MTH 244 Differential Equations Summer session II - 2013

Instructor: Orlando Merino, merino@math.uri.edu, 200F Lippitt Hall, 8744442
Textbook: An Introduction to Differential Equations, by Stanley Farlow, Dover Pubs, 1994.
Calculator: Not required, and not allowed in tests.
Meets: MTuWTh, 8-9:50 a.m., Lippitt 204.
Office Hrs: MTuWTh, 12:30-2 p.m. or by appointment.
Prerequisite   MTH142 or equivalent

About the course MTH 244 is a first course in ordinary differential equations. Differential equations are used by scientists and engineers to model physical, biological and economic phenomena. In this course we will learn both how to use differential equations to describe different phenomena and mathematical techniques for solving differential equations. For this we will use numerical, graphical, and analytical methods. The methods to be discussed include elementary analytical techniques that lead to exact solutions of certain classes of problems, numerical algorithms or series expansions for approximating solutions, and geometric analysis.

Objectives At the end of the session you will be able to use numerical, graphical, analytic techniques to analyze and/or solve scalar and systems of differential equations, and to apply these concepts in the study of basic mathematical models.

Assignments We will have homework collected every day of class, with some exceptions. Also computer homework will be assigned. Homework questions will be answered at the beginning of class. You may also email me your questions (merino@math.uri.edu).

1.1: 4,6,8	**3.5:** 8,12	**5.2:** 1,3,6,7,8,10,11,19
1.2: 2,4,14,34a	**3.6:** 3,10	**5.3:** 2,5,13,16
2.1: 4,6,14,20	**3.7:** 3,5,13,14,24,32	**5.4:** 3,6,8
2.2: 2,4,6,10,13,14,18,30	**3.8:** 3,6,7,14	**5.5:** 1,2,8,10,13,19,21
3.1: 3,6,10,11,18,42,43	**4.1:** 9,10,13,15	**5.6:** 1,2,4
3.2: 4,18	**4.2:** 3,4,6,10,12,13	**Ch 6: TBA**
3.3: 2,4,6	**4.3:** 1,2,3,4,5	
3.4: 4,16	**5.1:** 1,2,3,9	

Solutions to Problems: It is your responsibility to communicate clearly in writing up solutions for homework, quizzes, and exams. Your results must display your understanding well and be written in a correct, complete, coherent, and well organized fashion. The rules of language still apply in mathematics, and apply even when symbols are used in formulas, equations, etc. Neatness counts!

Evaluation
Your grade will be based on tests (on Mondays, except on first day of class), homework, quizzes, computer projects, and a comprehensive final exam (given on the last day of class) as follows:
        Four exams(12.5% each), Final Exam (25%), Assignments (25%).

Expectations You are expected to attend every lecture, and to submit your work on time -- no late work will be accepted (exceptions allowed for medical reasons). You must check SAKAI frequently.

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In class Please ask questions at any time. I will make an effort to clarify difficult concepts, or to explore any interesting ideas you may offer. Class participation has a positive impact on the student's learning, and I encourage it.

Outside of class To keep up with the rapid pace of the class requires that you spend several hours every day doing homework, reviewing notes, reading the book, and working out extra problems, all in addition to the time spent in class.

Disability   Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations (contact Disability Services for Students Office at 330 Memorial Union 401-874-2098).

Academic Honesty Cheating is defined in the University Manual section 8.27.10 as *the claiming of credit for work not done independently without giving credit for aid received, or any unauthorized communication during examinations* (of course, this includes use of the "internet"). Students are expected to be honest in all academic work. The resolution of any charge of cheating or plagiarism will follow the guidelines set forth in the University Manual 8.27.10 - 8.27.20.

Civility If you must come in late or leave early, let me know and please do not disrupt the class. Please turn off all cell phones, ipads, ipods, etc. In particular, "texting" is prohibited.

Incomplete Grade I follow to the letter the URI regulations concerning incomplete grades, namely the following paragraphs taken from the university manual:

8.53.20. A student shall receive a report of "Incomplete" in any course in which the *course work has been passing* up until the time of a *documented* precipitating incident or condition, but has not been completed because of illness or another reason which in the opinion of the instructor justifies the report. An instructor who issues a grade of "Incomplete" shall forward a written explanation to the student's academic dean.

8.53.21. The student receiving "Incomplete" shall make necessary arrangement with the instructor or, in the instructor's absence, with the instructor's chairperson to remove the deficiency. This arrangement shall be made prior to the following mid-semester for the undergraduate student and within one calendar year for the graduate student.

Math Tutoring Schedule		Summer Session II - Kingston		6/16 to 7/28	Rm. 201
Time	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Notes**
10:00am	A. Armstrong/D. Smith	D. Smith/C. Staniszewski	A. Armstrong	D. Smith/A. Armstrong	
11:00am	A. Armstrong/D. Smith	D. SmithC. Staniszewski	A. Armstrong	D. Smith/A. Armstrong	
12:00pm	A. Armstrong/D. Smith	D. Smith/E. Denette	A. Armstrong/E. Denette	D. Smith/E. Denette	
1:00pm	A. Armstrong/D. Smith	D. Smith/E. Denette	A. Armstrong/E. Denette	D. Smith/E. Denette	
2:00pm	T. Valletta/D. Smith	D. Smith/E. Denette	T. Valletta/E. Denette	D. Smith/E. Denette	
3:00pm	T. Valletta	J. Reis	T. Valletta	J. Reis	
4:00pm	T. Valletta	J. Reis	T. Valletta	J. Reis	
5:00pm	W. Jamieson	J. Reis		J. Reis	
6:00pm	W. Jamieson	J. Reis		J. Reis	