

# Syllabus, MAT 295: Calculus I

Fall 2017

Course Supervisor

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## Course Description

MAT 295 is the first course in a three-semester sequence in calculus. This sequence is designed for mathematics, science and engineering majors and for those students in other majors who intend to take more advanced courses in mathematics. This course covers functions, limits, differentiation, and integration as well as applications such as curve sketching, optimization, linear approximation, and computation of areas.

## Prerequisites

There are no official prerequisites for this course, but students should have a strong foundation in algebra and precalculus. During the first week of class a readiness test will be given; those who do not do well should take a precalculus course such as MAT 194 instead of MAT 295. Students who have scored 4 or 5 on the Advanced Placement Calculus AB exam should register for MAT 296 Calculus II. Students who have scored 4 or 5 on the Advanced Placement Calculus BC exam should register for MAT 397 Calculus III.

## Credit

The course material of MAT 295 overlaps with that of MAT 284, MAT 285, and MAT 286, and so credit cannot be given for both MAT 295 and these courses. Read the Course Catalog for these four courses for current rules. MAT 295 can count towards the Quantitative Skills requirement and the Divisional Perspectives Requirement in Natural Sciences and Mathematics as a part of the Liberal Arts Core.

## Course Format

The course meets three or four times a week, consisting of two or three lectures and one recitation. Your recitation instructor will answer questions about the course material and will work with students on solving additional problems. **A quiz will be given in most recitation sessions.**

## Materials

### Textbook and WebAssign

- Stewart, J. Essential Calculus: Early Transcendentals (2<sup>nd</sup> ed). Cengage Learning
- WebAssign access code for submitting on-line homework.
  - The ISBN for the bundle (book and WebAssign) is 9781133425946.
  - The ISBN for WebAssign (with e-book) is 9781285858265.

## Calculators

MAT 295-296-397 students are expected to complete the calculus sequence without the use of a calculator. Calculators will not be permitted on quizzes or exams.

### Attendance and Participation

Students are expected to attend and participate in class. Strong attendance and participation are good indicators of success in MAT 295. Each student is responsible for all course material, announcements, quizzes and exams made in class, whether or not the student attended that day's class.

### Homework

Homework assignments will be announced by your instructor in class or online. Due dates will be strictly enforced. Depending on your instructor, there may be written and/or online homework (WebAssign).

### Exams and Quizzes

#### Quizzes

Quizzes will be given in recitation. There will be a quiz almost every week during the semester.

#### Midterm Exams

There will be three in-class or in-recitation examinations. Exams will be given during the weeks of September 22, October 20, and November 17. Instructors will announce the exact day of the exam.

#### Final Exam

The final exam covers the entire course. It is a two-hour exam and will be given on Wednesday, December 13, 2017 some time between 8:00 AM and 2:30 PM. The exact time and location will be announced in class near the end of the semester. *Students must take the final examination during the appointed examination block and at the scheduled time.* If you have a conflict with another final exam, you must contact the instructor *at least two weeks in advance* in order to have it resolved. **Do not make plans to leave campus before 2:30 PM on Wednesday, December 13, 2017. The final exam will not be given at any other time.**

#### Missed Quizzes or Exams

A missed quiz or exam will count as a zero unless it is due to a documented religious observance, University-sponsored event, or documented emergency. For religious observances and for University-sponsored events, this documentation must be submitted in advance. For emergencies, you must present documentation from a physician or from the Dean's Office as soon as you are able to resume attending classes. In such cases, at instructor's discretion, you will either be given an opportunity to take an alternate quiz or exam, or to have a suitable subscore from the final exam counted in place of the missed assessment. Please consult with your course instructor.

### Grading Policy

Course grades will be computed using the percentages: 20% for each of the three exams, 20% for the final exam, and 20% for quizzes and homework. Letter grades are determined as follows:

93-100	A	77-79	C+
90-92	A-	73-76	C
87-89	B+	70-72	C-
83-86	B	65-69	D
80-82	B-	60-64	F

### Help

Each lecture and recitation instructor will be available to answer questions during office hours. Help is also available at the Calculus Help Center.

### Students with Disabilities

If you believe that you need academic adjustments (accommodations) for a disability, please contact the Office of Disability Services (ODS), visit the [ODS website– http://disabilityservices.syr.edu](http://disabilityservices.syr.edu), located in Room 309 of 804 University Avenue, or call (315) 443-4498 or TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting academic adjustments. ODS is responsible for coordinating disability-related academic adjustments and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since academic adjustments may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

### Religious observances policy

SU religious observances policy 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 are 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.

### 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 university 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 written 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.

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/>.

### Tips for Success

Here are a few basic suggestions for how to succeed in this course.

#### Keep up with homework

It is absolutely essential that you understand how to solve the assigned homework problems and, more importantly, how and why the skills and techniques presented in the course are used in solving the assigned problems.

#### Ask questions

It is normal to get confused from time to time or to need your instructor to clarify ideas. Asking questions is part of the learning process.

#### Stay caught up

Mathematical concepts build on each other cumulatively and you need to stay on top of the material at every stage. If you are having difficulty, don't expect that the problem will take care of itself and disappear later. Contact me immediately and discuss the problem.

#### Form a study group

Many students benefit from a study group to work through challenging problems and to review for exams. You should attempt the problems ahead of time by yourself and then work through any difficulties with your study partners. Explaining your reasoning to another student can help to clarify your own understanding.

You should expect to work hard. Don't get discouraged if you find some of the material very difficult. Be persistent and patient! If you follow the above suggestions, your experience in this course will be a rewarding one.

### Use of Student Work

In compliance with the federal Family Educational Rights and Privacy Act, registration in this class is understood as permission for assignments prepared for this class to be used anonymously in the future for educational purposes.

### Course-related Problems or Questions

Please inform your instructor of any problems you have with this course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor, listed on the first page, without delay.

### Tentative Schedule

<b>Week</b>	<b>Sections</b>	<b>Special Events</b>
<b>Aug. 28-Sep. 1</b>	1.3, 1.4	
<b>Sep. 4 – Sep. 8</b>	1.5, 1.6	Labor Day
<b>Sep. 11 – Sep. 15</b>	1.6, 2.1, 2.2	
<b>Sep. 18 – Sep. 22</b>	2.2, 2.3	Exam 1
<b>Sep. 25 – Sep. 29</b>	2.4, 2.5	
<b>Oct. 2 – Oct. 6</b>	2.6, 2.7	
<b>Oct. 9 – Oct. 13</b>	3.3, 3.5	
<b>Oct. 16 – Oct. 20</b>	3.7	Exam 2
<b>Oct. 23 – Oct. 27</b>	4.1, 4.2, 4.3	
<b>Oct. 30 – Nov. 3</b>	4.3, 4.4, 4.5	
<b>Nov. 6 – Nov. 10</b>	4.5, 4.7, 5.1	
<b>Nov. 13 – Nov. 17</b>	5.2	Exam 3
<b>Nov. 20 – Nov. 24</b>		Thanksgiving Break: No classes
<b>Nov. 27 – Dec. 1</b>	5.3, 5.4	
<b>Dec. 4 – Dec. 8</b>	5.5	
<b>Dec. 11 – Dec. 15</b>		Final Exam