” or greater in MATH 1314 or a satisfactory score on an algebra placement test. Course fee. (MATH 1302)

MATH 1324
Finite Mathematics (3-0) **3 Hours**
This course is designed to enable students to solve elementary business problems involving the following topics: sets, linear relations and functions, elementary matrix theory, systems of linear equations and inequalities, linear programming by the simplex method, simple and compound interest, annuities, amortization, and bonds. Prerequisite: Requires a “B” or greater in MATH 0391 or a satisfactory score on an algebra placement test. Course fee. (MATH 1324)

MATH 1325
Business Calculus (3-0) **3 Hours**
This course is designed to enable students to learn quantitative methods for analyzing business problems. The topics to be studied are: elementary probability theory, expected values, statistics, and elementary differential and integral calculus. Prerequisite: Requires a “C” or greater in MATH 1324. Course fee. (MATH 1325)

MATH 1332
Contemporary Mathematics I (3-0) **3 Hours**
Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included. Prerequisites: THEA score of 270 or "C" or greater in Math 0391. Course fee.

MATH 1333
Contemporary Mathematics II (3-0) **3 Hours**
Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included. Prerequisites: THEA score of 270 or "C" or greater in Math 0391. Course fee.

MATH 1342
Statistics (3-0) **3 Hours**
This course is designed to enable students to learn the introductory techniques of collection, presentation, analysis, and interpretation of data. Correlation methods, analysis of variance, dispersion, sampling, quality control, reliability, mathematical models, and regression analysis are also studied. Students will become proficient in use of computer technology such as Excel. Prerequisite: Requires a “B” or greater in MATH 0391 or a higher level Math course or a satisfactory score on an Algebra placement test. Course fee. (MATH 2332)

MATH 1348
Analytic Geometry (3-0) **3 Hours**
This course is designed to enable students to become proficient in equations of lines and conics, algebraic curves, transcendental curves, polar coordinates, parametric equations, curve fitting, and vectors. Prerequisite: Requires a “C” or greater in MATH 1316 or a satisfactory score on a trigonometry placement test. Course fee. (MATH 1303)

MATH 1350
Fundamentals of Mathematics I (3-0) **3 Hours**
Concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4-8) teacher certification. Prerequisite: Requires a “C” or greater in MATH 1314. Course fee.

MATH 1351
Fundamentals of Mathematics II (3-0) **3 Hours**
Concepts of geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4-8) teacher certification. Prerequisite: Requires a “C” or greater in MATH 1350. Course fee.

MATH 2318
Linear Algebra (3-0) **3 Hours**
This course is designed to produce student proficiency in finite dimensional vector spaces, linear transformations and matrices, quadratic forms, and eigen values and eigen vectors. Prerequisites: "C" or greater in Math 2415. Course fee.

MATH 2412
Pre-Calculus (4-0) **4 Hours**
This course is designed to enable students to become proficient in applications of algebra and trigonometry to the study of elementary functions and their graphs including polynomial, rational, exponential, logarithmic, and trigonometric functions. Some topics from analytical geometry are discussed. Prerequisite: Requires a "C" or greater in MATH 1314 or a satisfactory score on Trigonometry placement test. Course fee.

MATH 2413
Calculus I (4-0) **4 Hours**
This course is designed to enable students to become proficient in introductory analytic geometry, the theory of limits, differential calculus of algebraic and trigonometric functions, applications of differentiation, antiderivatives, and the definite integral. Prerequisite: Requires a “C” or greater in MATH 1316 or a “C” or better in MATH 2412 or a satisfactory score on a precalculus placement test. Course fee. (MATH 2313)

MATH 2414
Calculus II (4-0) **4 Hours**
This course is designed to enable students to become proficient in the differentiation and integration of transcendental functions, techniques of integration, and applications of the definite integral. Prerequisite: Requires a “C” or greater in MATH 2413. Course fee. (MATH 2314)

MATH 2415
Calculus III (4-0) **4 Hours**
This course will enable students to become proficient in indeterminate forms, improper integrals, sequences, series, and the differential and integral calculus of several variables. Prerequisite: Requires a “C” or greater in MATH 2414. Course fee. (MATH 2315)

MATH 2320
Differential Equations (3-0) **3 Hours**
This course is designed to produce student proficiency in first order equations, linear differential equations, differential operators, Laplace transforms, and the applications of differential equations. Prerequisite: Requires a “C” or greater in MATH 2415. Course fee. (MATH 2310)

MODERN & CLASSICAL LANGUAGES

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Russell Goodyear	118 SF	685-4605
	James C. Jones	113 SF	685-4629
Lab Instructor:	Donna Patterson	235 LRC	685-4562
Division Secretary:	Lula Lee	141 AFA	685-4624

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: One English Literature course

Suggested Courses for Field of Study **20-22 Semester Credit Hours**

Modern Language 1411, 1412*, 2311*, 2312*, Second Language 1411, 1412* or 2311*, 2312*

MINIMUM SEMESTER CREDIT HOURS = 65-67

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

American Sign Language

SGNL 1401
Beginning American Sign Language I (4-0) **4 Hours**

Introduction to American Sign Language, covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to communicate with the hearing impaired/deaf. (5102055132)

SGNL 1402
Beginning American Sign Language II (4-0) **4 Hours**

A continuation of Beginning American Sign Language I. Prerequisite: SGNL 1411. (5102055132)

SGNL 2301
Intermediate American Sign Language I (3-0) **3 Hours**

Review and application of conversational skills in American Sign Language; interpreting from signing to voice as well as from voice to signing. Prerequisite: SGNL 1412. (5102055232)

SGNL 2302
Intermediate American Sign Language II (3-2) **3 Hours**

A continuation of Intermediate American Sign Language I. Prerequisite: SGNL 2311. (5102055232)

French

FREN 1411
Elementary French I (3-4) **4 Hours**
This course is for students who have no previous instruction in French. It is designed to acquaint the student with the four basic language skills: listening, speaking, reading, and writing with emphasis on speaking and comprehension. Grammar and vocabulary are presented through intensive drills in class and the Language Laboratory. Course fee. (1609015131) (FREN 1401)

FREN 1412
Elementary French II (3-4) **4 Hours**
This is a conversation course conducted primarily in French for the students who have completed French 1411 or its equivalent. Intensive oral-aural drill and classroom interaction will enable the student to master the lexical and grammatical structures necessary in carrying on conversations in French. Prerequisite: FREN 1411. Course fee. (1609015131) (FREN 1402)

FREN 2303
Introduction to French Literature (3-0) **3 Hours**
This course is designed for those students who wish to acquire a basic background in French literature and culture. The course includes the reading of cultural essays, short stories, and poetry that are the basis for class discussion and composition. Practice in speaking, reading, and writing provide for vocabulary expansion. Prerequisite: FREN 2312. Course fee. (1609015331) (FREN 2303)

FREN 2311
Intermediate French I (3-2) **3 Hours**
This course is conducted in French, and it includes a comprehensive review of French grammar and structure. Through classroom drill, discussion, and composition, the course emphasizes vocabulary expansion and the acquisition of a basic knowledge of French culture and literature. Prerequisite: FREN 1412. Course fee.

FREN 2312
Intermediate French II (3-2) **3 Hours**
Continuation of French 2311. Prerequisite: FREN 2311. Course fee. (1609015231) (FREN 2302)

German

GERM 1411

Elementary German I (3-4) **4 Hours**
This course is for students who have no previous instruction in German. It is designed to acquaint the student with the four basic language skills: listening, speaking, reading, and writing with emphasis on speaking and comprehension. Grammar and vocabulary are presented through intensive drills in class and in the Language Laboratory. Course fee. (1605015113) (GERM 1401)

GERM 1412
Elementary German II (3-4) **4 Hours**
This is a conversation course conducted primarily in German for the student who has completed German 1411 or its equivalent. Intensive oral-aural drill and classroom interaction will enable students to master the lexical and grammatical structures necessary in carrying on conversations in German. Prerequisite: GERM 1411. Course fee. (1605015113) (GERM 1402)

GERM 2311
Intermediate German I (3-2) **3 Hours**
This course is conducted in German, and it includes a comprehensive review of German grammar and structure. Through classroom drill, discussion, and composition, the course emphasizes vocabulary expansion and the acquisition of a basic knowledge of German culture and literature. Prerequisite: GERM 1412. Course fee. (1605015213) (GERM 2301)

GERM 2312
Intermediate German II (3-2) **3 Hours**
A course designed to provide fluency in spoken and written German through intensive grammar presentation and review, through conversational practice, and through composition and reading. The course is conducted in German. Prerequisite: GERM 2311. Course fee. (1605015213) (GERM 2302)

Latin

LATI 1411
Beginning Latin (4-0) **3 Hours**
This non-laboratory course is designed for students who have no previous instruction in Latin. Through classroom presentation, explanation, and drills, students will be introduced to basic Latin vocabulary, word formation, syntax, Roman culture, and the historical backgrounds of the language. Course fee. (1612035113) (LATI 1301)

LATI 1412
Beginning Latin II (4-0) **3 Hours**
This course is for students who have a fundamental knowledge of Latin vocabulary and syntax. Through grammar presentation, the reading of simple texts, and the repetition of lexical items, the course emphasizes improvement in the student's overall comprehension in Classical Latin. Prerequisite: LATI 1311 Course fee. (1612035113) (LATI 1302)

LATI 2311
Intermediate Latin I (3rd semester Latin) (3-0) **3 Hours**
Review of grammar and readings in Roman literary works. Prerequisite: LATI 1412. Course fee. (1612035213)

LATI 2312
Intermediate Latin II (4th semester Latin) (3-0) **3 Hours**
Review of grammar and readings in Roman literary works. Prerequisite: LATI 2311. Course fee. (1612035213)

Spanish

SPAN 1300
Conversational Spanish (3-0) **3 Hours**
This introductory course emphasizes the acquisition of comprehension, pronunciation, and reading skills. Mastery of vocabulary and standard idiomatic expressions is stressed through intensive conversational drill and practice in the classroom and laboratory. Material is presented in a Hispanic culture context. Course fee. (1609055413) (SPAN 1303)

SPAN 1411
Elementary Spanish I (3-4) **4 Hours**
This course is for students who have no previous instruction in the language. It is designed to acquaint the student with the four basic language skills: listening, speaking, reading, and writing with emphasis on speaking and comprehension. Grammar and vocabulary are presented through intensive drills in class and in the Language Laboratory. Course fee. (1609055113) (SPAN 1401)

SPAN 1412
Elementary Spanish II (3-4) **4 Hours**
This is a conversation course conducted primarily in Spanish for the student who has completed Spanish 1411 or its equivalent. Intensive oral-aural drill and classroom interaction will enable the student to master the lexical and grammatical structures necessary in carrying on conversations in Spanish. Prerequisite: SPAN 1411. Course fee. (1609055113) (SPAN 1402)

SPAN 2311
Intermediate Spanish I (3-2) **3 Hours**

This course is conducted in Spanish, and it includes a comprehensive review of Spanish grammar and structure. Through classroom drill, discussion, and composition, the course emphasizes vocabulary expansion and the acquisition of a basic knowledge of Spanish culture and literature. Prerequisite: SPAN 1412 or equivalent. Course fee. (1609055213) (SPAN 2301)

SPAN 2312
Intermediate Spanish II (3-2) **3 Hours**

A course designed to increase fluency in spoken and written Spanish through intensive grammar presentation and review, through conversational practice, and through composition and reading. Prerequisite: SPAN 2311 or equivalent. Course fee. (1609055213) (SPAN 2302)

SPAN 2321
Introduction to Spanish Literature (3-0) **3 Hours**

This course is designed for those students who wish to acquire a basic background in Spanish and Latin American literature and culture. The course includes the reading of cultural essays, short stories, and poetry, which are a basis for class discussion and composition. Practice in speaking, reading, and writing provide for vocabulary expansion. Conducted in Spanish. Prerequisite: SPAN 2312. Course fee. (1609055313) (SPAN 2303)

SPAN 2324
Hispanic Literature (3-0) **3 Hours**

A course designed to enable students through reading, discussion and writing to explore the fiction, drama, and poetry of Hispanic authors who write in English or who have been translated into English. Course fee. (1609055313)

MUSIC

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Rabon Bewley	122 AFA	685-4643
	Bert Bostic	137 AFA	685-4624
	Michael Jordan	134 AFA	685-4647
	Betty Morris	120 AFA	685-4644
Division Secretary:	Lula Lee	141 AFA	685-4624

The Department of Music is a member of the Texas Association of Schools of Music and offers courses corresponding to its recommended curriculum.

Music courses are open to all students. See Tuition and Fees section of this catalog for voice/instrument instruction charges.

Students planning to transfer to a particular university should arrange their programs to meet the requirements of the college to which they plan to transfer.

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: MATH 1314, MUSI 1306, MUSI 1308, MUSI 1309, MUSI 1310, one English Literature coure (Humanities)

Suggested Courses for Field of Study . . . . . 21-24 Semester Credit Hours

– 4 semesters of Applied Voice or Instrument with Major Emphasis* (8 semester hours)
– 2 semesters of secondary Voice or Instrument: Class Piano (MUSI 1181+) for non-Piano majors; Voice (MUSI 1179+) for Piano Majors (2 semester hours)
– 2 semesters of Music Theory (MUSI 1311+) (6 semester hours)
Note: Prerequisite is MUSI 1301 or placement by test.
– 2 semesters of Ensemble (2 semester hours)
– 3-6 additional hours of Music elective from the following: MUSI 1308, MUSI 1309
* =Completion of prerequisite course(s) or permission of instructor required

MINIMUM SEMESTER CREDIT HOURS = 63-66

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.
Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76
Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

Class Instruction

MUSI 1301
Fundamentals of Music (3-0) **3 Hours**
For music majors. A preparatory course not applicable toward the music degree, in the fundamentals of rhythm, melody, harmony, ear-training, sight singing, and keyboard. (5009045530) (MUSI 1303)

MUSI 1304
Public School Music Methods and Materials (3-0) **3 Hours**
Techniques and materials for music instruction in kindergarten and grades one through six. Participation includes experience in part singing, playing, listening, voice testing, rhythmic, and creative activities. (5009045430) (MUSI 2303)

MUSI 1306
Music Appreciation (3-0) **3 Hours**
Overview of music in the context of social and cultural history. Antiquity to present. (5009025130)

MUSI 1308
Survey of Music Literature I (3-0) **3 Hours**
Critical examination of music, its development, and its function in culture. From antiquity to 1750. Use of primary sources and listening selections. (5009025230)(MUSI 2306)

MUSI 1309
Survey of Music Literature II (3-0) **3 Hours**
Critical examination of music, its development, and its function in culture. From 1750 to present. Use of primary sources and listening selections. (5009025230)(MUSI 2307)

MUSI 1310
American Music: History of Country Music **3 Hours**
Traces the development of country music and its function in American culture from Appalachia in the 1920s to present. Credit will be given only once for MUSI 1310. (5009025330)

MUSI 1310
American Music: Jazz (3-0) **3 Hours**
Course examines genesis and history of Jazz in America and probes its influence on American music, culture, and society. Credit will be given only once for MUSI 1310. (5009025330)

MUSI 1310
American Music: Rock 'n' Roll Music (3-0) **3 Hours**
Course examines the effect of historical events on American popular music culture. Includes listening and reporting on music in context of recent American History. Credit will be given only once for MUSI 1310. (5009025330)

Instrumental Technique

MUAP 1166, 1167
Woodwind Instruments I, II, (2-1) **1 Hour**
Course fee. (5009035130) (MUSI 1113, 1114)

MUAP 1168
Brass Instruments (2-1) **1 Hour**
Course fee. (5009035130) (MUSI 1108)

MUAP 1188
Percussion Instruments (2-1) **1 Hour**
Course fee. (5009035130) (MUSI 1112)

MUAP 1190, 2190
String Instruments I, II (2-1) **1 Hour**
Course fee. (5009035130) (MUSI 1115, 1116)

MUAP 2240
Instrumental Techniques (2-2) **2 Hours**
Course fee.

Individual Instruction Minor Emphasis

MUAP 1169, 1170, 2169, 2170
Brass Instruction I, II, III, IV (0-2) **1 Hour**
Course fee. (5009035430) (MUSI 1121, 1122, 2121, 2122)

MUAP 1171, 1172, 2171, 2172
String Instruction I, II, III, IV (0-2) **1 Hour**
Course fee. (5009035430) (MUSI 1123, 1124, 2123, 2124)

MUAP 1173, 1174, 2173, 2174
Percussion Instruction I, II, III, IV (0-2) **1 Hour**
Course fee. (5009035430) (MUSI 1125, 1126, 2125, 2126)

MUAP 1175, 1176, 2175, 2176
Woodwind Instruction I, II, III, IV (0-2) **1 Hour**
Course fee. (5009035430) (MUSI 1127, 1128, 2127, 2128)

MUAP 1177, 1178, 2177, 2178
Keyboard Instruction I, II, III, IV (0-2) **1 Hour**
Intermediate piano. Prerequisite: MUSI 2182 or instructor's permission.
Course fee. (5009035430) (MUSI 1129, 1130, 2129, 2130)

MUAP 1179, 1180, 2179, 2180
Voice Instruction I, II, III, IV (0-2) **1 Hour**
Course fee. (5009035430) (MUSI 1131, 1132, 2131, 2132)

Individual Instruction Major Emphasis

MUAP 1269, 1270, 2269, 2270
Brass Instruction I, II, III, IV (0-2) **2 Hours**
Course fee. (5009035430) (MUSI 1221, 1222, 2221, 2222)

MUAP 1271, 1272, 2271, 2272
String Instruction I, II, III, IV (0-2) **2 Hours**
Course fee. (5009035430) (MUSI 1223, 1224, 2223, 2224)

MUAP 1273, 1274, 2273, 2274
Percussion Instruction I, II, III, IV (0-2) **2 Hours**
Course fee. (5009035430) (MUSI 1225, 1226, 2225, 2226)

MUAP 1275, 1276, 2275, 2276
Woodwind Instruction I, II, III, IV (0-2) **2 Hours**
Course fee. (5009035430) (MUSI 1227, 1228, 2227, 2228)

MUAP 1277, 1278, 2277, 2278
Keyboard Instruction I, II, III, IV (0-2) **2 Hours**
Advanced Piano. Prerequisite: MUSI 2178 or instructor's permission.
Course fee. (5009035430) (MUSI 1229, 1230, 2229, 2230)

MUAP 1279, 1280, 2279, 2280
Voice Instruction I, II, III, IV (0-2) **2 Hours**
Course fee. (5009035430) (MUSI 1231, 1232, 2231, 2232)

Ensembles

MUEN 1121, 1122, 2121, 2122
Wind Ensemble I, II, III, IV (0-5) **1 Hour**
Course fee. (5009035530) (MUSI 1133,1134, 2133, 2134)

MUEN 1123, 1124, 2123, 2124
Band I, II,III, IV (0-5) **1 Hour**
Course fee. (5009035530) (MUSI 1135, 1136, 2135, 2136)

MUEN 1125, 1126, 2125, 2126
Orchestra I, II, III, IV (0-5) **1 Hour**
Course fee. (5009035530) (MUSI 1137, 1138, 2137, 2138)

MUEN 1131, 1132, 2131, 2132
Studio Ensemble I, II, III, IV (0-4) **1 Hour**
Course fee. (5009035630) (MUSI 1139, 1140, 2139, 2140)

MUEN 1133, 1134, 2133, 2134
Brass Ensemble I, II, III, IV (0-4) **1 Hour**
Course fee. (5009035630) (MUSI 1141, 1142, 2141, 2142)

MUEN 1135, 1136, 2135, 2136
String Ensemble I, II, III, IV (0-4) **1 Hour**
Course fee. (5009035630) (MUSI 1143, 1144, 2143, 2144)

MUEN 1137, 1138, 2137, 2138
Woodwind Ensemble I, II, III, IV (0-4) **1 Hour**
Course fee. (5009035630) (MUSI 1145, 1146, 2145, 2146)

MUEN 1139, 1140, 2139, 2140
Percussion Ensemble I, II, III, IV (0-4) **1 Hour**
Course fee. (5009035630) (MUSI 1147, 1148, 2147, 2148)

MUEN 1141, 1142, 2141, 2142
Chamber Singers I, II, III, IV (0-5) **1 Hour**
Course fee. (5009035730) (MUSI 1149, 1150, 2149, 2150)

MUEN 1143, 1144, 2143, 2144
Chorale I, II, III, IV (0-5) **1 Hour**
Course fee. (5009035730) (MUSI 1151, 1152, 2151, 2152)

MUEN 1145, 1146, 2145, 2146
Women's Choir I, II, III, IV (0-5) **1 Hour**
Course fee. (5009035730) (MUSI 1153, 1154, 2153, 2154)

MUEN 1147, 1148, 2147, 2148
Men's Choir I, II, III, IV (0-5) **1 Hour**
Course fee. (5009035730) (MUSI 1155, 1156, 2155, 2156)

MUEN 1151, 1152, 2151, 2152
Jazz Singers I, II, III, IV (0-4) **1 Hour**
Course fee. (5009035830) (MUSI 1157, 1158, 2157, 2158)

Additional Classes

MUSI 1159, 2159
Musical Theatre I, II (1-2) **1 Hour**
Study and performance of works from the musical theatre repertoire. Course fee. (5009036130) (MUSI 1104, 1105)

MUSI 1162, 1165
Diction I, II (1-1) **1 Hour**
Course fee. (5009085330) (MUSI 1159, 1160)

MUSI 1163, 1164
Jazz Improvisation I, II (0-3) **1 Hour**
Course fee. (5009036530) (MUSI 1165, 1166)

MUSI 1181, 1182, 2181, 2182
Class Piano I, II, III, IV (2-1) **1 Hour**
Elementary piano. Course fee. (5009075130) (MUSI 1119, 1120, 2119, 2120)

MUSI 1183, 1184, 2183, 2184
Class Voice I, II, III, IV (2-1) **1 Hour**
Class instruction in the fundamentals of correct breathing, tone production, and diction. Laboratory course designed for students with little or no previous voice training. Aids in developing a pleasing tone quality that is produced with ease and proper enunciation. Course fee. (5009085130) (MUSI 1117, 1118, 2117, 2118)

MUSI 1311, 1312, 2311, 2312
Music Theory I, II, III, IV (3-3) **3 Hours**
First principles of chord progression and phrase harmonization. A study of more advanced chord structures and their placement within the phrase. The student receives a broad summary of classical harmony and then explores the techniques of the twentieth century. Written exercises, analysis, and correlated keyboard projects are required. Prerequisite: MUSI 1301 or a passing score on placement test. (5009045130, 5009045230) (MUSI 1207, 1208, 2207, 2208)

MUSI 1386, 2386
Musical Composition—MIDI I & II **3 Hours**
These courses employ Musical Instrument Digital Interface (MIDI). Students compose music on the computer; write music from a piano being played; record real time from microphones; sequence, store, and edit sounds; and overdub and mix blocks of sound. (5009045330) (MUSI 1301)

NURSING-ASSOCIATE DEGREE

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Dorothy Joy	212 DFH	685-4602
Faculty:	Kim Bezinque	214 DFH	685-4741
	Juanita Coldiron	216 DFH	685-4598
	Lea Keesee	205 DFH	685-4595
	Debbie Korback	218 DFH	685-4590
	Helen Peetz	215 DFH	685-4599
	Ed Penz	219 DFH	685-4591
	Patti Richard	207 DFH	685-4593
	Lenora Sevcik	213 DFH	685-4597
	Valerie Steiner	217 DFH	686-4822
Division Secretary:	Kay Floyd	209b DFH	685-4600

Midland College offers a two-year nursing program leading to the degree of Associate in Applied Science. A transition option for licensed vocational nurses is also available. Satisfactory completion of the program prepares the graduate to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN-CAT) for licensure as a registered nurse. The nursing program is accredited by the National League for Nursing Accreditation Commission, 61 Broadway, New York, NY, 10006, (212) 363-5555.

To be eligible for graduation from the nursing program, the student must have completed each of the prescribed courses with a minimum grade of "C'', passed the end-of-program achievement examination, completed an NCLEX-RN-CAT review course, satisfied all college financial obligations, and returned all school property. Requirements to write the licensing examination include the application process, payment of fees, certification by the Program Director, graduation from the program, and approval of the Board of Nurse Examiners for the State of Texas.

The degree in this field offered by Midland College and the courses needed to achieve this credential are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a plan of study. Courses for the degree plan must be taken in sequence. Only students admitted to the Associate Degree Nursing Program can enroll in courses with the RNSG prefix. BIOL 2401, BIOL 2402, and HPRS 1106 are required for program admission and are prerequisites for the first semester nursing courses. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, BIOL 2402, ENGL 1301, PSYC 2301

Specialty Courses **46 Semester Credit Hours**

RNSG 1108, RNSG 1162, *RNSG 1163, *RNSG 1201, RNSG 1210, RNSG 1215, RNSG 1231, *RNSG 1232, *RNSG 1247, RNSG 1248, RNSG 1412, *RNSG 1462, RNSG 1513, RNSG 2207, RNSG 2213, RNSG 2341, *RNSG 2461, *RNSG 2560

Related Courses **9 Semester Credit Hours**

HPRS 1106, PSYC 2314, ITSC 1191, BIOL 2421

MINIMUM SEMESTER CREDIT HOURS = 72

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements.

Oral Communication: RNSG 1513

Basic Use of Computers: ITSC 1191

Course Progression

The following is the required sequence of nursing courses in the Associate Degree Nursing program.

Fall Admission

First Year, First Semester
RNSG 1108, RNSG 1162, RNSG 1215, RNSG 1231, RNSG 1513
First Year, Second Semester
RNSG 1163, RNSG 1201, RNSG 1232, RNSG 1247, RNSG 1462, RNSG 2213
Second Year, First Semester
RNSG 1248, RNSG 1412, RNSG 2461
Second Year, Second Semester
RNSG 1210, RNSG 2207, RNSG 2341, RNSG 2560

Spring Admission

First Year, First Semester
RNSG 1108, RNSG 1162, RNSG 1215, RNSG 1231, RNSG 1513
First Year, Second Semester
RNSG 1201, RNSG 1232, RNSG 1247, RNSG 1462
Second Year, First Semester
RNSG 1163, RNSG 1248, RNSG 1412, RNSG 2213, RNSG 2461
Second Year, Second Semester
RNSG 1210, RNSG 2207, RNSG 2341, RNSG 2560

Associate of Applied Science
Licensed Vocational Nurse to Associate Degree Nursing Option

Core Requirements **A Minimum of 15 Semester Credit Hours**
See Core Requirements, page 75
Required Core Course(s) for this degree: BIOL 2401, BIOL 2402, ENGL 1301, PSYC 2301

Specialty Courses **35 Semester Credit Hours**
RNSG 1163, RNSG 1201, RNSG 1210, RNSG 1227, RNSG 1232, RNSG 1247, RNSG 1248, RNSG 2207, RNSG 2261, RNSG 2213, RNSG 1412, RNSG 2341, *RNSG 2461, *RNSG 2560

Related Courses **8 Semester Credit Hours**
PSYC 2314 and ITSC 1191, BIOL 2421

Awarded Credit **12 Semester Credit Hours**
After completion of RNSG 1227 and RNSG 2261, credit will be awarded for the following courses: HPRS 1106, RNSG 1108, RNSG 1162, RNSG 1215, RNSG 1231, RNSG 1513

MINIMUM SEMESTER CREDIT HOURS = 72

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements
Oral Communication: RNSG 2207
Basic Use of Computers: POFI 1170

Course Progression

The following is the required sequence of nursing courses in the Licensed Vocational Nursing to Associate Degree Nursing Option:

First Semester
RNSG 1163, RNSG 1227, RNSG 1232, RNSG 1247, RNSG 2261, RNSG 2213
Second Semester
*RNSG 1248, RNSG 1412, *RNSG 2461
Third Semester
RNSG 1210, RNSG 2207, RNSG 2341, *RNSG 2560

Admission Requirements

The Midland College Associate Degree Nursing Program has a limited enrollment based on specific admission criteria. For information regarding the admission criteria, contact the Health Sciences Division.

To ensure consideration for the Fall Associate Degree Nursing class all admission criteria must be completed and all documentation submitted by May 25. To ensure consideration for the Spring Associate Degree Nursing class, all admission criteria must be completed and all documentation submitted by August 25. Information regarding the Licensed Vocational Nursing to Associate Degree Nursing option for currently licensed vocational nurses or licensed practical nurses may be obtained by contacting the program director.

A physical examination and current immunizations are required after admission but prior to beginning nursing courses. Health insurance is required. Students must be certified in CPR (cardiopulmonary resuscitation).

RNSG 1108
Dosage Calculations for Nursing (0-3-0) **1 Hour**
Dosage calculations includes reading, interpreting and solving calculation problems encountered in the preparation of medications, and conversion of measurements within the metric, apothecary and avoirdupois systems.

RNSG 1162
Clinical I (0-0-3) **1 Hour**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

RNSG 1163
Clinical - Mental Health (0-0-3) **1 Hour**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

RNSG 1201
Pharmacology (2-1-0) **2 Hours**
Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. Prerequisite: BIOL 2401

RNSG 1210
Introduction to Community Based Nursing (2-1-0) **2 Hours**
Overview of the delivery of nursing care in a variety of community-based settings; application of systematic problem-solving processes and critical thinking skills, focusing on the examination of concepts and theories relevant to community-based nursing; and development of judgment, skill, and professional values within a legal/ethical framework. Prerequisite: Admission into the program.

RNSG 1215
Health Assessment (1-3-0) 2 Hours
Development of skills and techniques required for a comprehensive health assessment within a legal/ethical framework. Prerequisite: Admission to the Program.

RNSG 1227
Transition from Vocational to Professional Nursing (2-1-0) 2 Hours
Topics include health promotion, expanded assessment, analysis of data, nursing process, pharmacology, multidisciplinary teamwork, communication, and applicable competencies in knowledge, judgment skills, and professional values within a legal/ethical framework throughout the life span. Prerequisite: Admission to the Program.

RNSG 1231
Principles of Clinical Decision Making I (2-1-0) 2 Hours
Examination of selected principles related to the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis is on clinical decision making for clients in medical-surgical settings experiencing health problems involving perioperative care, pain, and infectious disorders. Discussion of knowledge, judgment, skills and professional values within a legal/ethical framework will be included. Prerequisite: Admission into the program.

RNSG 1232
Principles of Clinical Decision Making II (2-1-0) 2 Hours
Examination of selected principles related to the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis is on clinical decision making for clients in medical-surgical settings experiencing health problems involving fluid and electrolytes, respiratory disorders, peripheral vascular disorders, and immunologic disorders. Discussion of knowledge, judgment, skills and professional values within a legal/ethical framework will be included. Prerequisite: Admission into the program.

RNSG 1247
Concepts of Clinical Decision Making I (2-1-0) 2 Hours
Integration of previous knowledge and skills into the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis is on clinical decision-making for clients in medical-surgical settings experiencing health problems involving gastrointestinal disorders, eye-ear-nose-throat disorders, and integumentary disorders. Discussion of knowledge, judgment, skills, and professional values within a legal/ethical framework will be included. Prerequisite: Admission into the program.

RNSG 1248
Concepts of Clinical Decision Making II (2-1-0) 2 Hours
Integration of previous knowledge and skills into the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis is on clinical decision-making for clients in medical-surgical settings experiencing health problems involving endocrine and metabolic disorders; reproductive and sexual disorders; and musculoskeletal disorders. Discussion of knowledge, judgment, skills, and professional values within a legal/ethical framework will be included. Prerequisite: Admission into the program.

RNSG 1412
Nursing Care of the Childbearing and Childrearing Family (4-1-0) 4 Hours
Study of the concepts related to the provision of nursing care for childbearing and childrearing families; application of systematic problem-solving processes and critical thinking skills, including a focus on the childbearing family during preconception, prenatal, antipartum, neonatal, and postpartum periods and the childrearing family from birth to adolescence; and competency in knowledge, judgment, skill, and professional values within a legal/ethical framework. Prerequisite: Admission into the program.

RNSG 1462
Clinical II (0-0-12) **4 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

RNSG 1513
Foundations for Nursing Practice (4-3-0) **5 Hours**
This course is an introduction to the role of the professional nurse as a provider of care, coordinator of care, and member of the profession. Topics include but are not limited to the fundamental concepts of nursing practice, history of professional nursing, a systematic framework for decision-making, mechanisms of disease, the needs and problems that nurses help patients manage, and basic psychomotor skills. Emphasis on knowledge, judgment, skills, oral communications and professional values within a legal/ethical framework will be included. Prerequisite: Admission into the program.

RNSG 2207
Transition to Nursing Practice (1-3-0) **2 Hours**
Introduction to selected concepts related to the role of the professional nurse as a provider of care, coordinator of care, and member of the profession. Review of trends and issues impacting nursing and health care today and in the future. Topics include knowledge, judgment, skill, and professional values within a legal/ethical framework. Prerequisite: Approval of Program Director.

RNSG 2213
Mental Health Nursing (2-1-0) **2 Hours**
Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of clients and their families. Prerequisite: Approval of the Program.

RNSG 2261
Clinical - Transition Option (0-0-6) **2 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

RNSG 2341
Advanced Concepts of Clinical Decision Making (3-1-0) **3 Hours**
Application of advanced concepts and skills for development of the professional nurse's role in complex client/nursing situations. Emphasis on clinical decision-making for clients in medical-surgical settings experiencing health problems involving cardiovascular disorders; neurologic disorders; liver, biliary and pancreatic disorders; renal and urinary disorders; hematologic disorders; and cancer. Focus will be given to knowledge, judgment, skills, and professional values within a legal/ethical framework. Prerequisite: Admission into the program.

RNSG 2461
Clinical IV (0-0-15) **4 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

RNSG 2560
Clinical V (0-0-24) **5 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: Admission into the program.

HPRS 1106
Medical Terminology (1-0-0) **1 Hour**
A study of common medical terminology, word origin, structure, and application.

NURSING-VOCATIONAL

Midland Program:

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Susan Jones	140 T	685-6437
Faculty:	Linda Jordan	140 T	685-4270
	Lynn Mock	140 T	685-5594
	Tracie Wood	140 T	685-4787
Division Secretary:	Kay Floyd	209b DFH	685-4600

Ft. Stockton Program:

Dean, Distance Learning:	Dale Beikirch	A42 AMS	432/685-5539
Director, WRTTC:	Brenda Lee		432/336-7882
Coordinator:	Karla Hooker		432/336-7882
Faculty:	Madylon Lawrence		432/336-7882

Midland College offers Vocational Nursing Programs on the Midland Campus and through the Williams Regional Technical Training Center (WRTTC) in Ft. Stockton.

The Vocational Nursing Program is a one year (12 month) program leading to a certificate. Satisfactory completion of the program qualifies the individual to apply to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN) which in turn, allows the individual to become licensed to practice as a vocational nurse. The curriculum prepares the graduate to work in an acute or long term care facility, nursing agency or physician's office.

Requirements for graduation include completing all courses with a minimum grade of "C", taking the end of program achievement test and satisfying all college financial requirements. Requirements to write the licensure examination include written application, payment of fees, certification by program director and graduation from the program.

Certificate

Specialty Courses **41 Semester Credit Hours**

VNSG 1126, VNSG 1136, VNSG 1219, VNSG 1230, VNSG 1234, VNSG 1238, VNSG 1304, VNSG 1420, VNSG, 1423, VNSG 1509, VNSG 2431, VNSG 2362, VNSG 2460, VNSG 2461

Related Courses **4 Semester Credit Hours**

HPRS 1106, RNSG 1108, HPRS 2200

MINIMUM SEMESTER CREDIT HOURS = 45

Course Progression

Following is the required semester sequence of courses in the Vocational Nursing program.

First Semester

HPRS 1106, HPRS 2200, RNSG 1108, VNSG 1126, VNSG 1304, VNSG 1420, VNSG 1423

Second Semester

VNSG 1230, VNSG 1509, VNSG 2431, VNSG 2460

Third Semester

VNSG 1136, VNSG 1219, VNSG 1234, VNSG 1238, VNSG 2362, VNSG 2461

Admission Requirements

The Vocational Nursing Programs have limited enrollments based on specific admission criteria. For information regarding the admission criteria, see the program brochure or program representatives.

The courses needed to achieve a certificate are presented in the following sections. Students interested in one of these programs should contact either the Division Office in Midland or the WRTTC in Ft. Stockton to obtain additional information and/or acquire a certificate plan.

VNSG 1126
Gerontology (1-0-0) **1 Hour**
Overview of the normal physical, psychosocial, and cultural aspects of the aging process including common disease processes of aging and exploration of attitudes toward care of the elderly. Corequisite: VNSG 1119 and VNSG 2261.

VNSG 1136
Mental Health (1-0-0) **1 Hour**
An introduction to the principles and theories of positive mental health and human behaviors, including emotional responses, coping mechanisms, and therapeutic communication skills. Corequisite: VNSG 1238 and VNSG 2160.

VNSG 1219
Professional Development (2-0-0) **2 Hours**
The study of the importance of professional growth and development of added nursing skills. Topics include the role of the licensed vocational nurse in the multi-disciplinary health care team, professional organizations, and continuing education. Corequisite: VNSG 1126 and VNSG 2261.

VNSG 1230
Maternal-Neonatal Nursing (2-0-0) **2 Hours**
The utilization of the nursing process in the assessment and management of the childbearing family. Emphasis is on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth, and the neonate period including abnormal conditions. Corequisite: VNSG 1262.

VNSG 1234
Pediatrics (2-0-0) **2 Hours**
The study of childhood diseases and childcare from infancy through adolescence. The focus is on the care of the well and the ill child utilizing the nursing process. Corequisite: VNSG 1263.

VNSG 1238
Mental Illness (2-0-0) **2 Hours**
The study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process. Corequisites: VNSG 1136 and VNSG 2160.

VNSG 1304
Foundations of Nursing I (3-0-0) **3 Hours**
Introduction to the nursing profession including history, standards of practice, legal and ethical issues, and role of the vocational nurse. Topics include mental health, therapeutic communication, cultural and spiritual diversity, nursing process, and holistic awareness.

VNSG 1420
Anatomy and Physiology for Allied Health (3-2-0) **4 Hours**
This course is an introduction to the normal structure and function of the body including an understanding of the relationship of body systems in maintaining homeostasis.

VNSG 1423
Basic Nursing Skills (2-6-0) **4 Hours**
The mastery of entry level nursing skills and competencies for a variety of health care settings. The nursing process will be utilized as the foundation of all nursing interventions. Midland - Prerequisite: BIOL 2402, VNSG 1222. Ft. Stockton - Prerequisite: HPRS 1106, VNSG 1420, VNSG 1115. Corequisite: VNSG 1222.

VNSG 1509
Nursing in Health and Illness II (4-3-0) **5 Hours**
Introduction to common health problems requiring medical and surgical interventions

VNSG 2431
Advanced Nursing Skills (2-6-0) **4 Hours**
Mastery of advanced level nursing skills and competencies in a variety of health care settings utilizing the nursing process as a problem-solving tool.

VNSG 2362
Clinical - Mental Health/Mental Illness/
Professional Development (0-0-13) **3 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

VNSG 2460
Clinical - Nursing in Health and Illness I (0-0-18) **4 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

VNSG 2461
Clinical - Clinical-Maternal/Pediatrics (0-0-12) **4 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

HPRS 1106
Medical Terminology (1-0-0) **1 Hour**
A study of common medical terminology, word origin, structure and application.

HPRS 2200
Pharmacology for Health Professions (2-0-0) **2 Hours**
A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisite: BIOL 2401 or VNSG 1420.

OFFICE SYSTEMS TECHNOLOGY

(See Information Technology)

ORIENTATION

Coordinator:	Peggy Wood	112 SF	685-4667
Assistant Coordinator:	James E. Fuller	114 SF	685-4625

Orientation 0101 is strongly recommended for all entering, degree-seeking students who are registering for nine (9) or more hours. Orientation modules are especially recommended for students who have been out of school for several years, for students who have failed one or more sections of THEA, or for those students who have been placed on scholastic probation or scholastic enrollment restriction.

ORIN 0101
Orientation (1-0) **1 Hour**
Specific Orientation Modules include **Academic Empowerment, College Survival, Leadership, Life Choices, Transition Student,** and **Personal Finance. (32.0101.52 12)**

Academic Empowerment
An Orientation module designed to teach students how to enhance their potential for success in the college academic setting. The emphasis will be placed on Preparation, Organization, Work, Evaluation, and Rethinking, an umbrella for more specific strategies such as time management, note taking, annotating, and reading.

College Survival
An Orientation module designed to provide students with the knowledge of key components of college survival as incoming students. The strategies for a successful transition to college life include locating campus resources, managing time and stress, setting goals, discovering your learning style, critical thinking, note taking, academic advising, and college etiquette.

Leadership
An Orientation module designed to increase college success through the development of leadership skills. The focus is to enable students to become more effective leaders, a lifelong skill to apply to multiple settings. The techniques used will incorporate examples of leadership from movies, Literatures, current events, which will be analyzed as models for the benefits and drawbacks of various leadership styles.

Life Choices
An Orientation module designed to give students the opportunity to cultivate the skills, values and attitudes necessary to become confident, capable students who can make responsible and informed decisions at school and in their personal lives. Topics for this module (Sex, Drugs, and Rock and Roll) include Responsible Dating and Relationships, Time Management, Personality and Building Self-Esteem, Substance Abuse, Sexually Transmitted Diseases, and Sexual Harassment.

Transition Student
An Orientation module structured to teach students how to balance and manage responsibilities, i.e. children, family, employment stress, social life, and education. Topics include Time Management, Relationships/Communication, The Culture of Higher Education/Diversity, Reading and Writing for College, Note and Test Taking, Critical Thinking, Money and Health.

Personal Finance
An Orientation module designed to acquaint students with aspects of financial responsibility. Topics include budgeting, managing finances, avoiding debt, paying for college, living single, establishing and maintaining good credit, and investing.

For additional, related courses, see: DVLP 0190, DVLP 0290, DVLP 0390

Strategic Studies
Strategic Studies is a course designed to teach students how to enhance their prospects of being successful in college. The techniques that are taught include general-purpose learning strategies such as note taking, organization, time management, means of avoiding procrastination, reading/comprehension, attention/listening, problem solving and critical thinking, encoding and retrieval, test taking, test preparation, tests/test anxiety, group and cooperative learning, memory, motivation, writing and proofing. In addition, content specific strategies include English, general science, chemistry, business, philosophy, political science, history, and psychology. Computer related activities and instruction complement traditional methods of instruction. The course may be taken in one credit hour or two credit hour modules on a flexible entry basis. (3201015235)

PHILOSOPHY

Dean:	William Morris	141a AFA	685-4640
Faculty:	Jerry Franks	125 SF	685-4607
Division Secretary:	Monica Sosa	141 AFA	685-4640

PHIL 1301
Introduction to Philosophy (3-0) **3 Hours**
"Introduction to Philosophy" samples the writings of thinkers who over the past 2500 years have challenged the human intellect with questions about the meaning of existence, the nature of reality, and the validity of knowledge. The course encourages students to re-examine and clarify their own beliefs and values. (3801015135)

Phil 1304
Introduction to World Religions (3-0) **3 Hours**
Is a survey of the major belief systems in society today- Judaism, Christianity, Islam, Hinduism, and Buddhism, how they are different from ancient belief systems and how they are influencing new religious movements.

PHIL 1316
History of Christianity (3-0) **3 Hours**
This course is an historical survey of the development of Christianity and its role in world history, from its origins to the present time covering theological and institutional issues. Course may be taken for either credit or non-credit. Also HIST 1316. (3802015135)

PHIL 1317
History of Judaism (3-0) **3 Hours**
Is a chronological study of the development of the Jewish nation and religion. The first part of the course will cover Ancient Israel: Abraham to the Roman destruction of the second temple (70 CE). The second part begins with the rise of Rabbinic Judaism (after 70 CE) and continues through the establishment of the nation of Israel to its existence today.

PHIL 2303
Introduction to Logic (3-0) **3 Hours**
"Introduction to Logic" introduces the students to the nature and methods of correct reasoning; deductive and inductive proof; fallacies; argumentation. (3801015235)

PHIL 2306
Ethics (3-0) **3 Hours**
This course covers the major classic philosophies of life with consideration of some of the value or "goodness" involved in the moral, religious, aesthetic, and scientific points of view. (3801015335)

PHIL 2321
Philosophy of Religion (3-0) **3 Hours**
"Philosophy of Religion" is a study of the nature and philosophical implications of religious beliefs, experiences, and practices, and the relation of these to other major human concerns. (3802015335)

PHOTOGRAPHY

(See Communication or Arts)

Photography courses at Midland College offer experiences for students from introductory through advanced levels. Photography credit may be applied to majors in art, communication, or chosen as electives. Many of our photographers are simply enthusiasts who pursue the medium for personal pleasure. All four black and white courses include darkroom time. Each student will have the ability to produce photographs from subjects they shoot and the opportunity to submit images for publication in our newspaper, magazines, and student shows. Photography courses are offered through either the Communication Department or the Art Department.

PHYSICS

Dean:	Margaret Wade	125 SF	685-4615
Faculty:	Tom O'Hara	110 SF	685-4617
Division Secretary:	Norma Duran	124 SF	685-4612

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: CHEM 1411, CHEM 1412, MATH 2413

Suggested Courses for Field of Study **19 Semester Credit Hours**

PHYS 2425*, PHYS 2426*, MATH 2414* (2314), MATH 2415* (2315), MATH 2320*

Related Courses **4 Semester Credit Hours**

Four semester credit hours of science in addition to the core courses.

MINIMUM SEMESTER CREDIT HOURS = 65

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

ENGR 2301
Statics (3-0) **3 Hours**

Calculus-based study of composition and resolution of forces, equilibrium of force system, friction, centroids, and moments of inertia. Prerequisite: the first calculus-based physics course (PHYS 2425). Corequisite: a second course in calculus (MATH 2314).

ENGR 2302
Dynamics (3-0) **3 Hours**

Calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. Prerequisite: Statics (ENGR 2301). Corequisite a third course in calculus (MATH 2315).

PHYS 1401
College Physics I (3-4) **4 Hours**

This course will enable students to become familiar with classical mechanics, thermodynamics, and wave motion. This course is designed for students planning to study medicine, dentistry, veterinary medicine, optometry, biology, architecture, and the technical disciplines. A knowledge of algebra and elementary trigonometry is needed. (PHYS 1401)

PHYS 1402
College Physics II (3-4) **4 Hours**

This course will enable students to become proficient in optics, electricity, magnetism, and selected topics from modern physics. Prerequisite: PHYS 1401. (PHYS 1402)

PHYS 1415
Physical Science I (3-3) **4 Hours**

This is a survey course in the physical sciences and scientific methods and is intended for non-science majors. The course introduces topics in physics, chemistry, geology, meteorology, and astronomy with an emphasis on physics topics. A lab is included, and basic mathematics is required.

PHYS 1417
Physical Science II (3-3) **4 Hours**

This is a continuation of PHYS 1415 with an emphasis on topics in chemistry, geology, meteorology, and astronomy. A lab is included, and basic mathematics is required.

PHYS 2425
University Physics I (3-4) **4 Hours**

This course will enable students of the physical sciences, engineering, and mathematics to become proficient in classical mechanics and thermodynamics. Prerequisite or Corequisite: MATH 2413 (2313). (PHYS 1403)

PHYS 2426
University Physics II (3-4) **4 Hours**

This course will enable students to become proficient in classical electricity and magnetism, wave motion, and optics. Prerequisite: PHYS 2425 or Corequisite: MATH 2414 (2314). (PHYS 2401)

PROFESSIONAL PILOT

Dean:	Curt Pervier	143 T	685-4677
Director:	L.C. Durham	163T	685-4668
Faculty:	Deon Christensen	160 T	685-4661
	Jim Mielkus	162 T	685-4684
	Craig Patterson	155 T	685-5569
Program Coordinator:	Karen Harris	161 T	685-4799
		MFC	684-9800

The Professional Pilot Program is conducted in an alliance with Mesa Airlines. This 16 month program will prepare the student for employment as an airline pilot. The program has specialized admission requirements due to the Federal Aviation Regulations and the cost of flight training. Students will complete a rigorous four-semester program culminating with an Associate Degree of Applied Science-Professional Pilot. Each student will obtain the following pilot licenses and ratings: Private Pilot, Commercial Pilot, Instrument rating, and Multi-engine rating. Upon successful completion of the program, each student will receive an interview with Mesa Airlines for employment as a First Officer.

Requirements for graduation include completing all courses with a minimum grade point of 3.0, and satisfy all college and independent contractors financial obligations. Upon successful completion of the program, each student will receive a recommendation for an interview with Mesa Airlines.

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: SPCH 1318

Specialty Courses **56 Semester Credit Hours**

AIRP 1191, AIRP 1301, AIRP 1307, AIRP 1315, AIRP 1317, AIRP 1341, AIRP 1343, AIRP 1345, AIRP 1355, AIRP 1451, AIRP 2346, AIRP 2333, AIRP 2337, AIRP 2339, AIRP 2350, AIRP 2351, and nine hours specialty electives

MINIMUM SEMESTER CREDIT HOURS = 71

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.

Oral Communication: SPCH 1318

Basic Use of Computers: AIRP 1307

Private Pilot Certificate

Speciality Courses **12 Semester Credit Hours**

AIRP 1301, AIRP 1307, AIRP 1315, AIRP 1317

Instrument Pilot Certificate

Specialty Courses **19 Semester Credit Hours**

AIRP 1341, AIRP 1345, AIRP 2335, AIRP 1451, AIRP 2333, AIRP 2350

Commercial Pilot Certificate

Speciality Courses **15 Semester Credit Hours**

AIRP 1355, AIRP 2337, AIRP 2339, AIRP 2346, AIRP 2357

AIRP 1171
High Performance Airplane Transition (0-2) **1 Hour**
Instruction in the transition from a non-high performance airplane to a high performance airplane. Includes flight instruction and necessary ground instruction on aircraft systems.

AIRP 1191
Special Topics (1-0) **1 Hour**
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

AIRP 1301
Air Navigation I (VFR) (3-0) **3 Hours**
Visual flight navigation in the National Airspace System, including sectional charts, flight computers, plotters, and navigation logs. Radio navigation will include NDB and VOR navigation.

AIRP 1307
Aviation Meteorology (3-0) **3 Hours**
In-depth coverage of meteorological phenomena affecting aircraft flight. Topics include basic concepts of aviation meteorology in the study of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, and fog. Also includes analysis and use of weather data for flight planning.

AIRP 1315
Private Pilot Flight Training (1-6) **3 Hours**
Flight training to prepare the student for the Federal Aviation Administration private pilot license. Student will demonstrate competency of each item as required by the Private Pilot Practical Test Standards.

AIRP 1317
Private Pilot Ground School (3-0) **3 Hours**
Private Pilot ground school covering topics such as principles of flight, radio procedures, weather, navigation, aerodynamics, Federal Aviation Administration regulations, and NOTAM's.

AIRP 1341
Advanced Air Navigation (3-0) **3 Hours**
Introduction to instrument flight operation and navigation. Topics include enroute navigation, instrument approaches, DP's, STAR's, NDB, VOR, and GPS.

AIRP 1343
Aerodynamics (3-0) **3 Hours**
Study of the general principles of flight. Topics include lift, weight, thrust drag, aircraft stability and design, aerodynamic forces, subsonic, transonic, supersonic and multiengine aerodynamics.

AIRP 1345
Aviation Safety (3-0) **3 Hours**
A study of the fundamentals essential to the safety of flight. Topics include decision making factors, accident reporting, accident investigation, air traffic systems, and aircraft technologies.

AIRP 1355
Intermediate Flight Training (0-6) **2 Hours**
Provides students with flight hours and skills necessary to fulfill the dual and solo hours in the areas of maneuvers and cross-country navigation required for the Federal Aviation Administration commercial pilot license.

AIRP 1451
Instrument Ground School (3-3) **4 Hours**
A study of the basic instrument radio and navigation fundamentals used in instrument flight. Topics include a description and practical use of navigation systems, instruments, instrument charts, and the Federal Aviation Administration regulations.

AIRP 2333
Aircraft Systems (3-0) **3 Hours**
Study of the general principles, operation, and application of pneumatic, hydraulic, electrical, fuel, environmental, protection, and warning systems. Emphasis on types of aircraft structures and their control systems.

AIRP 2335
Airline Transport Pilot Ground School (3-0) **3 Hours**
Provides the flight training and ground instruction required to meet the Federal Aviation Administration regulations for the Airline Transport Pilot Certificate. Emphasis on achieving the competency to pass the oral and practical exams as prescribed in the Federal Aviation Administrations Practical Test Standards.

AIRP 2336
Certified Flight Instructor (1-6) **3 Hours**
Flight instruction necessary to qualify for the Federal Aviation Administration Certified Flight Instructor-Airplane Certificate. Topics include ground and flight instruction.

AIRP 2337
Commercial Pilot Ground School (3-0) **3 Hours**
A study of advanced aviation topics to prepare the student for the Federal Aviation Commercial written examination.

AIRP 2339
Commercial Flight (1-6) **3 Hours**
Flight instruction necessary to qualify for the Commercial pilots license. Student will demonstrate proficiency of all commercial pilot maneuvers to Commercial Pilot Practical Test Standards.

AIRP 2346
High Performance Aircraft Familiarization (3-0) **3 Hours**
Introduction to the flight characteristics of high performance aircraft with emphasis on preflight, operation of systems, performance calculations, and flight handling characteristics including multi-engine operations.

AIRP 2350
Instrument Flight (1-6) **3 Hours**
Preparation for the completion of the Federal Aviation Administration Instrument Pilot rating. Student will demonstrate mastery of the airplane on full and partial panel instruments, chart reading, flight planning, and ATC radio procedures.

AIRP 2351
Multiengine Flight (1-4) **3 Hours**
Preparation for the multiengine rating which will be added to a current certificate. Includes explanation and demonstration of all required Federal Aviation Administration normal and emergency operations and procedures.

AIRP 2357
Turbine Aircraft Systems (3-0) **3 Hours**
Instruction in the systems of specific turbine aircraft. Emphasis on the “glass cockpit”, auxiliary power, aircraft systems, and the first officers’ operational role. Capstone course.

AIRP 2449
Instructor Ground School (4-1) **4 Hours**
Skill development in the fundamentals of teaching and learning in an aviation-oriented environment. Introduction to the techniques of instruction and analysis of flight maneuvers. Topics include flight instructor responsibilities and federal aviation regulations relating to the instructor rating.

AVIM 1301
Introduction to Aviation Management (3-0) **3 Hours**
An introduction to small aviation business management. Emphasis on financial marketing, human resources, and administrative and information systems essential for successful business operations.

PSYCHOLOGY AND/OR SOCIAL WORK

Dean:	William Morris	141a AFA	685-4640
Faculty:	Todd Kirk, *Social Work Advisor*	136 AFA	685-4638
	Donna Thompson	134 AFA	685-4649
	Andrea Zabel	132 AFA	685-4646
Division Secretary:	Monica Sosa	141 AFA	685-4640

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 1406, BIOL 1407, MATH 1314*, MATH 1332*, SOCI 1301

Suggested Courses for Field of Study **12 Semester Credit Hours**

PSYC 2301; PSYC elective; SOCW 2361; PSYC elective or SOCW 2362

Related Courses **8-11 Semester Credit Hours**

For an Associate of Science add 8 semester credit hours of electives for an Associate of Arts add 6-8 semester credit hours of modern language courses and one English literature course.

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

PSYC 1301
Human Relations (3-0) **3 Hours**

A study of methods and principles of psychology applied to human relations and interpersonal communication. Emphasis will be placed on establishing positive interpersonal relations which could apply to work, family, and social environments. Topics covered will include conflict resolution, leadership skills, interpersonal communication, teamwork problem solving, decision making, cross-cultural relations, individual differences, motivating others, stress management, and job search and management skills.

PSYC 2301
Introduction to Psychology (3-0) **3 Hours**

"Introduction to Psychology" deals with the scientific study of the behavior of individuals and their mental processes. The focus is on the perceptions, thoughts, emotions, and social interactions of people in their everyday lives. The psychological goals of describing, explaining, predicting, and controlling behavior will be addressed. (4201015140)

PSYC 2302
Applied Cognitive and Social Development (3-0) **3 Hours**

This course is the application of psychological principles and methods to the development of the cognitive and social skills of students in the collegiate setting. Does not count toward major in Psychology. (4201015240)

PSYC 2306
Human Sexuality (3-0) **3 Hours**
"Human Sexuality" provides a comprehensive introduction to the biological, psychological, behavioral, and cultural aspects of sexuality. Contemporary research addressing such issues as communication, love, relationships, sexual problems, therapies, pregnancy, and childbirth is discussed. (4201015340) Also SOCI 2306

PSYC 2308
Child Psychology (3-0) **3 Hours**
"Child Psychology" is the first course in the human developmental process. Together with "Adult Development" it covers the environmental factors that shape the personality and achievement. This course covers from birth through early adolescence. A class project may consist of naturalistic observation and study of children. Prerequisite: PSYC 2301 or permission of instructor. (4207015140)

PSYC 2311
Adult Development (3-0) **3 Hours**
This is the second course in the human developmental process-from adolescence through old age. The focus is on how physiological, cognitive, social, and environmental factors change behavior across the adult life span. Prerequisite: PSYC 2301 or permission of instructor. (4207015140)

PSYC 2314
Life-span Growth and Development (3-0) **3 Hours**
This course is a survey course dealing with the study of the relationships among physical, emotional, social and mental factors of human growth and development from birth throughout the life-span. Emphasis is on scientific research, fundamental issues, and major psychological theories used to explain development. This course is designed for nursing students or those desiring an elective course. It may not transfer to 4-year college and universities for purposes of majors in psychology or education. (4207015125)

PSYC 2315
Mental Health and Personal Adjustment (3-0) **3 Hours**
"Mental Health and Personal Adjustment" covers the psychological principles and methods that are most important in the practical control of human behavior, the application of psychology for increasing human efficiency, improving personalities, and harnessing the emotions. (4201015640)

PSYC 2319
Social Psychology (3-0) **3 Hours**
"Social Psychology" is the study of how the thoughts, feelings, and behaviors of individuals are influenced by the actual, imagined, and implied presence of others. (4216015140) (PSYC 2305) Also SOCI 2326.

PSYC 2340
Psychology of Women (3-0) **3 Hours**
"Psychology of Women" is the study of psychological topics related to female development and to sex roles in our society. The focus is on gender similarities as well as differences, their causes and social impact. Possible issues include gender stereotypes, socialization of children, teenage pregnancy, abortion, rape, battered women, job discrimination, and sexual harassment. (4201015540)

SOCW 2361
Introduction to Social Work (3-0) **3 Hours**
In "Introduction to Social Work" students will study the development of the philosophy and practice of social work in the United States, and survey the fields and techniques of the profession. (4407015142)

SOCW 2362
Social Welfare (3-0) **3 Hours**
"Social Welfare" is the student's introduction to the study of modern social work, its underlying philosophy and ethics, and its major divisions and types, together with their methods and objectives. (4407015242)

RADIOGRAPHY

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Quinn Carroll	208 DFH	685-4592
Clinical Director:	William Heathman	211 DFH	685-4691
Division Secretary:	Kay Floyd	209b DFH	685-4600

Midland College offers a two-year Radiography Program leading to the degree of Associate in Applied Science. Radiographers operate x-ray machines in the diagnosis of disease, and may go on to specialize in ultrasound, CT scanning, MRI or other related fields. Satisfactory completion of the program qualifies the graduate to take the certifying examination of the American Registry of Radiologic Technologists and to apply for MRT certification by the Texas Department of Health. A balanced curriculum combines classroom and laboratory instruction with supervised practicums at local medical imaging centers.

The mission of the Midland College Radiography Program is to provide for both the professional career development and the personal development of each student in the field of Radiography.

A class is admitted each fall. Applicants are encouraged (but not required), to complete support courses such as Anatomy and Physiology prior to enrolling in the program. Accepted students must take all radiography courses in sequential order, and must maintain a minimum grade of "C" in all radiography courses to complete the program. Applicants completing all admission procedures by May 10th will be scheduled for an admission interview in May, and will be notified of acceptance by the end of May. Late applicants may be placed on an alternate list for consideration should openings occur during the summer.

The degree and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. Specialty courses must be taken in sequence. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, BIO 2402, ENGL 1301

Specialty Courses **48 Semester Credit Hours**

*RADR 1166, *RADR 1167, *RADR 1266, *RADR 1267, RADR 1309, RADR 1313, *RADR 1371, RADR 1411, RADR 2117, RADR 2205, RADR 2209, RADR 2233, RADR 2313, RADR 2331, RADR 2335, RADR 2336, RADR 2366, RADR 2367, RADR 2401

Related Courses **2 Semester Credit Hours**

ITSC 1191, HPRS 1160

MINIMUM SEMESTER CREDIT HOURS = 67

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements.

Oral Communication: RADR 1309

Basic Use of Computers: ITSC 1191

Magnetic Resonance Imaging Certificate

Specialty Courses **12 Semester Credit Hours**

RADR 2240, MRIT 2230, MRIT 2234, MRIT 2360, *MRIT 2361

MINIMUM SEMESTER CREDIT HOURS = 12

Computed Tomography Certificate

Specialty Courses **12 Semester Credit Hours**

RADR 2240, CTMT 2232, CTMT 2236, CTMT 2360, *CTMT 2361

MINIMUM SEMESTER CREDIT HOURS = 12

Course Progression

The following is the required sequence of radiography courses in the Radiography program.

First Year, Fall Semester
RADR 1266, RADR 1309, RADR 1411
First Year, Spring Semester
RADR 1267, RADR 1371, RADR 2401
First Year, Summer Semester
RADR 1166, RADR 1313, RADR 2331
Second Year, Fall Semester
RADR 2117, RADR 2205, RADR 2336, RADR 2366
Second Year, Spring Semester
RADR 2209, RADR 2223, RADR 2313, RADR 2367
Second Year, Summer Semester
RADR 1167, RADR 2335

Admission Requirements

The Midland College Radiography Program has limited enrollment based on specific admission criteria. For information regarding the admission criteria attend a Radiography Program Orientation. Orientations are held on a regular basis. Call for information regarding the scheduled sessions. Information is also available in the program brochure.

Advanced Placement Program in Medical Imaging

Midland College offers an Advanced Placement Program for certified medical imaging technologists with hospital-based or non-traditional training who wish to obtain an Associate Degree.

The College may award 40 credit hours to certified imaging technologists who do not have a college degree. These credits may be applied toward the Associate of General Studies degree, which requires completion of an additional 22 hours, or they may be applied toward the Associate of Applied Science degree, (the degree awarded to regular Radiography graduates), which requires completion of an additional 30 hours. A minimum of 15 hours must be completed at Midland College.

General radiography courses, or advanced courses, such as Magnetic Resonance Imaging, may be applied toward an Associate Degree under the Advanced Placement Program. Technologists interested in any of these areas are encouraged to discuss these options with the Dean of Health Sciences.

Degree Options

A. Associate of General Studies Degree

1. Credits granted for certification	40
2. Core requirements	15
-3 hours in Visual and Performing Arts or Humanities	
-3 hours in Social and Behavioral Sciences	
-3 hours in Mathematics or Natural Sciences	
-3 additional hours in Social and Behavioral Sciences or Mathematics and Natural Sciences	
-3 hours in oral competency requirement	
3. Credits selected from "Certificate Options'', management courses or other courses	7
Total Credit Hours Required	**62**

B. Associate of Applied Science Degree

1. Credits granted for certification	40
2. Credits from courses selected from the "Certificate Options''	9
3. Credits from core requirements of Radiography Curriculum which include:	
-BIOL 2401	4
-BIOL 2402	4
-ENGL 1301	3
-SPCH 1318	3
-Social and Behavioral Science or Mathematics and Natural Sciences elective	3
-POFI 1170	1
-Visual and Perfoming Arts or Humanities elective	3
Total Credit Hours Required	**70**

Admission Requirements for Advanced Placement Program and Certificate Programs in Medical Imaging

For information regarding admission contact program faculty or request information from the division office.

CTMT 2232
Principles of Computed Tomography (2-0-0) 2 Hours
In-depth coverage of computed tomography imaging techniques. Image quality assurance and radiation protection are emphasized. Prerequisite: General certification by the Texas MRT Board.

CTMT 2236
Computed Tomography Equipment and Methodology (2-0-0) 2 Hours
Skill development in the operation of computed tomographic equipment, focusing on routine protocols, image quality, quality assurance and radiation protection.

CTMT 2360
Clinical I: Computed Tomography (0-0-9) 3 Hours
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience

CTMT 2361
Clinical II: Computed Tomography (0-0-9) 3 Hours
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: CTMT 3360

MRIT 2230
Principles of Magnetic Resonance Imaging (2-0-0) 2 Hours
General principles for learning to operate a magnetic resonance imager. Focuses on building a sound understanding of the underlying scientific theory and practice leading to magnetic resonance imaging. Designed to introduce the concepts and scientific principles employed in magnetic resonance imaging techniques. Principles of magnetism and interactions of living matter within magnetic fields are emphasized. Prerequisite: General certification by the Texas MRT Board.

MRIT 2234
Magnetic Resonance Equipment and Methodology (2-0-0) 2 Hours
A study of the actual operation and operational control of magnetic resonance imaging equipment. Focuses on routine protocols, image quality and quality control of magnetic resonance imaging. Theory and application of magnetic resonance imaging equipment and the principles of patient imaging techniques utilizing the equipment. Prerequisite: General certification by the Texas MRT Board.

MRIT 2360
Clinical I: Magnetic Resonance Imaging (0-0-9) 3 Hours
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience.

MRIT 2361
Clinical II: Magnetic Resonance Imaging (0-0-9) 3 Hours
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: MRIT 2360

RADR 1166
Practicum III (0-0-10) 1 Hour
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: RADR 1267.

RADR 1167
Practicum VI (0-0-7) 1 Hour
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: RADR 2367.

RADR 1266
Practicum I (0-0-14) 2 Hours
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: Admission to the Radiography Program.

RADR 1267
Practicum II (0-0-16) 2 Hours
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: RADR 1266.

RADR 1309
Introduction to Radiography and Patient Care (2-2-0) 3 Hours
An overview of the historical development of radiography, basic radiation, protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the program and to the health care system. Patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology are also included. Prerequisite: Admission to Radiography Program.

RADR 1313
Principles of Radiographic Imaging I (2-2-0) **3 Hours**
An introduction to radiographic image qualities and the effects of exposure variables upon these qualities.

RADR 1371
Basic Imaging Physics (3-0-0) **3 Hours**
An overview of the basic physical principles of matter, energy, mechanics, heat, sound, magnetism and electricity, light, electromagnetic radiation, quantum interactions and the production of x-rays. Prerequisite: RADR 1309.

RADR 1411
Basic Radiographic Procedures (3-2-0) **4 Hours**
An introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy.

RADR 2117
Radiographic Pathology (1-0-0) **1 Hour**
A presentation of the disease process and common diseases and their appearance on medical images.

RADR 2205
Principles of Radiographic Imaging II (2-1-0) **2 Hours**
A continuation of the study of radiographic imaging technique formulation, image quality assurance, and the synthesis of all variables in image production. Prerequisite: RADR 1313.

RADR 2209
Radiographic Imaging Equipment (2-1-0) **2 Hours**
A study of the equipment and physics of x-ray production, basic x-ray circuits, and the relationship of equipment components to the imaging process.

RADR 2233
Advanced Medical Imaging (2-0-0) **2 Hours**
An exploration of specialized imaging modalities.

RADR 2240
Sectional Anatomy for Medical Imaging (2-0-0) **2 Hours**
In-depth coverage of anatomic relationships that are present under various sectional orientations as depicted by medical imaging.

RADR 2313
Radiation Biology and Protection (3-0-0) **3 Hours**
A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure.

RADR 2331
Advanced Radiographic Procedures (2-2-0) **2 Hours**
Continuation of positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of advanced anatomy and related pathology. Prerequisite: RADR 2401.

RADR 2335
Radiologic Technology Seminar (2-2-0) **3 Hours**
A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.

RADR 2336
Special Patient Applications (2-4-0) **3 Hours**
An advanced discussion of pediatrics, geriatrics, trauma, history recordation and abbreviation and ECG. Plebotomy and venipuncture will be discussed and practiced.

RADR 2366
Practicum IV (0-0-23) **3 Hours**
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: RADR 1166.

RADR 2367
Practicum V (0-0-23) **3 Hours**
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is an unpaid learning experience. Prerequisite: RADR 2366.

RADR 2401
Intermediate Radiographic Procedures (3-2-0) **4 Hours**
A continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of anatomy. Prerequisite: RADR 1411.

HPRS 1106
Medical Terminology (1-0-0) **1 Hour**
A study of common medical terminology, word origin, structure, and application.

READING

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Lynda Webb	134 T	685-4639
Division Secretary:	Lula Lee	141 AFA	685-4624

READ 0170
Developmental Reading Lab I (0-1) **1 Hour**
A lab course that emphasizes application of fundamental reading skills to enable student to increase comprehension, vocabulary, and rate. This lab is required to be taken with READ 0370. Course fee (3201085235) (0192)

READ 0171
Developmental Reading Lab II (0-1) **1 Hour**
A lab course that offers further application of fundamental reading skills to enable student to increase comprehension, vocabulary, and rate. This lab is required to be taken with READ 0371. Course fee (3201085235)

READ 0180
Intermediate Reading I (0-2) **1 Hour**
A lab course providing individual instruction in college reading readiness. Prerequisite is READ 0371/0171. Course fee. (3201085235) (0190)

READ 0181
Intermediate Reading II (0-1) **1 Hour**
Lab course required for student who is taking an approved reading-intensive course under the "C or Better" option. Student must make a "C" in this course and a "C" in reading-intensive course to satisfy reading readiness requirements. Special attention given to reading skills that are needed in student's particular course work. Course fee. (3201085235)

READ 0260
Individualized Developmental Reading (0-2) **2 Hours**
An individualized lab course designed for students who are required to take developmental reading when structured courses are not being offered. Course may be taken more than once. Course fee. (3201085235)

READ 0350
Applied Reading (3-0) **3 Hours**
A course conducted through lecture/discussion and individual instruction and designed to enable student to increase comprehension through intensive study of critical thinking, vocabulary, and readings in a specified field. Course is designed to help student to increase comprehension, reading rate, and vocabulary. Prerequisite: none. Course fee. (3201085212)

READ 0370
Developmental Reading I (3-0) **3 Hours**
A course conducted through lecture/discussion and individual instruction and designed to enable student to increase comprehension, reading rate, vocabulary, and study skills. Course provides instruction in coping more effectively with reading requirements in students' other courses. READ 0170 Developmental Reading Lab I is required with this course. Course fee. (3201085235) (0392)

READ 0371
Developmental Reading II (3-0) **3 Hours**
A more advanced course conducted through lecture/discussion and individual instruction and designed to enable student to increase comprehension, reading rate, vocabulary, and study skills. Course provides instruction in coping more effectively with reading requirements in students' other courses. READ 0171 Developmental Read Lab II is required with this course. (3201085235) (0393)

RESPIRATORY CARE

Dean:	Becky Hammack	209a DFH	685-4600
Program Director:	Robert Weidmann	A34 AMS	685-5549
Clinical Director:	Stan Middleton	A31 AMS	685-5570
Division Secretary:	Kay Floyd	209b DFH	685-4600

Respiratory care is an allied health specialty employed in the diagnostic and therapeutic management of patients with respiratory system abnormalities. The program is designed to provide the necessary education required for a thorough understanding and proficiency in all aspects of respiratory care.

New classes begin each Fall and courses must be taken sequentially for progression in the program. Applicants are strongly encouraged to complete as many non-respiratory courses as possible prior to entering the program. Specific admission criteria are listed in the brochure or call the Health Sciences Division for information. The student must achieve a minimum grade of "C'' in all Respiratory and Biology courses, a cumulative grade point average of 2.0 and pass a written and/or clinical simulation final exit exam to be eligible for graduation. Clinicals will be scheduled with Midland/Odessa health care facilities and others as available. Respiratory Care students satisfactorily completing the program will receive a Certificate of Completion and an Associate of Applied Science degree. These students will be eligible for the Certified Respiratory Therapist (CRT) Entry-Level Exam, which after successful completion will allow the graduate to sit for the Registered Respiratory Therapist/Advanced Practitioner (RRT) exam.

The degree and certificate in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: BIOL 2401, BIOL 2402, ENGL 1301

Specialty Courses **46 Semester Credit Hours**

RSPT 1141, *RSPT 1160, *RSPT 1161, RSPT 1213, *RSPT 1260, RSPT 1307, *RSPT 1360, RSPT 1410, *RSPT 1411, RSPT 1425, RSPT 2135, RSPT 2139, RSPT 2247, RSPT 2255, RSPT 2305, RSPT 2310, RSPT 2353, *RSPT 2360, *RSPT 2361

Related Courses **6 Semester Credit Hours**

HPRS 1106, ITSC 1191, BIOL 2421

MINIMUM SEMESTER CREDIT HOURS = 69

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfy THEA or alternative THEA requirements.

Oral Communication: RSPT 1360

Basic Use of Computers: ITSC 1191

Course Progression

The following is the required sequence of respiratory care courses in the Respiratory Care program.

Fall Admission

First Year, Fall Semester
RSPT 1206, RSPT 1307, RSPT 1410, RSPT 1425

First Year, Spring Semester
RSPT 1213, RSPT 1360, RSPT 1411, RSPT 2310

First Year, Summer I Semester
RSPT 1160, RSPT 2305

First Year, Summer II Semester
RSPT 1161, RSPT 1141, RSPT 2353

Second Year, Fall Semester
RSPT 2255, RSPT 2360

Second Year, Spring Semester
RSPT 2139, RSPT 2135, RSPT 2247, RSPT 2361

Admission Requirements

The Midland College Respiratory Care Program has a limited enrollment based on specific admission criteria. For information regarding the admission criteria, see the program brochure. Each prospective student will be counseled by either the Program Director or the Clinical Director as scheduled through the Health Sciences secretaries.

Respiratory Care Technical Standards

Respiratory Care students/practitioners are expected to master the following technical standards of the profession:

- Utilize both visual and auditory monitoring equipment safely and effectively.
- Assess and record changes in patient status using visual, auditory, and tactile senses.
- Troubleshoot patient/equipment systems.
- Effectively and appropriately communicate and relate with patients, their families, and members of the health care team using oral and/or written means.
- Possess strength and mobility sufficient to support and transport patients as well as equipment.
- Perform Respiratory Care procedures while wearing personal protective equipment (mask, gown, gloves, etc.).
- Safely and effectively prioritize workload.
- Perform CPR (bag/mask ventilation, chest compressions).
- Utilize intellectual ability to adapt to changing patients' conditions.

RSPT 1141
Respiratory Home Care/Rehabilitation (1-0-0) **1 Hour**
This course is designed to develop an understanding of respiratory home care/rehabilitation equipment, procedures, and patient care, with emphasis on the use of special technology and equipment in the treatment of patients in a subacute and/or long-term patient care setting.

RSPT 1160
Clinical III (0-0-6) **1 Hour**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: RSPT 1360

RSPT 1161
Clinical IV (0-0-6) **1 Hour**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: RSPT 1160

RSPT 1213
Basic Respiratory Care Pharmacology (2-0-0) **2 Hours**
The student will study basic pharmacological principles/practices of respiratory care drugs. Emphasis will be on classification, routes of administration, dosages/calculations, indications, hazards and interaction of the autonomic nervous system.

RSPT 1260
Clinical I (0-0-8) **2 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: RSPT Admission to the program.

RSPT 1307
Cardiopulmonary Anatomy and Physiology (3-0-0) **3 Hours**
The student will gain an increased understanding of the anatomy and physiology of the cardiovascular, renal, and pulmonary systems. This will include the terminology used in respiratory physiology.

RSPT 1360
Clinical II (0-0-16) **3 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: RSPT 1260.

RSPT 1410
Respiratory Care Procedures I (2-6-0) **4 Hours**
This course provides students with the essential knowledge of the equipment and techniques used in the treatment of pulmonary disease and their clinical application. The following areas are discussed in-depth; medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, CPT, pulse oximetry, arterial puncture, and interpretation. Patient assessment skills will also be addressed.

RSPT 1411
Respiratory Care Procedures II (3-3-0) **4 Hours**
This course provides students with essential knowledge of airway care and mechanical ventilation. Airway care includes indications, techniques, equipment, and hazards and complications. Mechanical ventilation includes indications, initiation modes, clinical application, management, complications, and weaning. Prerequisite: RSPT 1410.

RSPT 1425
Respiratory Care Sciences (4-0-0) **4 Hours**
This course will provide a study of cardiopulmonary sciences including physics, math, chemistry and statistics.

RSPT 2135
Pediatric Advanced Life Support (1-0-0) **1 Hour**
This is a comprehensive course designed to develop the cognitive and psychomotor skills necessary for resuscitation of the infant and child. Strategies for preventing cardiopulmonary arrest and identification of high risk infants and children will be presented.

RSPT 2139
Advanced Cardiac Life Support (1-0-0) **1 Hour**
This is a comprehensive course designed to develop the cognitive and psychomotor skills necessary for resuscitation of the adult. Strategies for managing and stabilizing the cardiopulmonary arrested patient will be included.

RSPT 2247
Specialties in Respiratory Care (2-0-0) **2 Hours**
This course provides an introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and electroencephalograms.

RSPT 2255
Critical Care Monitoring (1-3-0) **2 Hours**
Students will be introduced to monitoring techniques used clinically to assess a patient in the critical care setting.

RSPT 2305
Pulmonary Diagnostics (2-2-0) **3 Hours**
The student will understand the theories and techniques involved in pulmonary function testing diagnostics with emphasis on blood gas theory and analysis, quality control, oximetry, and capnography.

RSPT 2310
Cardiopulmonary Disease (3-0-0) **3 Hours**
This course will provide a discussion of pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases.

RSPT 2353
Neonatal/Pediatric Cardiopulmonary Care (3-0-0) **3 Hours**
The student will study acute care, monitoring, and management as applied to the neonatal and pediatric patient.

RSPT 2360
Clinical V (0-0-16) **3 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: RSPT 1161.

RSPT 2361
Clinical VI (0-0-16) **3 Hours**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Clinical education is an unpaid learning experience. Prerequisite: RSPT 2360.

HPRS 1106
Medical Terminology (1-0-0) **1 Hour**
A study of common medical terminology, word origin, structure, and application.

SOCIAL WORK:

(See Psychology and/or Social Work)

SOCIOLOGY AND/OR ANTHROPOLOGY

Dean:	William Morris	141a AFA	685-4640
Faculty:	Mike Schneider	129 AFA	685-4642
Division Secretary:	Monica Sosa	141 AFA	685-4640

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts or Associate of Science

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: PSYC 2301

Suggested Courses for Field of Study **12 Semester Credit Hours**

SOCI 1301; SOCI 1306 or ANTH 2301or ANTH 2302; ANTH 2323 or ANTH 2351; HIST 2321 or HIST 2322; ANTH 2389 is an elective for an Anthropology concentration.

Related Courses **8-11 Semester Credit Hours**

For an Associate of Science add 8 semester credit hours of electives; for an Associate of Arts add 6-8 semester credit hours of Modern Language courses and an English literature course.

MINIMUM SEMESTER CREDIT HOURS = 62

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

ANTH 2301
Physical Anthropology (3-0) **3 Hours**

This course covers the physical characteristics of modern man, fossil man, the higher primates, and ethnic groups, and the development of those characteristics. (4503015142)

ANTH 2302
Introduction to Archaeology (3-0) **3 Hours**

This course is an overview of human origins and bio-cultural adaptions. There is an introduction to methods and theory in the excavation and interpretation of material remains of past cultures. Students may not receive credit for both ANTH 2301 and 2302.(45.0301.51 25).

ANTH 2323
World Cultures and Societies (3-0) **3 Hours**

"World Cultures and Societies" is the study of variations among contemporary societies throughout the world. Emphasis is on the historical roots and implications of current sociocultural diversity. Examples will come from a variety of specific societies within a regional context. Students can receive credit for either ANTH 2323 or ANTH 2351, but not both. (4502015342) Also HUMA 2323.

ANTH 2351
Cultural Anthropology (3-0) **3 Hours**

The students will study human culture in historical perspective by examining the development of culture as well as comparing present cultures. (4502015342)

ANTH 2389
Practicum in Museum Archaeology (0-7) **3 Hours**

Students will work with museum archaeological collections. They will learn museum methods; to care for and identify artifacts; and to create data bases. (45.0101.51 25)

SOCI 1301
Introduction to Sociology (3-0) **3 Hours**
In this class students are introduced to the basic concepts of sociology with emphasis on the relationship of culture and social interaction to group behavior; the analysis of social organization, human ecology, and social change. (4511015142)

SOCI 1306
Social Problems (3-0) **3 Hours**
In "Social Problems" sociological concepts are applied to current social issues such as family and community disorganization and crime and delinquency. (4511015242)

SOCI 2301
Marriage and the Family (3-0) **3 Hours**
In this course sociological analysis is applied to human relationships pertaining to the varied aspects of courtship, mate selection and marital adjustment, and to the problem of adjustment in each stage of the life cycle. (4511015442)

SOCI 2306
Human Sexuality (3-0) **3 Hours**
"Human Sexuality" includes units relating to the biological, psychological, social and cultural aspects of sexuality. (4201015342) Also PSYC 2306.

SOCI 2308
Special Topics in Sociology (3-0) **3 Hours**
Titles for this course will vary according to student interest. In each unique class there will be a selected in-depth study of a sociological issue. Students will receive credit only once. (4511015742)

SOCI 2319
American Minorities (3-0) **3 Hours**
"American Minorities" is a sociological analysis of minority-majority group relations, past and present. It examines the causes and consequences of prejudice and discrimination and ways of combating them; it emphasizes the effects of social inequality of race and ethnicity. The sociological significance and historic contributions of the principal minority groups are presented. (4511015342)

SOCI 2320
Minority Issues (3-0) **3 Hours**
"Minority Issues" examines current minority group issues and problems associated with the policies and programs of public and private agencies that impact the family, education, religion, politics and the economy. (4511015342) Also GOVT 2320.

SOCI 2326
Social Psychology (3-0) **3 Hours**
"Social Psychology" is the study of how thoughts, feelings, and behaviors of individuals are influenced by the actual, imagined, and implied presence of others. (4216015142) Also PSYC 2319.

SPEECH

Dean:	William G. Feeler	141b AFA	685-4626
Faculty:	Tyler Tindall	125 AFA	685-4637
Division Secretary:	Lula Lee	141 AFA	685-4624

The courses listed below are suggested for students who wish to receive an associate degree at Midland College and transfer to a four-year college. An official degree plan should be filed the semester before graduation; please contact the Dean whose name is listed above. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Arts

Core Requirements **42 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: one English Literature course (Humanities)

Suggested Courses for Field of Study **12 Semester Credit Hours**

Four (12 semester credit hours) of the following SPCH courses: SPCH 1311, SPCH 1315, SPCH 1318, SPCH 1321, SPCH 2320, SPCH 2333, SPCH 2341

Related Courses **9-11 Semester Credit Hours**

6-8 semester credit hours of Modern Language courses and an English literature course.

MINIMUM SEMESTER CREDIT HOURS = 63-65

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirements.

Oral Communication: SPCH course from Communications area of the Approved Core Courses, page 76

Basic Use of Computers: Testing, college or high school courses. All course work must be approved by the Dean.

SPCH 1144, 1145, 2144, 2145
Forensic Laboratory (0-3) **1 Hour**

A course designed to enable students to participate in speech communication activities and research. Course fee. (2310016035) (SCOM 1103, 1104, 2103, 2104)

SPCH 1311
Introduction to Speech Communication (3-0) **3 Hours**

A course designed to enable students to practice speech communication in interpersonal, small group, and public communication situations and to apply the concepts of communication theory. (2310015135) (SCOM 1300)

SPCH 1315
Public Speaking (3-0) **3 Hours**

A course designed to enable students to research, compose, organize, and deliver speeches for various purposes and occasions with emphasis on listener analysis and informative and persuasive techniques. (2310015335) (SCOM 1302)

SPCH 1318
Interpersonal Communication (3-0) **3 Hours**

A course designed to enable students to analyze and practice person-to-person communication with focus on the development, maintenance, and termination of relationships. Oral presentations and listening skills are emphasized and developed. (2310015435) (SCOM 2307)

SPCH 1321
Business and Professional Speaking (3-0) **3 Hours**

A course designed to enable students to apply the skills of speech communication as they relate to business and professional situations. Practice in public presentations, organizational and small group settings, interviewing, and leadership techniques are emphasized. (2310015235) (SCOM 2304)

SPCH 1342
Voice and Diction (3-0) **3 Hours**
A course designed to enable students to study the physiology and mechanics of effective voice production with practice in articulation, pronunciation, enunciation, and practical use of the International Phonetic Alphabet. Recommended for students studying English as a Second Language. (2310015835) (SCOM 2306)

SPCH 2333
Discussion and Small Group Communication (3-0) **3 Hours**
A course designed to enable students to apply discussion and small group theories and techniques as they relate to group processes and interaction. (2310015635) (SCOM 2308)

SPCH 2335
Argumentation and Debate (3-0) **3 Hours**
A course designed to enable students to study the principles of argumentation and debate. Practice in briefing, evidence, and refutation. (2310015935) (SCOM 2303)

SPCH 2341
Oral Interpretation (3-0) **3 Hours**
A course designed to enable students to practice techniques of analyzing and interpreting literature through preparation and presentation of various literary forms. (2310015735) (SCOM 2302)

VETERINARY TECHNOLOGY

Dean:	Margaret Wade	125 SF	685-4615
Program Director:	Kerry Coombs	187 T	685-4619
	Adrian Hernandez	PB06-A	686-4218
	Michele McDermett	PB06-A	686-4219
Division Secretary:	Norma Duran	124 SF	685-4612

The Veterinary Technology Program is designed to provide the theory and practice to become registered as a Veterinary Technician by the Texas Veterinary Medical Association capable of entering the work force immediately upon graduation.The program is accredited by the American Veterinary Medical Association. A veterinary technician is knowledgeable in the care and handling of animals, in basic principles of normal and abnormal physiology, and in routine laboratory and clinical procedures. During the two years, the student will acquire sufficient theoretical skills and knowledge to enable him to perform in practicums acquiring “hands on’’ experience. The student must achieve a minimum grade of “C” in all VTHT, Chemistry and Biology courses. A cumulative grade point average of 2.0 is required to be eligible to register for graduation. All courses except VTHT 2266 must be completed to be eligible to register for the licensing exam.

The degree in this field offered by Midland College and the courses needed to achieve this credential are presented in the following sections. New classes begin each Fall and courses must be taken sequentially for progression in the program. Student must achieve a minimum grade of “C” in all Veterinary Technology, Chemistry and Biology courses, to achieve a cumulative grade point average of 2.0. Students interested in this program should contact the Program Director or Division office to obtain additional information and/or acquire a degree plan. Please note that courses that require prerequisites are denoted by an asterisk (*).

Many of the course prefixes have changed due to the implementation of the Workforce Education Course Manual. Courses previously taken should still apply to these degrees or certificates. Course prefixes and program names are listed in the index. Please check course descriptions carefully and review your schedule with your advisor prior to enrolling.

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**
See Core Requirements, page 75
Required Core Course(s) for this degree: BIOL 2421, CHEM 1405, ENGL 1301, SPCH
Elective

Specialty Courses **49 Semester Credit Hours**

VTHT 1105, VTHT 1125, *VTHT 1166, VTHT 1209, VTHT 1301, VTHT 1317, *VTHT 1345, *VTHT 1349, VTHT 1413, *VTHT 1441, VTHT 2201, *VTHT 2209, *VTHT 2213, *VTHT 2217, *VTHT 2266, *VTHT 2323, VTHT 2325, VTHT 2421, *VTHT 2435

Related Courses **3 Semester Credit Hours**

ENGL 1301

MINIMUM SEMESTER CREDIT HOURS = 69

Graduates of this program must demonstrate general education competencies as follows:
Reading, Writing, Fundamental Mathematical Skills: THEA requirements.
Oral Communication: SPCH 1311, SPCH 1315, SPCH 1318, or SPCH 1321
Basic Use of Computers: VTHT 1317

Admission Requirements

1. Proof of high school graduation or GED completion.
2. A completed VTHT application form for admission to the Veterinary Tech. Program.
3*. Personal interview with Program or Clinical Director.
4*. Successful completion of THEA requirements. Minimum score of 220 in writing, 230 in reading and 230 in math on THEA or completing the appropriate developmental sequence with a grade of "C" or greater.
5*. Recommended observation at a veterinary clinic for sixteen hours.

VTHT 1105
Veterinary Medical Terminology (0-2) **1 Hour**

Introduction to word parts, directional terminology, and analysis of common veterinary terms.

VTHT 1125
Pharmacological Calculations (0-2) **1 Hour**

Skill development in calculating oral and parental drug dosages.

VTHT 1209
Veterinary Nutrition (2-0) **2 Hours**

Fundamentals of energy and non-energy producing nutrients and their sources and functions. Integration of concepts including digestion, absorption, and metabolism with application to normal and therapeutic nutritional needs.

VTHT 1271
License Preparation (2-0) **2 Hours**

Review of the Veterinary Technology Curriculum in preparation for students/graduates to take the National and Texas State board exams. Prerequisite: Permission of Director.

VTHT 1301
Introduction to Veterinary Technology (3-1) **3 Hours**

Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of domestic animals, and ethical and professional requirements.

VTHT 1317
Veterinary Office Management (2-2) **3 Hours**

Practical experience in management of the veterinary hospital. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment.

VTHT 1345
Veterinary Radiology (2-3) **3 Hours**

Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. Prerequisites: VTHT 1125, VTHT 1349 and VTHT 1413.

VTHT 1349
Veterinary Pharmacology (3-0) **3 Hours**

Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of common veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. Prerequisites: Must have passed THEA test and CHEM 1405.

VTHT 1413
Veterinary Anatomy and Physiology (3-2) 4 Hours
Gross anatomy of domestic animals including physiological explanations of how each organ system functions.

VTHT 1441
Anesthesia and Surgical Assistance (3-4) 4 Hours
In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. Prerequisites: Permission of Director, must have passed THEA test, VTHT 1125, VTHT 1349 and VTHT 1413.

VTHT 2201
Canine and Feline Clinical Management (1-3) 2 Hours
Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine.

VTHT 2213
Lab Animal Clinical Management (1-3) 2 Hours
Survey of feeding, common management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. Prerequisites: VTHT 2201 and VTHT 2209.

VTHT 2366
Practicum (1-24) 2 Hours
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Prerequisite: Permission of Director. Course Fee.

VTHT 2323
Veterinary Clinical Pathology I (2-4) 3 Hours
In-depth study of hematology and related chemistries with emphasis on lab procedures. Prerequisites: Permission of Director, VTHT 1301 and VTHT 1413.

VTHT 2325
Large Animal Assisting Techniques (2-3) 3 Hours
Study of basic restraint and proper management, treatment, and medication techniques for farm animals.

VTHT 2421
Veterinary Parasitology (3-2) 4 Hours
Study of parasites common to domestic animals including zoonotic diseases. Prerequisites: VTHT 1301 and VTHT 1413.

VTHT 2435
Advanced Veterinary Anatomy and Physiology (3-2) 4 Hours
Continuation of anatomy of domestic animals including physiological explanations of the functioning of each system. Prerequisites: Permission of Director, VTHT 1301, VTHT 1349, VTHT 1413 and VTHT 2421.

VTHT 2439
Veterinary Nursing Care (3-4) 4 Hours
A capstone course requiring integration of course work in the field of veterinary technology. Including the application of anesthesia and surgical assisting, nursing principles, restraint and all other areas that apply to Veterinary Technology. The student must demonstrate competencies expected of an entry level registered veterinary technician. Prerequisite: Permission of Director and VTHT 1301, 1413, 2201, 1345, 1349, and 2435. Course fee.

WELDING TECHNOLOGY

Dean:	Curt Pervier	143 T	685-4677
Faculty:	Doug Avery	197 T	685-4689
	Dan Ledbetter	185 T	685-4681
	Joe Smith	ATC	697-5863 ext. 3620
Division Secretary:		143 T	685-4676

The Welding Technology curriculum is designed as three certificate programs or the student may pursue the two-year Associate of Applied Science Degree. The objective of the program is to provide the student the opportunity to develop skills needed to enter the fabrication, manufacturing and/or welding repair industry.

The degrees and certificates in this field offered by Midland College and the courses needed to achieve these credentials are presented in the following sections. Students interested in this program should contact the Division office to obtain additional information and/or acquire a degree or certificate plan. To receive a Welding Technology certificate, students must maintain a 2.5 grade point average within those specified courses. Please note that courses that require prerequisites are denoted by an asterisk (*).

Associate of Applied Science

Core Requirements **A Minimum of 15 Semester Credit Hours**

See Core Requirements, page 75

Required Core Course(s) for this degree: ENGL 1301

Specialty Courses **40 Semester Credit Hours**

WLDG 1521, *WLDG 1557, *WLDG 1553, * WLDG 1530,* WLDG 1534 and three related courses

Related Courses **9 Semester Credit Hours**

MCHN 1320, DFTG elective, POFT 1302

MINIMUM SEMESTER CREDIT HOURS = 64

Graduates of this program must demonstrate general education competencies as follows:

Reading, Writing, Fundamental Mathematical Skills: Satisfied THEA or alternative THEA requirement.

Oral Communication: BMGT 1305

Basic Use of Computers: DFTG elective

Basic Certificate

Specialty Courses **18/20 Semester Credit Hours**

WLDG 1521, WLDG 1553, *WLDG 1557, *WLDG 1525 or MCHN1320

MINIMUM SEMESTER CREDIT HOURS = 18/20

Intermediate Certificate

Specialty Courses **15 Semester Credit Hours**

*WLDG 1530, *WLDG 1534, *WLDG 2543

MINIMUM SEMESTER CREDIT HOURS = 15

Advanced Certificate

Specialty Courses **20 Semester Credit Hours**

*WLDG 2506 or 2553, *WLDG 2535, *WLDG 2539, *WLDG 2547 or * WLDG 2551

MINIMUM SEMESTER CREDIT HOURS = 20

WLDG 1313
Introduction to Blueprint Reading for Welders (3-0) **3 Hours**
A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Interpretation of plans and drawings used by industry.

WLDG 1371
AWS Certification Review (3-0) **3 Hours**
A review of various welding processes, welding, terminology and technology in preparation for taking the American Welding Society Level One Certification written test. American Welding Society Testing fees will apply.

WLDG 1391
Special Topics in Welding Technology (3-0) **3 Hours**
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

WLDG 1437
Introduction to Metallurgy (3-2) **4 Hours**
A study of ferrous and nonferrous metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surfacing, welding techniques, forging, foundry processes, and mechanical properties of metal including hardness, machinability, and dutility.

WLDG 1521
Introduction to Welding Fundamentals (3-6) **5 Hours**
An introduction to the fundamentals of equipment used in oxy-acetylene welding (OFW-A) and shielded metal arc welding (SMAW), including welding and cutting safety, basic oxy-acetylene welding and cutting, basic arc welding processes and basic metallurgy. The student will demonstrate safety procedures associated with equipment; and identify ferrous and nonferrous metals.

WLDG 1525
Introduction to Oxy-Fuel Welding (OFW) and Cutting (OFC) (3-6) **5 Hours**
An introduction to OFW and OFC, including history and future in welding, safety, setup and maintenance of OFW and OFC equipment and supplies. The student will describe or explain OFW and OFC safety procedures and identify and classify fuels and filler metals. The student will perform entry-level OFW and OFC operations and select proper equipment and materials. Prerequisite: WLDG 1521.

WLDG 1530
Introduction to Gas Metal Arc Welding (GMAW) (3-6) **5 Hours**
A study of the principles of GMAW setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs. The student will describe welding positions with various joint designs on plate; describe safety rules and equipment used; describe the effects of welding parameters in GMAW; and understand safety rules, equipment used, and testing performed by visual inspection. Student will weld various types of structural material and diagnose welding problems and perform visual inspections. Prerequisite: WLDG 1521.

WLDG 1534
Introduction to Gas Tungsten Arc Welding (GTAW) (3-6) **5 Hours**
An introduction to the principles of GTAW, setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions and joint designs. The student will describe various joint designs; describe safety rules and equipment; and describe the effects of welding parameters in GTAW; and will weld various structural materials. Prerequisite: WLDG 1521.

WLDG 1553
Intermediate Layout and Fabrication (3-6) **5 Hours**
A course which covers design and production of shop layout and fabrication. Emphasis placed on symbols, blueprints, and written specifications. The student will identify auxiliary views and calculate steel and pipe dimensions using layout tools and construction templates. The student will identify fittings, weldments, templates, and tools; and interpret orthographic and isometric drawings.

WLDG 1557
Intermediate Shielded Metal Arc Welding (SMAW) (3-6) **5 Hours**
A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. The student will identify principles of arc welding; describe SMAW operations of fillet and groove joints; explain heat treatments of low alloy steels; and explain weld size and profiles. The student will prepare test plates; perform fillet welds in the overhead position; perform Air Carbon Arc Cutting (CAC-A), weld removal; perform bevel groove welds with backing plates in various positions; and demonstrate safe use of tools and equipment. Prerequisite: WLDG 1521.

WLDG 2331
Advanced Blueprint Interpretation and Cost Analysis (3-0) **3 Hours**
A continuation of the blueprint for Welders course. Emphasis placed on inspection, cost analysis, and estimating, including instruction in basic drafting skills. Prerequisite: WLDG 1313

WLDG 2355
Advanced Welding Metallurgy (2-2) **3 Hours**
A study of metallurgy as it applies to welding, including structure, identification, and testing of metals; temperature changes and their effect on welded metals; properties of metals, and factors affecting weldability of ferrous and nonferrous metals.

WLDG 2380 and 2381
Cooperative Work Experience (1-0-20) **3 Hours**
The student will be exposed to the application of career-related activities encountered in the Welding area of specialization. The student is required to work a minimum of 20 hours per week in a paid job in a welding trades cooperative position under the supervision of the college and training sponsor.

WLDG 2506
Intermediate Pipe Welding (3-6) **5 Hours**
A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. The student will describe equipment and required pipe preparation. The student will perform 1G, 2G, 5G, and 6G welds using various electrodes. Prerequisite: WLDG 2543. Capstone course.

WLDG 2535
Advanced Layout and Fabrication (3-6) **5 Hours**
A continuation of the Intermediate Layout and Fabrication course which covers production and fabrication of layout tools and processes. Emphasis on application of fabrication and layout skills. The student will apply appropriate techniques of fabrication; design welding projects; prepare drawings and produce templates. The student will apply layout offsets; take offs; bills of materials; and apply mathematical concepts in the construction of projects. Safety will be stressed. Prerequisite: WLDG 1553 and WLDG 1557.

WLDG 2539
Advanced Oxy-Fuel Welding (OFW) and Cutting (OFC) (3-6) **5 Hours**
A study of all position welding on ferrous and nonferrous metals using OFW processes, including welding, cutting, brazing, and soldering operations. The student will identify and explain OFW procedures; and select proper tools, equipment and materials. The student will perform advanced OFW and OFC operations; and identify and select appropriate tools, equipment, and materials. Safety will be stressed. Prerequisite: WLDG 1525.

WLDG 2543
Advanced Shielded Metal Arc Welding (SMAW) (3-6) 5 Hours
Advanced topics based on accepted welding codes. Training provided with various electrodes in SMAW processes on open V-groove joints in all positions. The student will describe effects of preheating and postweld heating; explain precautions used when welding various metals and alloys; distinguish between qualification and certification procedures; and discuss problems of welding discontinuities. The student will perform open groove welds with mild steel and low alloy electrodes in all positions. Safety will be stressed. Prerequisite: WLDG 1557.

WLDG 2547
Advanced Gas Metal Arc Welding (GMAW) (3-6) 5 Hours
Advanced topics in GMAW welding, including welding in various positions and directions on plate and pipe with .035, .045 and innershield wire with various shielding gases. The student will exhibit expertise in various welding positions on pipe; describe safety rules and equipment used; and describe the effects of welding parameters in GMAW. The student will weld various joint designs and diagnose welding problems and perform visual inspection. Prerequisite: WLDG 1530.

WLDG 2551
Advanced Gas Tungsten Arc Welding (GTAW) (3-6) 5 Hours
Advanced topics in GTAW welding, including welding in various positions and directions. The student will exhibit expertise in various welding positions; describe safety rules and equipment used; and describe the effects of welding parameters in GTAW. The student will weld various joint designs; diagnose welding problems; and perform visual inspection. Prerequisite: WLDG 1534.

WLDG 2553
Advanced Pipe Welding (3-6) 5 Hours
Advanced topics involving welding of pipe using the shielded metal arc welding (SMAW) process. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes. Prerequisite: WLDG 2543 Capstone course.

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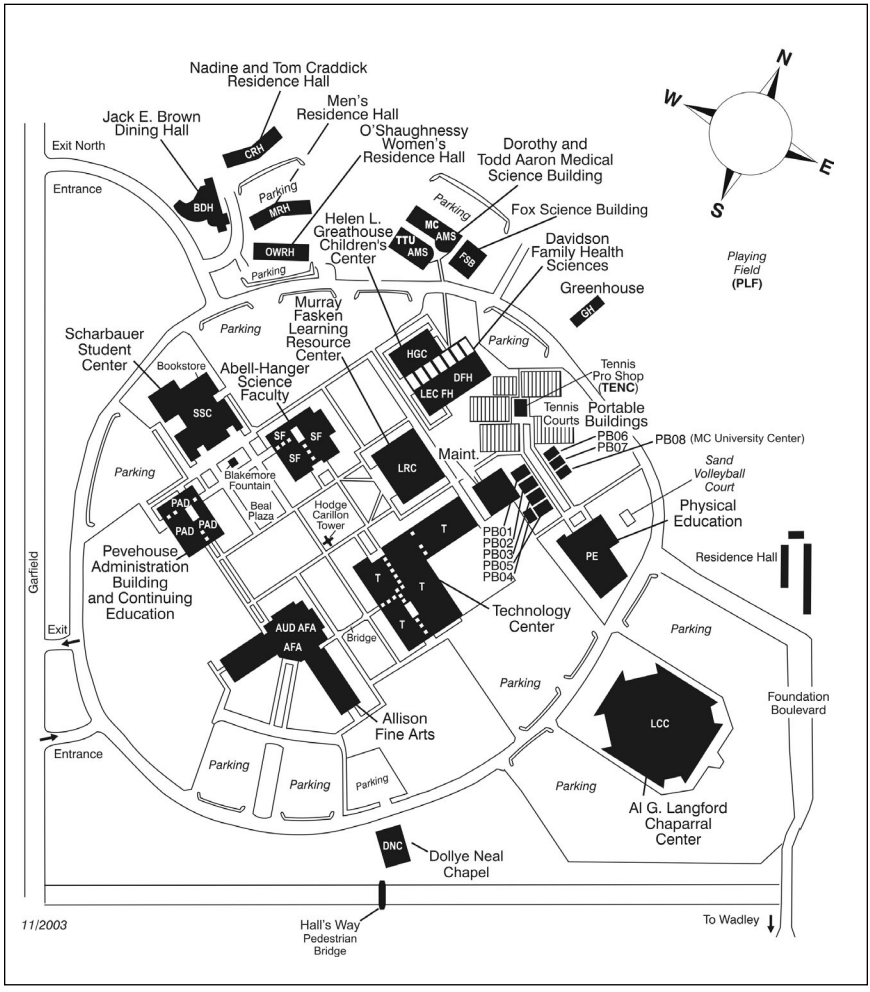
Midland College

Main Campus Map



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