

Course Syllabus
HSAD 5293: Managerial Epidemiology and Biostatistics
Fall 2022
Midwestern State University
College of Health Sciences and Human Services
Department of Criminal Justice and Health Administration

Instructor(s): Roe Roberts, Ph.D., MPH & Nathan Moran, Ph.D.

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Email: D2L Email Only. Please use the D2L email for all class related inquiries, but if you need to discuss something unrelated to the class, Dr Roberts university email is roe.roberts@msutexas.edu. Please bear in mind Dr. Roberts will be on FMLA for several weeks during the fall semester, during those dates please contact Dr. Moran. Also, note Dr. Roberts and Moran may not reply to email during weekends, or evenings (after 5:00 PM), so please plan accordingly. Most emails will be returned within 48 hours, except on weekends. If you send an email after 5:00 PM Thursday, the response may not arrive until Monday as Friday is considered a 'research day' for faculty. It is always a good policy to plan ahead and not expect help at the last minute. If you email one of us and do not hear back within 48 hours, email again, sometimes technology (d2L) doesn't work like we want it to and can cause us to miss your emails.

Office Hours: The most efficient way to reach us is to email first to make an appointment to discuss you issue via email, zoom or by phone.

Class Meets: **HSAD 5293 -X10/X11** Online - Monday to Sunday at your convenience
HSAD 5293 -X11 Face-to-Face at 4 to 5PM - 8/24, 8/31, 9/14, 9/28, 10/12, 10/26, 11/9, 11/30.

Course Overview:

This focus of this course will be on the principles and practices of monitoring disease status and control in relationship to health services management. It will emphasize the methods, databases and procedures of the epidemiologist as a basis for sound decision making in the healthcare industry. To achieve these ends it will examine the distribution and determination of diseases and injuries in human populations. It will review the historical disease patterns, medical science, healthcare issues, biomedical statistics, and computer applications. Core aspects of management will be emphasized as they relate to the critical evaluation of a communities' and/or populations' health status. It will emphasize the methods, databases and procedures of the epidemiologist as a basis for sound decision making in the healthcare industry.

Course Objectives:

At the completion of the course, students will:

1. Demonstrate an understanding of the organization and structure of healthcare organizations.
2. Have knowledge of different means of motivating professionals using the principles of various theories of motivation.
3. Demonstrate an understanding of leadership in health organizations applying alternative frameworks for leadership.

4. Demonstrate knowledge of conflict resolution and negotiation as described in the books and additional readings.
5. Demonstrate an understanding of how to manage groups and teams.
6. Have knowledge of how to design various health services organizational subsystems.
7. Be able to integrate theoretical and applied content to analyze organizational situations.
8. Have knowledge of the basic principles of strategy and finance for healthcare organizations.
- 9.

Required Textbooks and Materials:

Fleming, S. T. (2015). Managerial Epidemiology – Cases and Concepts. 3rd Ed. ISBN 9781567936841

Hebel, J.R., & McCarter, R. (2011). A Study Guide to Epidemiology and Biostatistics. 7th Edition. Jones & Barlett.

Other Materials:

Supplemental readings and/or information may be made available at times during the course.

Instructional Methods:

Instructional strategies for this class will include assigned readings, participation in discussions, written assignments which will include independent research.

Course Assignments:

Weekly Folio Modules: Modules specific to each course week are posted on D2L. Each module consists of assigned readings and will either have a written assignment or a discussion question due. Please follow the instructions for assignment completion posted within each module. Each module must be completed by the due date specified in the tentative course schedule attached to this syllabus.

Class Discussion: Some modules will have a discussion question posted by the instructor (total 11). The discussion question will be related to assigned readings for that module. Students are required to read assigned materials and answer the discussion question. In order to obtain full points for the discussion post, student must post a response of their own and reply to at least one other thread on the discussion board. **Any response which is shorter than five sentences will receive partial credit only.** Discussion posts will be graded based on quality of the content, length of the content, and compliance with APA guidelines for citations and references. **Students are encouraged to post both comments and questions and treat the discussion posts as discussions in the class room.** This is a great platform to share your experiences and thoughts related to weekly topics.

Written Assignments: Some modules will include a written assignment. The assignment may include short questions, essay type questions, and/or case studies. Questions and

case studies will be based on the materials from the course. In total, there will be THREE writing assignments and they are due on the date listed on the course schedule.

Final Exam: A written final exam will be conducted for this course. The final exam will include questions and case studies related to the course materials.

NOTE: THE FINAL EXAM IN THIS COURSE MUST TAKEN AT HOME WITH THE USE OF RESPONDUS LOCKDOWN. THE TECHNICAL REQUIREMENTS INCLUDE, A LAPTOP OR PC WITH WEBCAM.

IMPORTANT NOTE:

Although you may complete your work early, **no** discussion posts, assignments or exams will be accepted later than the due date. All assignments that are submitted after the due date will receive an automatic zero unless permission was given prior to the due date. Requests to turn work late must be submitted in writing at least ONE week prior to the submission due date. These requests will only be granted under extreme circumstances.

Course Assignment Style Guidelines:

For all written assignments and discussion board posts, students are expected to follow APA 6 formatting guidelines. **If you do not currently have an APA style guide, please purchase or borrow from your classmate.** If you still have difficulty locating the style guide, please contact the instructor.

Grading:

HSAD 5293 X 10

Final Grades will be calculated with total points obtained in class. Weighting of assignments for purposes of grading will be as follows:

Assignments	Grade Points
Discussion Posts (10x11)	110 Points
Written Assignment (3x30)	90 Points
Final exam (1x100)	100 Points
Total Possible Points	300 Points

Grade percentages (GP) will be calculated based on a student's accumulated points throughout the semester. The following point scale will be utilized for grading:

270-300 Points (90% or More)	A
240-269 Points (80%-89.99%)	B
210-239 Points (70%-79.99%)	C
180-209 Points (60-69.99%)	D

Students who accumulate below 209 points or 69% of GP will get an 'F'

Note: It is important to know that obtaining 'C' or lower grade in the course may impact your enrollment in the program.

Class Participation:

HSAD 5293 X10 - Your discussion posts will be counted as your participation in the class. So, communicating through discussion posts is critical.

HSAD 5293 X11 Discussion posts plus face-to-face meeting assignments.

Academic Honesty:

I assume that the written work you turn in reflects your own ideas and your own words, unless you specifically attribute them to another source. Very limited amount of quotation and paraphrasing for written assignments is acceptable. However, appropriate acknowledgement of the ideas, works, writings, or opinions that you borrow must be stated. **Since, no assignments for this course require group work; any students who are found to be working together may lose some or all of the points for the assignments.**

Academic dishonesty is not acceptable and is a breach of the student code of ethics.

Dishonesty includes, but not limited to:

- 1) Plagiarism
- 2) Submitting work that was not prepared by you (fraud)
- 3) Helping another student with their work when expressly prohibited (cheating).

If you need more information on student honor code please visit [Student Conduct](#)

Please note that any form of breach of student code of ethics can result in dismissal or grade of 'F'.

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil protections for persons with disabilities. Among other things, this legislation requires all students with disabilities be guaranteed a learning environment which provides for reasonable accommodation of their disabilities. In accordance with state and federal law, MSU provides academic accommodations to students with documented disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Support Services (DSS) in Room 168 of the Clark Student Center (phone 940-397-4140). The instructor is under no obligation to offer accommodations for students with disabilities who are not registered with DSS. To learn more about DSS, you can also visit [Disability Support Services](#)

Campus Carry:

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage at [Campus Carry Rules](#)

Note: The contents of the syllabus are as accurate as possible. The instructor reserves the right to make any changes necessary to the syllabus and course material. Every effort will be made to inform students about the changes in the syllabus, however, its student's responsibility to know what changes have been made and complete the course requirements. There are no extra credit opportunities in this course.

Tentative Class Schedule Fall 2022:

Module	Topic and Readings	Assignment
1	INTRODUCTION	Complete Module 1 on D2L (due by 11:59 27 th Aug.) Discussion 1 Due
2	CHAP 1 (Fleming - F) Managerial Epi CHAP 2 (F) Infectious Disease Epi	Complete Module 2 on D2L (due by 11:59 3 rd Sep.) Discussion 2 Due
3	CHAP 3 (F) Measuring and Interpreting Morbidity CHAP 1 (Hebel & McCarter – H&M) Investigation of an Epidemic CHAP 2 (H&M) Measures of Mortality	Complete Module 3 on D2L (due by 11:59 11 th Sep.) Discussion 3 Due
4	CHAP 3 (H&M) Incidence & Prevalence CHAP 4 (H&M) Measures of Risk	Complete Module 4 on D2L (due by 11:59 18 th Sep.) Discussion 4 Due
5	CHAP 5 (H&M) Biological Variability CHAP 6 (H&M) Probability	Complete Module 5 on D2L (due by 11:59 25 th Sept.) Writing Assignment 1 Due (no discussion this module)
6	CHAP 7 (F) Descriptive Epi: Time, Place & Person CHAP 7 (H&M) Screening	Complete Module 6 on D2L (due by 11:59 2 th Oct.) Discussion 5 Due
7	CHAP 8 (H&M) Sampling CHAP 9 (H&M) Statistical Significance	Complete Module 7 on D2L (due by 11:59 9 th Oct.) Discussion 6 Due
8	CHAP 10 (F) Statistical Tools CHAP 10 (H&M) Correlation CHAP 11 (H&M) Multiple regression	Complete Module 8 on D2L (due by 11:59 17 th Oct.) Discussion 7 Due
9	CHAP 11 (F) Case-control Studies CHAP 12 (H&M) Case-Control Studies	Complete Module 9 on D2L (due by 11:59 23 rd Oct) Writing Assignment 2 Due
10	CHAP 12 (F) Cohort Studies CHAP 13 (F) Randomized Control Trials CHAP 13 (H&M) Cohort Studies CHAP 14 (H&M) Randomized Control Trials	Complete Module 10 on D2L (due by 11:59 2 nd Nov.) Discussion 8 Due
11	CHAP 15 (H&M) Survival Analysis CHAP 16 (H&M) Association and Causation	Complete Module 11 on D2L (due by 11:59 9 ^h Nov.) Discussion 9 Due
12	CHAP 4 (H&M) Healthcare Planning and Needs Assessment	Complete Module 12 on D2L (due by 11:59 16 th Nov.)

Module	Topic and Readings	Assignment
	CHAP 5 (F) Quality of Care Measurement	Discussion 10 Due
13	CHAP 6 (F) Morbidity and Risk Adjustment CHAP 8 (F) Epidemiology and Financial Management CHAP 9 (F) Cost-effectiveness Analysis CHAP 14 (F) Clinical Epidemiology and Decision Making	Complete Module 13 on D2L (due by 11:59 30 th Nov.) Writing Assignment 3 Due Discussion 11 Due
14	FINAL EXAM	THE FINAL EXAM WILL OPEN 8:00 AM ON DEC. 4TH AND CLOSE 8:00 PM ON DEC. 6TH.

- * Please note that above schedule does not contain the list of additional supplemental and required readings and materials. To view additional required readings, please refer to each module.