MATH 246, FALL 2014 SECTIONS 02XX, TU-TH 9:30AM - 10:45AM ARM 0126

A current, updated copy of this syllabus will be available
http://www2.math.umd.edu/~matei/
Dr. M. Machedon, Math Bldg. 3311. e-mail: mxm@math.umd.edu
Office hours: Tuesdays and Thursdays from 2 to 2:50 (in Math 3311).

Discussion sections
0211 W 8:00am - 8:50am MTH B0429 Andrew Brandon
0212 W 8:00am - 8:50am MTH 0305 Addison Bohannon
0221 W 9:00am - 9:50am MTH B0429 Andrew Brandon
0222 W 9:00am - 9:50am MTH 0305 Addison Bohannon
0231 W 10:00am - 10:50am MTH B0429 Andrew Brandon
0232 W 10:00am - 10:50am MTH 0305 Addison Bohannon
0241 W 11:00am - 11:50am MTH B0429 Andrew Brandon
0242 W 11:00am - 11:50am MTH 0305 Addison Bohannon

Graduate assistants’ contact information and office hours:
Andrew Brandon 4308 MTH, asbrando@math.umd.edu Wed. 1-2, 3-4
Addison Bohannon 4326 CSS, addisonb@math.umd.edu Mon. 1-3
Please feel free to come to any of these office hours.

Additional resources:
Tutoring by Lauren Trollinger is available as part of the Department of Academic Achievement Program’s tutoring initiative. Lauren Trollinger is available on M/W/F 12-1:45 in EGR 1105 and Tu 5-7 in EGR 1105 and can be contacted at Trollinger.lauren@gmail.com.
Matlab tutoring: see
http://www-math.umd.edu/matlab-tutoring-schedule.html
Tutoring: see
http://www-math.umd.edu/math-tutoring-schedule.html

Textbooks: On-line notes by Prof. Levermore
https://courses.math.umd.edu/math246/NODE/1415F/main.html
(log in with your University username and password), and a Matlab textbook by Hunt, Lipsman, Osborn, Rosenberg, Differential Equations with Matlab, third edition.
The final grade will be based on Matlab Homework (10%), four 20 minutes in-class quizzes (20%) three in-class exams (40%), and a uniform final exam (30%).

Students with less than 50% of the maximum possible will receive an F. I expect the C/D cutoff to be 60%.

The most recent exams (given by Prof Levermore) can be found at http://www.terpconnect.umd.edu/~lvrmr/2013-2014-F/Classes/MATH246/Exams.html. These will serve as practice exams for our class.

**Quiz dates:**
- Thursday, September 18
- Thursday, October 9
- Thursday, October 23
- Tuesday, November 11

**Exam dates:**
- Tuesday, September 30
- Thursday, October 30
- Tuesday, November 25
- Uniform final exam: Monday, December 15, 1:30-3:30pm at a location to be announced later.

Make-up policy: There will be no make-ups for in-class exams or quizzes. In the case of an absence due to illness, religious observance, participation in a University activity at the request of University authorities, or other compelling circumstances, your blank grade will be replaced by the average of your other in-class exams (respectively, quizzes).

The major grading events for this class are the three in-class exams and the final. I will accept a self-signed note which acknowledges valid reasons for missing one exam, but will require formal written documentation (such as from a medical provider) for subsequent absences.

After each in-class exam or quiz students have one week from when the exam is returned to appeal the grading. Appeals for the final grade must be made in writing. No appeals for regrading work done during the semester (including the third exam), can be made after the day of the final exam.

On exams students must write by hand and sign the following pledge:

I pledge on my honor that I have not given or received any unauthorized assistance on this examination.
During exams, students are expected to apply the ideas they learn to some problems that are significantly different from the examples and homework they have seen.

Students who require special examination conditions must register with the office of the Disabled Students Services (DSS) in Shoemaker Hall. Documentation must be provided to the instructor. Proper forms must be filled and provided to the instructor before every exam.

The University’s policy on religious observance and classroom and tests states that students should not be penalized for participation in religious observances. Students are responsible for notifying the instructor of projected absences within the first two weeks of the semester. This is especially important for final examinations.

I will communicate with the class by e-mail. You are expected to have a correct e-mail address. You can update your e-mail address at http://www.testudo.umd.edu/apps/saddr/

Matlab assignments should be printed neatly so both input and output show, and should be handed to your TA (not to the professor) during discussion on the Wednesday they are due. You are allowed (and encouraged) to do the Matlab homeworks in teams of two (not more).

You can access Matlab from many campus computers, or remotely, at http://eit.umd.edu/vcl (follow the instructions). No late Matlab homework will be accepted. In the case of an excused absence your blank grade will be replaced by the average of your other Matlab grades.

**Matlab assignments to be turned in**, from the textbook by Hunt, Lipsman, Osborn and Rosenberg, third edition.

Due Wednesday September 10, : Read Chapters 1-4 in enough detail so you can solve and turn in Problem set A 3a, 3c 7a, 8a, 8c, 8d, 8e, 13

Due Wednesday, October 1: Read Chapters 5, 6, 7. Turn in B 3 a-c, 5, 15 a-b, 20 a-c You can look at the answer to problem 5 for hints, but please don’t copy it word by word.

Due Wednesday, October 8: Read pages 98-106 and 109-112 from the Matlab textbook. Solve and turn in C 3a, 7a, 13 (a, c), 16a.

Due Wednesday, November 5: D 1a, 4, 12, 15a

Due Wednesday, December 3: E 13(a, b) Here \(u_c(t) = u(t - c) = \text{ heavyside}(t - c)\), F 1 (first matrix only), 5(a, c, d), 9( a, b, c)
The following problems from the on-line notes by Dr. Levermore will be assigned, but should not be turned in. You should keep your work in a notebook, and check your answers against the ones in the notes. Some of these problems will appear on quizzes and in-class exams.

Problems for September 10
I. 2: (1 a, b, f), (3), (4), (6), (7), (8), (12), (15), (16)
I. 3: (1), (6), (7), (17)
I. 4 (2), (3)

Problems for September 17
I. 5 (1), (2), (3), (4), (6)
I. 6 (2), (6), (7), (8), (15)

Problems for September 24
I. 7 (2), (3)
I. 8 (1), (3), (6), (8), (12)
I. 9: Not covered.

Exam 1: Tuesday September 30.
Recommended problems for Wednesday, October 1
II. 1 (8)
II.2 (1), (3), (7), (18), (31), (32)
For Wednesday, October 8
II.3 (1 a, c), (3), (4 a), (9), (10)
II.4 (1), (2), (3), (4), (6), (8), (10), (11), (22), (33), (37), (40)
For Wednesday, October 15
II.5: (2), (9), (10)
II.6: (2), (3), (4), (5), (6), (7), (13), (15), (21), (22), (23), (33)
For Wednesday, October 22
II.7: (2), (4), (8), (22), (23)
II.8 (1), (3), (6), (7), (11)

The quiz on Thursday October 23 will cover sections II.5 - II.7
The exam on Thursday October 30 will cover sections II.1-II.8
Recommended problems for Wednesday, October 29 and/or Wednesday, November 5
II.9: (5), (6), (7), (8), (9), (12), (13), (15), (16), (17), (18)
For Wednesday, November 12
III.1: (2), (10), (15)
III.2: (1), (13), (14)
Wed, Nov 19
III.4: (5), (10), (11), (12), (20), (21), (28)
III.5 (1), (2), (3), (13)-(17), (20), (21), (35), (23), (36)
Wed, Nov. 26
III.6 (1)-(12)

Wed, Dec 3
III.7 (5), (6), (7), (8), (13), (14), (15), (19), (21)

Wed, Dec 10
III.8 (8)-(15), (21), (23)