

**MATH 331 Intro to Scientific Computing**

**CLASSROOM** 310 Gibby Hall

**INSTRUCTOR:** Mike Nicholas (Mike or Dr. Nicholas or Mr. Nicholas)

**OFFICE:** 318B Gibby Hall

**OFFICE HOURS:** MWF 1-2 PM or by appointment

**PHONE:** 862-3438

**EMAIL:** mnichol@tulane.edu

**TEXT:** Numerical Analysis, by Burden and Faires

**SOFTWARE:** Matlab, Student Edition

**THE CLASS:** This class is meant to be an introduction to two things: (1) the science of numerical analysis, and (2) the practice of implementing algorithms (programming) in matlab. We will mainly talk about the first of these in class, and you will mainly learn the programming on your own as you do the assignments.

**TESTS:**

There will be two in-class tests during the semester. I have tentatively scheduled them for:

February 18

April 14

The final will be on Tuesday, May 6, from 8 AM to 12 PM. It will be comprehensive.

**ASSIGNMENTS:** There will be an assignment each week. These will mostly be programming exercises to be completed in matlab, but there will be some pen and paper problems from the text as well.

**PROJECTS:** In April, you will work on large projects in small groups. More on these projects as we get closer to them.

**GRADES:** Grading goes like this

In class tests: 15% each

Homework Assignments: 40% total

Project (report and presentation): 15%

Final: 15%

**CHEATING POLICY:** No cheating allowed. You may work together on homework assignments, but you cannot copy someone else's work, and you should only turn in something if you feel you understand it. Please help each other with the programming, but please do not copy and paste someone else's homework.

**ATTENDANCE POLICY:** I will not be taking roll. I would like you to come to class.

**PUNCTUALITY POLICY:** It is courteous to arrive on time. Please make the effort, and I will too.

**ADVICE:** We are cramming a lot of stuff into little time. The students who get A's will be the students who read each section, who attend each class, and who do each assignment. We are going fast - keeping up will be very important.

## Math 331 Spring 2008 Schedule

<b>day</b>	<b>section</b>	<b>assignment</b>
1-1	section 1.2, 1.3	
1-2	intro to matlab	
1-3	section 2.1, 2.2	
2-1	MLK Day	No Class
2-2	section 2.3	Homework #1 due
2-3	section 2.4	
3-1	section 2.5	
3-2	section 2.6	Homework #2 due
3-3	section 3.1	
4-1	Fat Monday	No Class
4-2	section 3.2	Homework #3 due
4-3	section 3.3	
5-1	section 3.4	
5-2	section 3.5	Homework #4 due
5-3	REVIEW	
6-1	TEST 1	
6-2	section 4.1	Homework #5 due
6-3	section 4.2	

<b>day</b>	<b>section</b>	<b>assignment</b>
7-1	section 4.3	
7-2	section 4.4	Homework #6 due
7-3	section 4.5	
8-1	section 4.6	
8-2	section 4.7	Homework #7 due
8-3	section 4.9	
9-1	section 5.1	
9-2	section 5.2	Homework #8 due
9-3	section 5.3	
10-1	Spring Break	No Class
10-2	Spring Break	No Class
10-3	Spring Break	No Class
11-1	Spring Break	No Class

<b>day</b>	<b>section</b>	<b>assignment</b>
11-2	section 5.4	Homework #9 due
11-3	section 5.5	
12-1	section 5.6	
12-2	section 5.7,5.8	Homework #10 due
12-3	section 5.9	
13-1	section 5.10	
13-2	section 5.11	Homework #11 due
13-3	REVIEW	
14-1	TEST 2	
14-2	section 8.1	Homework #12 due
14-3	section 8.2	
15-1	section 8.3	
15-2	section 8.4	Homework #13 due
15-3	project presentations	
16-1	project presentations	
FINAL	Tue, May 6, 8:00 AM - 12:00 PM	Location TBA