

Ordinary Differential Equations – Math 3305

Syllabus for Fall 2009

Course Information

Class Meets: MWF 8:00-8:50 in RBN 4024

Instructor: Sheldon Davis
4002 RBN
903-565-5839
sdavis@uttyler.edu

Office Hours: 9:00-9:50 daily or by appointment.

Course Description: We will begin the study of the theory and applications of ordinary differential equations.

Text: *Introduction to Ordinary Differential Equations*, by Shepley Ross ISBN 0-471-09881-7

Credit hours: 3 hours

Course Prerequisites: Math 2414

Student Learning Outcomes: Upon completion of this course, students should be able to do the following:

- Understand and use abstract mathematical concepts (critical thinking)
- Determine order, type and linearity of differential equations
- Determine if a particular function is a solution to a differential equation
- Find the general solutions to first order linear differential equations
- Find the general solutions to linear differential equations with constant coefficients
- Use power series to find solutions to differential equations
- Use the method of Laplace transforms to find solutions to differential equations
- Model an assortment of physical situations using differential equations
- Solve systems of differential equations

Course Timeline

Important Dates:

September 7: Labor Day – no class
October 30: Last day to drop a course with a W
November 25-28: Thanksgiving Break – no class
Wednesday, December 16, 8:00 am – 10:00 am: Final Exam

Course Evaluation

Quizzes will count one-fourth, each of the two midterm exams will count one-fourth, and the final exam will count one-fourth.

The scale will be no more harsh than 90%=A, 80%=B, 70%=C, 60%=D.

Quizzes: Sept. 9, Sept. 23, Oct. 21, Nov. 4, Dec. 9

Midterms: Oct. 7, Nov. 18

University Policies

ADA Compliance:

If you have a disability, including a learning disability, for which you request disability support services/accommodation(s), please contact Ida MacDonald in the Disability Support Services office so that the appropriate arrangements may be made. In accordance with federal law, a student requesting disability support services/accommodation(s) must provide documentation of his/her disability to the Disability Support Services counselor. For more information, call or visit the Student Services Center located in the University Center, Room 282. The telephone number is 566-7079 (TDD 565-5579). Additional information may also be obtained at the following UT Tyler Web address: <http://www.uttyler.edu/disabilityservices>.

Social Security Statement:

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number.

Note Regarding Student Absence Due to Religious Observance:

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor by the second class meeting of such absences.

Grade Replacement:

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to file an intent to use grade forgiveness will result in both the original and repeated grade being used to calculate your overall grade point average. A student will receive grade forgiveness (grade replacement) for only three (undergraduate student) or two (graduate student) course repeats during his/her career at UT Tyler. (2008-2010 Catalog, p. 26)