

Course Syllabus: Numerical Analysis
McCoy College of Science, Mathematics, and Engineering
MATH/CMPS 3533, Section 101, TR 11AM-12:20PM, Bolin 103
Fall 2025, August 26 – December 9

Contact Information

Instructor: Jeff Hood Office: Bolin 122N

Office hours: MTWRF 8-9 AM Office phone: (940) 397-4194 E-mail: jeff.hood@msutexas.edu

Course Description

This course will cover the use of numerical methods to solve problems including but not limited to the following: function approximation, solutions of equations, numerical calculus, and differential equations. It includes the analysis of problems and the design and writing of programs.

Textbook & Instructional Materials

Text: Numerical Analysis 10th Edition, by Burden and Faires; ISBN 9781305253667

Access to a programming language of your choice for Projects

Scientific or Graphing Calculator (Optional)

Study Hours and Tutoring Assistance

It is recommended that you form study groups to work on the assignments.

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Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individuals to whom credit is given).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/Projects: 35% Exams: 40% Final Exam: 25%

Homework/Projects

Homework will be assigned in every lecture. However, these will usually not be taken up. The daily quiz will be used to assess student progress. 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 multiple small-group projects assigned, to be completed at home. These projects will each count as multiple quiz grades.

Quizzes/Projects

A quiz over the previous homework will be given during the first 5-10 minutes of class, every day. The group projects 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. The exams will be given after covering approximately every seven sections of material.

Exams 40% of Final Grade

Special Rules Apply; these will be announced in class. There will be no exceptions to the rules.

Final Exam

Comprehensive Final, Tuesday, December 9th, 1-3 PM.

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. There will be no exceptions to the rules.

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, quizzes, 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

Labor Day Holiday: September 1

Last Day to drop with a grade of "W:" November 24. Refer to: Drops, Withdrawals & Void

Thanksgiving Break: November 26-30

Attendance

It is in your best interest to attend every class. If, however, you are feeling Symptoms of Covid-19, 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. This means that the presence of electronic devices other than your calculator are not to be seen, heard, or implied, ever. It also means that while questions are encouraged and discussion is acceptable provided it is pertinent, excessive private discussions distract from the lesson and are frowned upon.

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 Disability Support Services.

College Policies

Campus Carry Rules/Policies Refer to: <u>Campus Carry Rules and Policies</u>
Active Shooter Policies Refer to: <u>Safety/Emergency Procedures</u>
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 the following sections of the, listed in the order they will be taught, with possible, rare exceptions: 1.1-1.4, 2.1-2.5, 3.1-3.5, 4.1, 4.3, 4.4, 4.7, 5.1-5.4. For our course, we will attempt to average a little more than 1 section every one class lecture (some days will cover more than one section), although based on how the class is doing at any given time, we may take more or less time per section.