

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES

Course #: Math 2326- 32224
Course Title: Differential Equations
Credit Hrs: 3
Term: Summer II- 2017
Course Meetings & Location: MTWTRF 11:40-1:50 in LART 101
Prerequisite Courses: Math 1312
Course Fee: (if applicable)
Instructor: M. A. Khamsi
Office Location: Bell Hall 328
Contact Info: 747-6763 Phone #
<http://www.drkhamsi.com/mail.php> E-mail address
747-6502 Fax #
747-6750 Emergency Contact
Office Hrs: MTTR from 2:00 to 3:00PM and by appointment.
Textbook(s), Materials: Required: Paul Blanchard, Robert L. Devaney, Glen R. Hall. *Differential Equations*. Brooks/Cole, 4th edition.

Suggested:

Course Objectives (Learning Outcomes): During the course you should expect (and I will expect) that you make considerable progress in the following areas:

1. Apply standard techniques to analyze and solve ordinary differential equations: using analytical, numerical and qualitative methods; using the method of the Laplace transform.
2. Be able to model with differential equations and interpret the results of their mathematical analysis.
3. Understand the fundamental difference between linear and non-linear differential equations.
4. Improve your ability to communicate Mathematics effectively in written form.

Course Activities/Assignments: There will be homework, grades from quizzes, two midterms, and the final exam.
Assessment of Course Objectives:
Grading Policy: The in class quizzes and homework (20%), the 2 midterms (40%) and the final exam count for 40% towards your overall class average.
Make-up Policy: Make-up tests will only be given under extraordinary circumstances and only if you notify the instructor prior to the exam date.

Content: The course will cover the following material:

1. **Chapter 1.1-1.9**
2. **Chapter 2.1-2.4**
3. **Chapter 3.1-3.7**
4. **Chapter 5.1-5.2**
5. **Chapter 6.1-6.4**

The instructor will assume that you have a thorough knowledge of the material covered in Calculus II.

Fair Warning: It is expected that you spend an absolute minimum of two hours outside of class for every in-class hour on solving homework problems, reading the textbook and reviewing your class notes. If you do not have the time necessary, you should take the course some other semester. The course's approach to differential equations is intended to be different. Since you already had a math course you will probably find much that is unfamiliar and a very different emphasis on things you may think you know already. Be alert to this and remember that previous experience is unlikely to be enough to coast on. Treat each topic as if you were meeting it for the first time, and be alert to make sure you understand each day's material before the next class meeting.

Attendance Policy: It is a must you attend all lectures. Unjustified absences will result in points taken from the Part average.

Academic Integrity Policy: For more on this, please refer to UTEP's policy cited in:

<http://academics.utep.edu/Default.aspx?tabid=23785>

Civility Statement: As a general rule, anything that will disturb other students will not be admitted.

Disability Statement: If a student has or suspects he/she has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

Military Statement: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact the instructor as soon as possible.

Course Schedule: The final exam is comprehensive and held **Friday August 4** from 1:00 PM to 3:45. The class schedule lists **Friday, July 28** as the last day to drop with an automatic "W". The instructor will NOT assign a "W" for students dropping the course after the deadline.

Suggested Homework: Every odd problem in every section and the Homework posted on the Instructor webpage.