

Midland College
Syllabus
MHSM 4356
Health Care Analytics and Database Design

Notice:

For **Online** classes, students **MUST** actively participate by completing and submitting an academic assignment by the official census date. Students who do not do so, will be dropped from the course.

Course Description:

This 16 week course examines networks, architectures and database design structure. Topics discussed include human factors related to models, theories, and practices of human–computer interactions, evaluations, usability testing, interface design standards and designed principles. Review of HIPAA security rule and other government regulations, firewalls, encryption and virtual private networks and other network considerations are also discussed.

Text, References, and Supplies:

Textbook Title: Computer Systems for Health Information Technology
Author(s): Trawick and Sayles
ISBN: 9781584263937
Publisher: AHIMA Press

and

Textbook Title: Statistics and Data Analytics for Healthcare Management
Author(s): Davis & Shiland
ISBN: 9781455753154
Publisher: Elsevier Health Sciences

This course also requires Microsoft Excel Software

This course must be completed using a laptop or desktop computer with a webcam. The software used for this course is not supported using cell phones or tablets such as iPads.

Software and References Basic Computer Specifications for Canvas can be found at: [Basic Computer Specifications for Canvas.](#)

Basic instructions on how to use Canvas is located within the Canvas course: Canvas Student Connection.

A Lock Down Browser and LDB+Monitor are required for students to use for designated gradable items: [Resondus Lockdown Browser Download Link](#). A fee will be paid by the student

per course to add the Monitor feature for proctoring the final or other exams. It is the responsibility of the student to pay to add Monitor to LDB prior to the exams due date.

Turn It In - TII software is used when students have to write and submit papers for grading to evaluate authentic work.

All assignment papers submitted are to be written in APA format.

The **Purdue Online Writing Lab** is used as a resource for students for APA format writing of papers and citing resources/references used in assignments. The following link is to be used for any assignments or papers within this course:

<https://owl.english.purdue.edu/owl/resource/560/01/>

Supplies for Virtual Office: PC or laptop with audio and video enabled capabilities or equipment

Technical skills students must have to succeed in the course:

- Using the learning management system Canvas
- Using email with attachments
- Creating and submitting files using Microsoft office and other applications
- Copying and pasting when using software
- Downloading and installing software or plugins
- Using spreadsheet software
- Using presentations and graphics programs
- Using online books and resources
- Using search engines for online research
- Using online communication and virtual office software
- Creating videos and submitting them in Canvas
- Using publisher online sites (book and EHR) to complete course work

Students Learning Outcomes and Core Competencies:

Upon completion of this course the student should be able to:

Identify, analyze, and interpret trends or patterns in complex data sets

Interpret data and develop recommendations on the basis of findings

Recommend improvements to processes, programs, and initiatives by using analytical skill and a variety of reporting tools

Determine the most appropriate approach for internal and external report design, production, and distribution, specific to the relevant audience

Analyze and manage efforts to enhance the strategic use of data and analytic tools to improve clinical care processes and outcomes continuously

Analyze outcomes and resources utilization for specific patient populations as necessary

Student Contributions, Responsibilities and Class Policies:

Academic Honesty

Students are expected to follow the Academic Honesty policy of Midland College. Using textbooks, assignments and other students, or assistance from others while taking an exam is cheating. Cutting and pasting without proper citation and passing off another's work as your own is cheating. Any student cheating may be removed from the course, given an "F" and reported to the College. Plagiarism will not be tolerated. For more information, review [Student Conduct/Misconduct](#) in the MC catalog.

Evaluation of Students:

Accumulation of points equating to a letter grade will be assessed using gradable items including assignments, exams/quizzes/tests, discussion boards, semester project, and final exam.

Students will receive a final letter grade based on the following scale:

- A = 90 to 100%
- B = 80 to 89%
- C = 70 to 79%
- D = 60 to 69%
- F = 59% or less

Students must pass all HITT courses with a grade of "C" or better to meet program requirements.

Course Schedule:

See Course Scheduling within Canvas

LICENSURE ELIGIBILITY NOTIFICATION:

Completion of Midland College degrees and/or certificates does not guarantee eligibility to take a certification/registry/licensure examination. The eligibility of each person is determined on an individual basis by the regulatory body of the specific discipline. If a student has been convicted of a crime other than a minor traffic violation, physical or mental disability/illness, hospitalization/treatment for chemical dependency within the past five years, current intemperate use of drugs or alcohol, or a previous denial of a licensure or action by a licensing authority, the student will need to contact the specific regulatory body for an individual ruling. Some programs require a criminal background check and urine and drug screen.

AMERICANS WITH DISABILITIES ACT (ADA):

The Americans With Disabilities Act (ADA) and Section 504 of the Rehabilitation Act require that no otherwise qualified person with a disability be denied access to, or the benefits of, or be subjected to discrimination of any program or activity provided by an institution or entity receiving federal financial assistance. It is this Section 504 mandate that has promoted the development of disability support service programs in colleges and universities across the

country. Sub-part E of Section 504 deals specifically with this mandate for institutions of higher education.

While it does not require development of special educational programming, for students with disabilities, it does require that an institution (public or private) be prepared to make appropriate academic adjustments and reasonable accommodations to allow the full participation of students with disabilities in the same programs and activities available to non-disabled students. Disabilities may include things such as physical/mobility problems such as paralysis or academic problems like learning disabilities. Some examples of accommodations are extra time for tests, testing in a quiet location, and providing architectural access to buildings.

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester.

NON-DISCRIMINATION STATEMENT:

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its program and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies:

Tana Baker

Title IX/504 Coordinator and Compliance Officer
3600 N. Garfield, SSC 242
Midland, TX 79705
(432) 685-4781
tbaker@midland.edu

Or

Natasha Morgan

Human Resources/Payroll Director
3600 N. Garfield, PAD 104
Midland, TX 79705
(432) 685-4534
nmorgan@midland.edu

For further information on notice of non-discrimination, visit the Office of Civil Rights website at <https://wdcrobcopl01.ed.gov/CFAPPS/OCR/contactus.cfm> for the address and phone number of the office that serves your area or call 1-800-421-3481.

Division Information: Health Sciences

Division Dean: Carmen Edwards

DFHS, 210 432.686.4822

Program or Department Chair: Husam Asfoor
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DFHS, 228 432.685.5573
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