

COURSE SYLLABUS**MAT 485 Fall 2017 Sections M002 & M003****Differential Equations and Matrix Algebra for Engineers****Sect: M002: Monday - Wednesday, 2:15 pm – 3:35 pm, Carnegie 122****Sect: M003: Monday - Wednesday, 12:45 pm – 2:05 pm, Carnegie 122****Instructor:** Paul Tuttle**Office:** Room 207 Carnegie Hall**Office Hours:**

- TBD (will be established based on class survey)
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If I find these hours to be inadequate, I will add extended office hours. Also, I'm available outside of these hours by appointment.

Phone: 315-243-4808 (cell - Please text)**Email:** pgtuttle@syr.edu**All Class Related Material is on Blackboard**

Course Supervisor: Professor Eugene Poletsky, Room 206A Carnegie, 315-443-1486, epolets@syr.edu. Please inform your instructor of any problems that you have with this course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor without delay.

Text: *Differential Equations & Linear Algebra (Second Edition)* by Farlow, Hall, McDill, and West, Prentice Hall, 2007. We expect to cover Chapters 1-8 with some omissions. The sections to be covered and the list of assigned homework problems from every section are attached.

Prerequisites: MAT 397. Credit cannot be given for both MAT 485 and MAT 414 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: Solutions of ordinary differential equations and such, Laplace transforms, vector spaces, matrix algebra, linear systems, eigenvalues and eigenvectors.

Exams: There are two in-class exams, tentatively scheduled on

EXAM #1: 27 September 2017

EXAM #2: 15 November 2017

The Final exam is on

Sect M002: TBS

Sect M003: TBS

The Final is comprehensive.

There are no make-up exams, and the *Final exam will not be given at any other time.*

BEHAVIOR

Attendance: You are expected to attend class and to participate in it. If you miss a class, you are responsible for obtaining notes and any announcement from that class from another student.

Exams: If you need to take a break during exams, leave your cell phone on the table. Pick it up upon your return.

Homework and Quizzes:

Solving the homework problems is crucial for your success! Homework is assigned approximately weekly. Homework is due as you enter the classroom. Homework submitted after that is considered late and will not be accepted. The two lowest homework scores will be dropped. Homework will be graded based on my selection of one or two representative, randomly selected, problems (depending on the length of the assignment).

The Homework assignments may be modified and an announcement will be posted weekly.

Quizzes will be held approximately weekly. There are no make-up quizzes. The two lowest quiz scores will be dropped.

Tips for Success

Don't fall behind! The material builds upon itself rapidly, so try to keep up on a daily basis. It is absolutely essential that you understand how to solve all the assigned problems. Once you understand how to solve a problem, write down your solution neatly and in full detail with explanations that make your reasoning clear. This will make your old homework assignments more useful to you when you are studying for an exam. Expect to work hard, be persistent and patient.

Course Grades: The Final grades will be computed as follows:

- 2 Exams 25% each
- Homework 5%
- Quizzes 15%
- Final 30%

In addition, half of the lowest exam score may be replaced by the score on the final.

Letter Grades

A	94+
A-	90 - 93.99
B+	87 - 89.99
B	84 - 86.99
B-	80 - 83.99
C+	77 - 79.99
C	74 - 76.99
C-	70 - 73.99
D	60 - 69.99
F	below 59.99

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 303 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. Making arrangements with ODS takes time. Do not wait until just before the first test.

You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Academic Integrity: Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams

and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

Complete academic honesty is expected of all students. Any incidence of academic dishonesty as defined by the SU Academic Integrity Policy will result in both course sanctions and formal notification of the College of Arts and Sciences and College of Engineering.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. For more information and the complete policy, see <http://class.syr.edu/academic-integrity/policy/>

Religious Observances: Syracuse University's religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.