

Course Syllabus: Operations Research
McCoy College of Science, Mathematics, and Engineering
MATH 4243, Section 201, TR 3:30-4:50PM, MY 207
Spring 2022, January 21-May 13<sup>th</sup>

## **Contact Information**

Instructor: Jeff Hood Office: Pierce 132

Office hours: MWF 3-4 PM, TR 1-2 PM

Office phone: (940) 397-4194 E-mail: jeff.hood@msutexas.edu

# Course Description

This course will cover a study of linear programming including convex sets, geometric solutions, simplex methods, duality, sensitivity analysis and integer programming.

# **Textbook & Instructional Materials**

**Text:** Operations Research, MSU Texas 4243 Edition, by Winston

#### Student Handbook

Refer to: Student Handbook

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct. Cheating will not be tolerated in any form. Any evidence of possible cheating may result in a 0 on the assignment/exam or an 'F' in the course. This includes the use of any Artificial Intelligence Devices or Programs.

# Grading

Course Grade – Your current course average is available at any time from the instructor's office; only in person.

Scale: 90-100% A, 80-89% B, 70-79% C, 60-69% D, 0-59% F

Percentage of Final Grade by Grade Type

Quizzes: 35% Exams: 40%

Final Exam: 25%

#### Homework

Homework will be assigned every day, but usually not taken up. Instead, the quizzes will assess your comprehension of the material. It is in your best interest to do the homework, even though it will likely not be graded. If the instructor deems that it would benefit the class to grade the homework, he may choose to do so, without prior notice. There will also be one or two group projects assigned, to be completed at home. These projects will each count as multiple quiz grades.

## Quizzes

A quiz over the previous homework will be given during the first 5 minutes of class, every day. The group project(s) will also count as multiple quiz grades.

Quizzes 35% of Final Grade

#### Exams

There will be 3 regular, one-hour exams. Dates of these exams will be announced in class as soon as possible.

Test 1: Chapter 1 – Section 3.6 Test 2: Section 3.7 – Chapter 4

Test 3: Chapters 5 & 7

Exams 40% of Final Grade

Special Rules Apply. These will be announced in class.

## Final Exam

Comprehensive Final, Tuesday, May 13<sup>th</sup>, 3:30-5:30 PM. Note: This could change, we must discuss it though.

The room for the final exam will be the same as the regular classroom, unless otherwise announced.

Final Exam 25% of Final Grade

Special Rules Apply. These will be announced in class.

#### Late Work

No work will be accepted after it is due, for any reason.

# Make Up Work/Tests

No make-ups will be allowed for homework, tests, or finals, for any reason. If an exam is missed, you will have the opportunity to replace it with the Final Exam – however, you may only have one grade replacement. If you miss more than one exam, it is likely you have had to miss too much of the material, and should consider dropping the course and retaking at a later date. If you are unable to avoid missing the Final, the instructor reserves the right to maintain complete discretion to decide how this will be handled on a case-by-case basis.

## **Important Dates**

Spring Break: March 10-14

Last Day to drop with a grade of "W:" April 30. Refer to: <a href="Drops">Drops</a>, Withdrawals &

Void

Holiday Break: April 17-18

## Attendance

It is in your best interest to attend every class. If, however, you are feeling <a href="Symptoms of Covid-19">Symptoms of Covid-19</a>, it is in everyone's best interest that you avoid class, take the initiative to seek medical care, and minimize the risk of exposure to your classmates. Do not return to classes until guided to do so by a physician. Documentation from your physician should be electronically submitted to your instructor as soon as possible and communication via email should be maintained to receive instructions on how to receive the information for the material you have missed so you can get caught up on your own. The two lowest quizzes will be dropped, and any quizzes missed for an excused absence will not count against you, however you are still responsible for learning the material you missed. Acceptance of absence excuse is at the discretion of the instructor. If one exam is missed, you will be given the opportunity to make it up with your final exam. If you arrive after the quiz is given, are not excused for an absence or if you leave early without a valid excuse, your quiz grade for that day will be forfeit.

## **Instructor Class Policies**

Students are expected to assist in maintaining a classroom environment, which is conducive to learning and healthy. This means that the use of electronic devices for activities other than those pertinent to class will not be acceptable, ever. It also means that every effort to maintain a safe and healthy environment should be observed.

Cheating will not be tolerated in any form. Any evidence of possible cheating may result in a 0 on the assignment/exam or an 'F' in the course. This includes the use of any Artificial Intelligence Devices or Programs.

## Services for Students With Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to <u>Disability Support Services</u>.

# College/University Policies

Campus Carry Rules/Policies Refer to: Campus Carry Rules and Policies

Active Shooter Policies Refer to: Safety/Emergency Procedures

Academic Honesty Refer to: Academic Honesty Checklist

#### Notice

Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor. Due to the uncertain nature of policy regarding Shelter-in-place or other such necessary public safety measures, the nature of instruction may be subject to change. Students are expected to be adaptable to those changes. Those changes may occur quickly and will be announced either in class or via email, therefore students must maintain regular communication via a listed email address.

## Course Schedule:

We will cover Chapters 1-5, & 7 of the text, with possible exceptions. For our course, we will attempt to cover 2 sections per day, in class, although based on how the class is doing at any given time, we may take more or less time per section.