

MAT 485 Spring 2010

Professor: Lixin Shen

Class: TTh 9:30am-10:50pm 313 Carnegie

Office: 206D Carnegie.

Phone: 443-2889

Email: lshen03@syr.edu

Office Hours: TTh 2:30-3:30

Course Supervisor: Professor G. C. Verchota, 229A Physics Bldg, gverchot@syr.edu

Catalog Description: MAT 485. Credit cannot be given for both MAT 485 and MAT 514 or for both MAT 485 and MAT 331. MAT 485 does not count towards mathematics major, and students in CIS should not take it.

Learning Goals: This course introduces students to ordinary differential equations and linear algebra. In particular, we shall cover the following topics: first order ODEs, separable equations, second order ODEs, higher order linear ODEs, systems of ODEs, determinants, linear systems, inverse of a matrix, eigenvalues & eigenvectors.

Text: *Differential Equation & Linear Algebra*, 2nd Edition, by Farlow, Hall, McDill, and West Published by Prentice Hall

Homework: Many days there will be a quiz consisting of one or two of the assigned exercises from the section(s) covered two classes before. (Answers for a selection of problems are given in the back of the text.) You are encouraged to ask questions about problems you are having trouble with the day after they are assigned. **Working many problems is essential for learning mathematics!** Work enough of the problems to be sure you understand the material and to prepare for a possible quiz. There should be ample class time to discuss any difficulties with homework problems. Depending on availability of grading assistance we may also collect some homework problems.

Attendance: Class attendance is essential for your understanding of the material.

Examinations: There will be two in class examinations during the semester, as well as a final examination covering the entire course. Dates and times of the examinations are tentatively scheduled as follows

The final exam will be held **Wednesday, May 12**. Don't make plans to leave campus before this time.

| Date | Exam/Final Exam |
|---------------|---------------------|
| Feb. 25 | Midterm Exam |
| Apr. 8 | Midterm Exam |
| May 12 | Final Exam |

Grading: Quizzes and homework will count for 20% of the grade, the final exam for 40%, and the tests will count for the remaining 40 %. Your letter grade for the term then comes from the following table.

| | | | |
|--------|----|-------|----|
| 93–100 | A | 77–79 | C+ |
| 90–92 | A- | 73–76 | C |
| 87–89 | B+ | 70–72 | C- |
| 83–86 | B | 60–69 | D |
| 80–82 | B- | 0–59 | F |

Academic Integrity:

The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort.

Students with Disabilities:

If you believe that you need accommodations for a disability, please contact the Office of Disability Services(ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.