



## MAD 4401

Last updated 4:34 pm August 9, 2016

### Introduction to Numerical Analysis

Section 3216

#### Time and Place

MWF 8th Period  
FAB 103

#### Text

No text, course notes will be posted on this site.

#### Policies

##### Prerequisites

MAS 4105 or MAS 3114 and a scientific programming language.

##### Grading

###### Three (3) exams

Exam 1: 30 points

Exam 2: 30 points

Final: 50 points

###### Ten quizzes (10), drop two

8 x 5 pts = 40 pts

###### Five (5) projects

5 x 10 pts = 50 pts

###### Total: 200 pts

With 2 drops there will be NO MAKE-UP quizzes.

A student is not permitted to do additional work to improve their grade.

Late projects will be penalized one point per day for each day after the due date.

##### Grading Scale

A 180 points

B 160 points

C 140 points

D 120 points

##### Attendance

Attendance is not required but strongly suggested. There is a definite correlation between students who do well in this class and attendance. The **University Attendance Policy** will be followed in this class.

##### Accommodation

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

##### Incomplete Grades

From the Undergraduate Catalog "An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which the student has completed a major portion of the course with a passing grade, been unable to complete course requirements before the end of the term because of extenuating circumstances, and obtained agreement from the instructor and arranged for resolution of the incomplete grade. Instructors are not required to assign incomplete grades."

The **incomplete policy** of the Mathematics Department and the College of Liberal Arts and Sciences is strictly enforced. Incomplete grades are given only in situations in which a student who has been in good standing all semester, is prevented from completing a course assignment (for example the last exam) due to circumstances beyond her/his control (for example, hospitalization, jury duty, death in the family, etc.)

##### Student Conduct

Students should be aware of the general expectations of UF students. Scholastic misconduct is broadly defined as "any act that violates the right of another student in academic work or that involves misrepresentation of your own work." The honor code is defined in **Student Honor Code and Student Conduct Code**. It includes but is not limited to cheating on assignments and examinations, and plagiarism.



##### Announcements

- Under Construction

##### Dates to Remember

Sept 3 – Quiz 1

Sept 10 – Quiz 2

Sept 17 – Quiz 3

Sept 24 – Exam 1

Oct 1 – Quiz 4

Oct 8 – Quiz 5

Oct 13 – No Class

Oct 22 – Quiz 6

Oct 29 – Exam 2

Nov 5 – Quiz 7

Nov 12 – Quiz 8

Nov 19 – Quiz 9

Dec 3 – Quiz 10

## Course Notes and Projects

These are PDF files which can be viewed in Acrobat.

Chapter 1 **Review of Linear Algebra and Introduction to MATLAB**

Chapter 2 Floating Point Arithmetic, Errors, and Flops

Chapter 3 Polynomials

Chapter 4 Numerical Linear Algebra

Chapter 5 Approximation

## Projects

Projects submitted by email *must be in plain text or PDF*. I do not accept MSWord or MATLAB format.

Project 1

### Introduction to MATLAB

Due 11:59 pm \*\*

Email to [rs@ufl.edu](mailto:rs@ufl.edu)

Project 2 Polynomials

Due 11:59 pm Feb 24

Email to [rs@ufl.edu](mailto:rs@ufl.edu)

Project 3 Least Squares and Numerical Linear Algebra

Due 11:59 pm Mar 16

Email to [rs@ufl.edu](mailto:rs@ufl.edu)

Project 4 More Numerical Linear Algebra

You will need this **image**.

Due 11:59 pm \*\*

Email to [rs@ufl.edu](mailto:rs@ufl.edu)

Project 5 Splines and Fourier Approximation

Due 11:59 pm \*\*

Email to [rs@ufl.edu](mailto:rs@ufl.edu)

## MATLAB Links

[The Official Matlab site](#)

[A MATLAB Tutorial \(pdf\)](#)

[A Graphics Reference \(pdf\)](#)

[Utah Matlab Introduction](#)

[A Practical Introduction to Matlab](#)

[Index of Matlab m-files](#)

