

MATH 2233, Section 002 - Differential Equations - Spring 2015

ROOM and TIME: AGH 009, MWF 12:30-1:20.

INSTRUCTOR: Dr. Roger Zierau

OFFICE: MSCS 502A

OFFICE HOURS: Tuesdays 4:30-5:30 (in the MLSC), Wednesdays 1:30-2:20 (in MSCS 502A) and by appointment

PHONE: 744-6296

E-MAIL: zierau@math.okstate.edu

TEXTBOOK: *Elementary Differential Equations and Boundary Value Problems*, tenth edition, by Boyce and DiPrima, is the required textbook.

COURSE CONTENT: This is a first course on differential equations. We will learn basic techniques for solving differential equations. We will also learn some ways that differential equations are used in science and engineering. We will cover most of chapters 1-6 in the textbook. These chapters will be covered (roughly) in the following order: 1,2,3,4,6,5.

GENERAL INFORMATION: Students are expected to attend all classes and work all of the assigned homework problems.

HOMEWORK: The homework is an extremely important part of the course; carefully working through the homework problems is crucial to learning the material. The homework will be in two parts. Regular (roughly daily) homework will be assigned. Students are expected to complete the assignments in a notebook - neatly written solutions showing all work is expected. The notebook will be collected and graded once or twice throughout the semester (20 points). There will also be four problem sets assigned, collected and graded (40 points). Examples of acceptable work will be provided.

REVIEW: The first week will be spent on a review of calculus skills. This is because the study of differential equations is based entirely on calculus; differentiation and integration skills are essential. On Friday, Jan. 16, we will have a short test on calculus skills and related algebra skills. This short test will be 40 points for students who complete at least 8 of 10 problems. There will be opportunity to retake this test for students who do not get 8 of 10 problems.

EXAMS: In addition to the short test described above, there will be four in-class exams (80 points each); they will occur after we finish Chapters 2, 3, 4 and 6. There will also be a comprehensive final exam (80 points). About a week before each in-class exam the instructor will post a practice exam on D2L. The final exam is scheduled for Wednesday, May 6, 10:00-11:50 a.m.

GRADES: Homework will total 60 points, the short test is 40 points and the in-class exams plus final totals 400 points. This is a total of 500 possible points. Letter grades will be assigned as follows:

450-500 points (90%): guaranteed A

400-449 points (80%): at least a B

325-399 points (65%): at least a C

300-324 points (60%): at least a D

0-299 points (below 60%): probable F.

There will be opportunity for a small amount of extra credit (totalling approximately 20

points).

MISSED WORK POLICY: A student shall be offered reasonable accommodation in the event that he or she misses an exam for a valid and documented reason. Arrangements must be made at the first opportunity.

D2L: D2L will be used to post homework assignments, practice exams, an occasional solution to homework problem, etc. Students should be sure to regularly check D2L. Students should also be sure to set their email address on D2L to an address that they regularly use; certain announcements and reminders will be emailed to students using this address. D2L is found at <https://oc.okstate.edu>; access D2L using okey login.

MSLC: The Mathematics Learning Success Center has (free) tutoring and is located on the fifth floor of the library. Special MSLC hours for MATH 2233 tutoring are Tuesdays and Wednesdays 5:00-8:00pm.

SYLLABUS ATTACHMENT: For various information such as drop dates, university policies on student disabilities and academic integrity, etc. see the OSU Syllabus Attachment.

The first homework assignment is now posted on D2L.