Jason Harrington
Department of Mathematics

MAD 4401

MAD 4401 Introduction to Numerical Analysis

Spring 2019

M W F Time 5th Period, FAC 120

Course Description: MAD 4401 is a 3-credit course covering numerical approximation techniques. Topics will include Numerical integration, nonlinear equations, linear and nonlinear systems of equations, differential equations and interpolation.

Prerequisites: MAS 3114 or MAS 4105 with a minimum grade of C and experience with a scientific programming language.

Recommended Textbook (not required): Elementary Numerical Analysis, by Kendall Atkinson.

Office Hours: Monday 8th Period, Tuesday 4th Period, and Friday 7th Period. You may schedule extra office hours by e-mail.

Grades: Your course grade is based on 3 exams worth 45% total, a final exam worth 20%, homework will count 20% total, Labs will count 15% total. We will use the following scale:

A [90,100]; A-[87,90); B+[83,87); B[80,83); B-[77,80)

C+[73,77); C [68,73); D [60,68); E[0,60)

Your grade is your responsibility. You have exactly one week once your assignment has been returned to you to discuss that grade. After that week, the grade is final. No additional points will be awarded to “boost” your grade.

Homework: Homework will be due every Friday (except on test days) at the beginning of the period. You are encouraged to work in groups, and turn in a single assignment. Neatness is mandatory!

Exams: There will be three exams in class. The three exams dates provided on the schedule are

TENTATIVE. Exam 1: February 7ᵘᴵ, Exam 2: March 14ᵘᴵ, and Exam 3: April 4ᵘᴵ.

Final Exam Date: April 30, 2019. Time: 10:00 AM to 12:00 PM in FAC 120

Honor Code: On all work submitted for credit by students, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Attendance Policy: Registration in this course obligates the student to be regular and punctual in class attendance. All late work will be penalized. Students will **NOT** be given the opportunity to complete old assignments at the end of the semester to improve their grades. Excused absences are consistent with university policies in the undergraduate catalog (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/) and require appropriate documentation.

Calculator Policy: You may need a scientific calculator, or graphing calculators to help with homework questions. A scientific calculator will be permitted on exams. You will also need to be familiar with computer software packages like Mathematica or Matlab.

Online course evaluation: Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu

Academic Honesty: On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The UF honor code is available here: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

Students with Disability: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Resources: Free tutoring is available at the Teaching Center that is located on the ground level of SW Broward Hall. The regular hours are Monday-Friday, 8am-5pm. Please check the website http://www.teachingcenter.ufl.edu/ for any changes.

* I reserve the right to change anything in this syllabus if needed. Please check the website for changes.

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