

1. Instructor Details:

Instructor	Dr. Mihai Tohaneanu
Office:	749 POT
Office Hrs.	WTh 2:00-3:30 (Mathskeller or office) or by Appt.

2. Course Web page: <http://ms.uky.edu/~mh20224/214S17.html>

All current announcements, lecture notes and general information about course related activities will be posted on the web page. Be sure to check it often.

Text: *Elementary Differential Equations*, Tenth Edition, William Boyce and Richard DiPrima

Earlier editions may be acceptable.

We will cover (most of) Chapters 1, 2, 3, 4, 6 and parts of chapters 5 and 7 with exact details to be decided based on available time. A tentative schedule has been posted on the website.

3. **Course Overview:** Historically differential equations (DE) have been used to describe a variety of natural phenomena such as falling objects, the flow of electricity, and the vibration of objects. In Chapter 2 we will study methods for solving certain first order DE. In Chapter 3 we solve second order DE with constant coefficients, with applications to mechanical and electrical problems. Chapter 4 covers higher order DE with constant coefficients. In Chapter 6 we introduce the Laplace transform, which is a powerful tool in dealing with DE containing discontinuous forcing functions. Chapter 7 is concerned with solving systems of DE, while Chapter 5 uses power series to solve second order DE with non-constant coefficients.

4. **Homework:** We shall use Web based homework. Detailed information will be on the course web page.

The homework is an integral part of the course and it is essential that it is done on time. **There is no way to make up homework once it expires.** The homework is posted even before the class discussions start and you must try to finish it at the earliest opportunity. Computer and Network problems arising in the last few hours before the deadline will not create a valid excuse for missed homework.

5. **Attendance:** I expect you to attend all classes. If you have a valid excuse, you should make a point of contacting me about it as soon as possible and you should make up all missed work.

I would also like to emphasize that you should try to participate actively in the class, even though it is a large class. If you are shy about asking questions in class, send me email or come to my office. I will try to answer all questions, directly to you or to the whole class, as needed.

Additional help sessions for MA 214 run by our TAs are on Tuesdays/Thursdays in mathskeller.

6. **Quizzes:** You will have a quiz each Friday.

7. **Exams:** There will be **three in class midterm exams** on the following dates:

Feb. 6, March 6 and April 10.

Final Exam: Monday May 1 8:00 to 10:00 AM

General Exam policy: Calculators are permitted; however, you will be expected to show your work which means convince me that you know how to integrate, differentiate and in general solve differential equations. Any device capable of electronic communication such as a cell phone or computer must be turned off and put away out of sight during all examinations.

8. Important dates:

Monday Jan. 16 MLK, no class
March 13-18 Spring break, no classes
March 31 Last day to withdraw without a grade
April 28 Last day of classes

9. Grade:

- 100 points per mid semester exam.
- 130 points for the final exam.
- 30 points for homework.
- 40 points for quizzes.
- The net grade will be based on a total of $(300+130+30+40)=500$ points.
Thus the final grade will roughly use the scale:

500 *A* 450 *B* 400 *C* 350 *D* 300 *E*

However, there may also be a slight curve after the final percentages are computed.

Course Policy on Academic Accommodations due to disability:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center. Check the site: <http://www.uky.edu/StudentAffairs/DisabilityResourceCenter> for further information.

Course Policy on Academic integrity:

Students may work together on homework, but should not submit solutions to WHS until they understand how to obtain the answer. All other course work on quizzes and exams must be the student's own work. Useful information about students' rights and responsibilities can be found at the following website: <http://www.uky.edu/Ombud> . You are advised to consult it as needed.