## MATH 2233.009—Differential Equations—Fall, 2015 MWF 1:30 PM-2:20 PM, LSE 215

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Office Hours: MWF 2:30–3:20 PM, or by appointment.

Online Classroom (Desire to Learn, "D2L"): https://oc.okstate.edu

Check this site for announcements, lecture notes, updates, homework assignments, and other material.

**Text:** Elementary Differential Equations and Boundary Value Problems, Tenth Edition, by William E. Boyce and Richard C. DiPrima. Note: You may use the 9th edition instead, but be aware that the numbering of the homework problems is different in the two editions. Lists of homework problems for each of these editions are posted on D2L. We will cover selected sections of chapters 1–6.

Quizzes and Homework: Several times during the semester a quiz (closed book and closed notes, unless otherwise indicated) will be given. Homework will be assigned, but it will not be collected or graded. Nevertheless, it is extremely important that you work on the homework problems; the quizzes and exams will include similar problems. Quizzes will be announced in class and on the D2L Course Homepage. The list of homework problems will be posted on D2L under Content.

**Exams:** There will be three fifty-minute examinations. They will be announced in class and on D2L. A comprehensive final examination will be administered from 2:00 to 3:50 PM on Friday, December 11. Unless otherwise indicated, exams will be closed book, closed notes.

**Grading:** Each 50-minute exam is graded on a 100 point scale and counts 20% of your total course score. The final is graded on a 200 point scale and counts 30% of your total score. There is no curving of exam scores.

The individual quizzes may be graded on different point scales. At the end of the semester your total quiz score will be adjusted to a 100 point scale as follows. A certain number of quiz points will be dropped from the maximum possible number of points to obtain a certain "perfect score". For example, suppose that there were six quizzes and that their individual point scales were 25, 20, 30, 25, 30, and 20. Then the maximum possible number of quiz points would be 25+20+30+25+30+20=150. If 30 points were dropped, then the "perfect score" would be 120. You would then be assigned the percentage (up to 100) of this "perfect score" that you have earned. Continuing with our example, if your scores were 20, 0, 10, 25, 20, and 15 you would have 20+0+10+25+20+15=90 quiz points. Then your total quiz percentage would be 75 (90 out of 120) instead of 60 (90 out of 150). If, in this example, you earned 120 or more quiz points then you would receive the maximum of 100. The number you are assigned will then count 10% of your total course score.

The following formula will give you a total course score which is some number out of 1000.

$$TOTAL = 2 (EXAM 1 + EXAM 2 + EXAM 3) + (1.5) FINAL + QUIZ\%$$

If you make at least the following total score, you will make at least the indicated letter grade. (Depending on the distribution of scores, it is possible that lower cutoffs may be used.)

900 points-A, 800 points-B, 700 points-C, 600 points-D

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Partial Credit: On quizzes there will be very little, if any, partial credit. On exams the amount of partial credit will depend primarily on how much of a problem you do correctly. On both quizzes and exams it is extremely important that you write down all of the steps involved in getting your final answer, not just the final answer by itself, in order to ensure credit. In general, once you make a mistake or deviate from the method required on that problem you will receive no credit on the rest of the problem.

Online Material: The Online Classroom site for this course will contain general information and announcements, quiz and exam keys, review sheets, and possibly other material, such as notes and exercises on supplemental topics and links to differential equations resources on the Web.

MLSC: The Mathematics Learning Success Center, located on the fifth floor of Edmond Low Library, provides several services which may be useful to you. In particular it provides tutoring for this course. Tutoring will be available at certain specified times which will be announced on the MLSC website at http://www.math.okstate.edu/mlsc.

The MLSC computers have mathematical software, including Maple, Mathematica, and Matlab, which can be used to solve various differential equations problems. Some of these programs are also available in various computer labs on campus as well as online via the virtual computer labs. See http://it.okstate.edu/students for more information. You are not required to use such software, but I urge you to familiarize yourself with it. In particular, it is an excellent way to check your homework.

Electronic Device Usage: On quizzes and exams you may use a calculator no more powerful than a TI-89. Note that if a problem states that you must show all the algebraic and/or calculus steps involved, then you must do so rather than just copying down calculator results. You may not use any other electronic devices, including computers, tablets, phones, music players, radios, or any device with a QWERTY keyboard. TI-83 calculators can be checked out for the semester for free from the Mathematics Department office, 401 MSCS during normal business hours as long as supplies last.

Makeups: The procedure described earlier of dropping a certain number of quiz points to obtain a "perfect score" is the official mechanism for dealing with missed quizzes. Therefore, there will be no makeups for missed quizzes, no matter what the reason why the quizzes were missed.

Makeups for exams will be given only for serious and unavoidable reasons. You should try if at all possible to contact me before the regularly scheduled exam time. These makeup exams may be somewhat harder than the original exams.

Syllabus Attachment: This document contains further information on such things as drop dates, incomplete grades, special accommodations for students with disabilities, academic integrity, where to go for help on various issues, and general university policies. It is available on the course D2L site as well as at the following website: Go to http://academicaffairs.okstate.edu. Click on Resources for Students. Then click on Current Syllabus Attachment.