

Course Syllabus: Numerical Analysis
McCoy College of Science, Mathematics, and Engineering
MATH/CMPS 3533, Section 101, MWF 9-9:50AM, Bolin 109
Fall 2023, August 28 – December 11

### **Contact Information**

Instructor: Jeff Hood

Office: Bolin 118M (Moving to Pierce Hall later this semester, office number 128)

Office hours: MWF 10-11AM, TR 9:30-10:30 AM Office phone: (940) 397-4194 (May Change)

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# 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* 10<sup>th</sup> *Edition*, by Burden and Faires; ISBN 1305253663 **Access to a programming language of your choice for Projects** 

Study Hours and Tutoring Assistance

A list of available, private tutors is also available in the Mathematics office.

#### 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Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individuals to whom credit is given).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 in the instructor's office. Grades are never given, except 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.

#### Final Exam

Comprehensive Final, Monday, December 11th, 8-10 AM.

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 quizzes, tests, or finals, for any reason.

Important Dates

Last Day to drop with a grade of "W:" October 30.

Refer to: <u>Drops, Withdrawals & Void</u>

### Attendance

It is in your best interest to attend every class. Attendance is taken in the form of a daily quiz, and missing (or being late for) class will put you behind and it will be difficult to catch up. Furthermore, no make-ups will be given at any time, for any reason. 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. Absences are not considered excused without a written note from a third party, on letterhead, with a (valid) reason for absence, signature and contact information. Acceptance of absence excuse is at the discretion of the instructor. If an 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: Campus Carry Rules and Policies

#### Notice

Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

### 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.