

MAT 303, LECTURE 02 : SPRING 2016

Course Description

Most of the fundamental principles of the sciences are expressed mathematically in the form of differential equations. This course discusses some basic methods for solving ordinary differential equations with applications to the physical, biological and social sciences. Particular emphasis is given to linear differential equations and systems of linear differential equations.

Course Teachers

Lecture 01: **Lowell Jones** is teaching Lecture 02 which meets Tuesdays and Thursdays 8:30am to 9:50am in Library W4540. His office is room **2-111 in the math building**; phone 632-8248; email at lejones@math.sunysb.edu; office hours TBA.

Recitation 01: **Marion de Oliveria Gomes** is teaching Recitation 03 which meets on Mondays 11am-11:53am in Library W4530. His office is in room 3-104 in the math tower; email at marion.deoliveriagomes@stonybrook.edu; office hours TBA.

Recitation 02: **Edward Bryden** is teaching Recitation 04 which meets on Thursdays 11:00am-11:53am in Physics 116. His office is **Physics D-101 in physics building**; email at ebryden@math.stonybrook.edu; office hours TBA.

Text

Differential Equations and Boundary Value Problems, fourth edition, by C. Henry Edwards and David E. Penney.

Homework

The homework assignment for any given week can be found by going to the “Calendar” on the Blackboard website for the lecture (viewed in monthly form) and clicking on the first class day of the appropriate week. For example, the first homework assignment can be found by going to January 25 and clicking on “HW 1 and topics”. Problem sets will be assigned each week. Each homework set is due during the recitation class of the week following the assignment (unless otherwise stipulated).

Exams

There is one inclass midterm on Tuesday March 22, 2016. The final exam will take place on Tuesday May 10, 2016, from 11:15am-1:45pm.

If you register for this course you must make sure that you have no schedule conflicts with the times of the midterm and final exam. **Makeup exams will only be given in the event that circumstances beyond the student's control do not allow the student to take the exams at the assigned times; in particular "schedule conflicts" are not reasons for a makeup to be given.**

Grading

Homework=30%

Midterm =30%

Final exam =40%

Americans with Disabilities Act:

If you have a physical, psychological, medical or learning disability that may impact on your ability to carry out assigned course work, please contact Disability Support Services (DSS) at 631-632-6748. The DSS will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation is confidential.

Academic Integrity:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity see the academic judiciary web site at <http://www.stonybrook.edu/uaa/academicjudiciary/>

Critical Incident Management:

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Further information about most academic matters can be found in the undergraduate Bulletin.

Approximate Schedule for Mat 303

The weekly homework assignments will be posted on the course calendar (see Blackboard).

Week of 1/25-1/29: cover sections 1.1,1.2

Week of 2/1-2/5: cover sections 1.3,1.4

Week of 2/8-2/12: cover sections 1.5,1.6

Week of 2/15-2/19: cover sections 2.1,2.2

Week of 2/22-2/26: cover section 2.3

Week of 2/19-3/4: cover sections 3.1, 3.2

Week of 3/7-3/11: cover sections 3.3, 3.4

Week of 3/14-3/18: spring recess (no classes)

Week of 3/21-3/25: **midterm on 3/22**; cover section 3.5 on 3/24

Week of 3/28-4/1: cover sections 4.1,4.2

Week of 4/4-4/8: cover sections 5.1,5.2

Week of 4/11-4/15: cover sections 5.3,5.4

Week of 4/18-4/22: cover sections 5.5,5.6

Week of 4/25-4/29: cover sections 8.1,8.2

Week of 5/2-5/6: catchup and review