DIFFERENTIAL EQUATIONS 12:30PM-1:20PM

Instructor:

Durga KC

Office:

MS408

Office Hours:

Tuesday and Thursday from 2:00-3:30pm and by appointment

Telephone:

405-744-2282

e-mail:

kcdurga@math.okstate.edu

Course Web Page:

oc.okstate.edu

Required Textbook and Supplies:

• <u>Textbook</u>. Elementary Differential Equations with Boundary Value Problems, ninth edition, by Boyce and DiPrima. The Student Solutions Manual is helpful but optional.

• <u>Graphing Calculator</u>. You may check out a graphing calculator from the Mathematics Department (401 MS) for use during the semester while the supply lasts; there is NO charge. I permit the use of a calculator during exams in this course.

Course Prerequisites: The prerequisite for this course is a solid knowledge of techniques of integration and manipulation of exponentials and power series, as gained from successfully completing Calculus II (we strongly recommend a grade of `C' or better).

Course Evaluation: There will be a total of 700 points possible in this course, distributed among homework, quizzes, hourly exams, and the final exam. Course grades will be determined according to the following distribution.

Homework		150 points
Quizzes		50 points
Examination 1		100 points
Examination 2		100 points
Examination 3		100 points
Final Examination		200 points
	TOTAL	700 points

Letter grades will be assigned according to the following scale.

630 - 700 points	Α
560 - 629 points	В
490 - 559 points	C
420 - 589 points	D
0 - 419 points	F

Examinations: There will be three (3) fifty-minute examinations with a maximum possible score of 100 points each and a 200 points comprehensive final examination. *Make-up examinations* will be given only for **very serious and unavoidable** conflicts and *only if* you notify me before or as soon as possible after the missed exam.

Our exams will be held on the following dates; mark your calendar NOW! I will announce which sections they cover at least two class periods in advance.

Exam 1: Wednesday, February 15

Exam 2: Friday, March 16 Exam 3: Friday, April 20, 2011

Final Exam: Wednesday, May 2, 10:00 - 11:50am

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Quiz Grade: worth a total of 50 points, will be given about 4-5 times during the semester. Quizzes are intended to help prepare you for the exams.

If class time is tight, selected quizzes may be given at the MLRC. In this case, you will have two days in which to take the quiz. Hours will be announced. You will be permitted a maximum of 30 minutes for completion of a quiz. Calculators will be permitted, but notes, books, telephones, and internet access are not permitted during quizzes.

Homework Grade: worth 150 points, collected about once a week, usually on Fridays. Each assignment is worth 15 points and your 10 best assignments will determine your homework grade.

To do well on my exams, you must be able to identify the correct technique quickly and use it accurately and efficiently. Regular practice is essential. I will assign homework problems from all sections of the text. Each week the homework will be collected and a few problems, not announced in advance, will be graded. Homework should be prepared on loose sheets with no ragged edges and stapled. Once I deliver papers to the grader and post the solutions to a particular assignment, late papers will not be accepted. If you miss an assignment, that will be one of your dropped scores. In order to receive full credit your work must be clear and legible, you must show all work, and explanations must be written out in correct English sentences. I highly recommend checking all of your answers in the back of the book and in the Student Solution Manual.

MLRC: Mathematics Learning Resource Center – The MLRC is an invaluable resource to support your mathematical learning. They are located on the 4th floor of the Classroom Building (420 CLB, 405-744-5818). Special tutoring hours for our course are available at the MLRC on Tuesday/Thursday between 6:00pm-9:00pm.

Lecture Video: The video record of Dr. Mantini's lectures in this course will be available for later viewing on OSU's video server, vbrick.okstate.edu.

Attendance Policy: Daily attendance is critically important to succeed in this course. The availability of video recordings does not remove your obligation to attend class. You are responsible for the content of every lecture. I will take roll daily. You may earn up to 10 points bonus by regular class attendance, as follows:

- 10 points bonus for missing 3 or fewer classes;
- 7 points bonus if you miss 4 classes;
- 3 points bonus if you miss 5 classes;
- 0 bonus points if 6 or more classes are missed.

Academic Dishonesty: Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript (F!), and being suspended from the University. Carefully read the OSU policy at academicintegrity.okstate.edu.

<u>Final Note:</u> Any changes in this syllabus will be communicated to you by the instructor in class or on our course website.

Boyce-DiPrima Ninth Edition Assignment List: I assign homework from every section of the text that we cover. Assignments must be stapled and completed on loose sheets with no ragged edges. We will spot check a few selected exercises before returning the assignments. I highly recommend checking all of your answers in the back of the book and in the Student Solution Manual.

Assignment	Due Date	Sections	Problems assigned
1	1/20	1.1	1, 5, 7, 9, 14, 15-20, 23, 24
		1.2	1a, 2a, 3, 8, 9, 12
		1.3	2, 4, 6, 7, 13, 14
2	1/27	2.1	1c, 2c, 6c, 8c, 15, 17, 19, 20, 31, 32
		2.2	1, 4, 5, 7, 8, 11, 16, 17, 19, 23, 26
3	2/3	2.3	3, 4, 7, 12, 16, 19
		2.4	2, 3, 4, 7, 8, 10, 13, 16, 27, 30
4	2/10	2.5	2, 3, 5, 9, 15, 18, 22
		2.6	1, 2, 4, 10, 13, 16, 27, 30
Exam 1	2/15		Covers Assignments 1-4
5	2/24	3.1	3, 6, 7, 10, 11, 12, 15, 17, 20
		3.2	2, 3, 4, 5, 7, 8, 13, 14, 16, 22, 38, 39
6	3/2	3.3	1, 5, 8, 11, 14, 17, 19, 21, 35, 36, 37
		3.4	3, 4, 5, 9, 12, 13, 16, 23, 25, 41, 42, 43
7	3/9	3.5	1, 2, 3, 4, 5, 6, 13, 15, 17, 29
		3.7	2, 3, 5, 6, 8, 11, 12, 17, 18
Exam 2	3/16		Covers Assignments 5-7
8	3/30	3.6	2, 5, 7, 9, 13
		3.8	1, 3, 5, 7, 9, 11a, 12
9	4/6	5.1	1, 3, 5, 9, 13, 14, 17, 19, 23
		5.2	1, 2, 6, 12, 16, 18
10	4/13	6.1	1, 5, 6, 10, 14, 15, 19, 22
		6.2	2, 5, 12, 14, 16, 22, 28, 30, 33
Exam 3	4/20		Covers Assignments 8-10
11	4/27	6.3	1, 2, 4, 7, 10, 14, 17, 19, 20, 21, 30
		6.4	3, 5, 8
12	5/2	4.1	4, 5, 7, 8, 11, 13
		4.2	1, 4, 11, 14, 18, 32
		4.3	1, 4, 7
Final	5/2	10:00-	Comprehensive: Covers Assignments 1-11
		11:50am	