

MATH 2233 (62557), Differential Equations - Fall 2017

- ROOM and TIME: CLB 212, MWF 2:30-3:20.
- INSTRUCTOR: Dr. Roger Zierau
- OFFICE: MSCS 502A
- OFFICE HOURS: Thursdays 1:30-2:30 (in the MLSC), Mondays 9:30-11:20 (in MSCS 502A) and by appointment
- PHONE: 744-6296, E-MAIL: roger.zierau@okstate.edu

TEXTBOOK: *Fundamentals of Differential Equations*, seventh edition, by Nagle, Saff and Snider 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 about some applications of differential equations. The following portion of the book will be covered: Ch. 1 (Sec. 1-4), Ch. 2 (Sec. 1-4), Ch. 3 (Sec. 2, 6), Ch. 4 (Sec. 1-7, 9), Ch. 5 (Sec. 1-5), Ch. 6 (Sec. 1-3), Ch. 7 (Sec. 1-7, 9), and Ch. 8 (Sec. 1-3).

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

REVIEW: Part of 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, August 25, 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.

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. Weekly 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 several times throughout the semester (total of 20 points). There will also be two homework assignments of a more 'in depth' nature; these will be collected and graded (total of 40 points).

CALCULATORS: Calculators will be useful at times, but they will not be used on exams.

EXAMS: In addition to the short test described above, there will be three in-class exams (100 points each); they will occur on, or very close to, Sept. 22, Oct. 27 and Dec. 1. There will also be a comprehensive final exam (100 points). About a week before each in-class exam the instructor will post a practice exam on Bright Space/D2L. The final exam is scheduled for Friday, December 15, 2:00-3:50 pm.

GRADES: Homework will total 60 points, the short test is 40 points and the in-class exams plus final exam 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.

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.

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

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 Bright Space/D2L.