

MAT 296 — Calculus II
Summer 2017

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Office: Smith Hall, Room 221

Office Hours: Tuesdays 10:40-11:40 and Wednesdays 2:15-3:15 and by appointment

Course Description: MAT 296 is the second course in a three-semester sequence in calculus. This sequence is designed for students who intend to take more advanced courses in mathematics. This course covers techniques of integration, improper integrals, polar coordinates, sequences and series (including power series, Taylor and Maclaurin series).

Learning Goals: The broad learning goals for this course are for you to:

- ✓ have a basic knowledge and understanding of the analytic and geometric concepts taught, and some of their classical applications to other sciences such as physics;
- ✓ understand the nature and role of deductive reasoning in mathematics;
- ✓ have the ability to use and understand the usage of mathematical notation;
- ✓ have the ability to do hand calculations accurately and appropriately; and
- ✓ have the ability to follow proofs and other mathematical discourse.

Background for Course: Completing MAT 295 (Calculus I) with a grade of C– or better is a prerequisite for MAT 296 (Calculus II). **If you have not satisfied this prerequisite, you must drop MAT 296 and register for MAT 295.** Students who earned a C or C– in MAT 295 are historically at great risk in MAT 296. For these students, it is essential to review material from the earlier course, especially as it comes up again. It is also vital not to fall behind with the current material. Students who have scored a 4 or 5 on the Advanced Placement Calculus BC exam cannot receive both AP credit and credit for MAT 296. Such students should register for MAT 397 Calculus III.

Textbook: *Essential Calculus: Early Transcendentals*, **2nd ed.**, by James Stewart.

Other Resources: Your textbook comes with access to an online resource at http://www.stewartcalculus.com/media/13_home.php. This website has some interactive visuals to accompany the topics in your textbook. It also has “homework hints” for the problems in your textbook that are marked in blue. Other interactive visuals can be found by clicking the TEC icon in the pages of your ebook.

Calculators: A calculator is not required for this course. **No calculators will be allowed on any in-class assignment, quiz, or exam. Using or having available any calculator or other electronic device during any quiz or exam is a violation of the Academic Integrity Policy.**

Class Attendance and Participation: You are expected to attend and participate in class. Missing class is the most common reason for poor performance in the course. If you miss a class, you are responsible for obtaining notes for that class from a

student who attended. It is also your responsibility to find out about any announcements made in class. There will be no make-ups for any in-class assignment, quiz, or exam.

Expected Work and Grading: The required work for this course includes daily homework assignments, in-class assignments, quizzes, two midterm exams, and a final exam. These pieces will be weighed as follows in determining your semester grade:

Homework, in-class assignments, and quizzes – 25%
Exam 1- 25%
Exam 2- 25%
Final Exam- 25%

Your course grade will be 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-	0-64	F

Homework: To learn the material in a mathematics class, it is essential to do all the homework assignments. Homework will be assigned at the end of each section. Announcements will be made in-class as to which problems will be collected. Whether homework is collected or not, completing all the homework problems is essential to be prepared for quizzes and exams. Homework assignments will be posted on blackboard.

In-class Assignments: There will be a worksheet assigned in class almost every week. Students may work together on the worksheet, but each student must turn in their own completed worksheet for a grade. There will be short in-class assignments on most days.

Quizzes: There will be at least 2 quizzes every week given in the beginning of class. The problems on the quizzes will be very similar to problems on the homework. **No makeup quizzes will be given.**

Exams: Two exams and a final exam will be given during the session. **No makeup exams will be given. Any missed exam will be scored as a zero.** In the event of special circumstances such as sickness or other serious emergencies, the instructor may count the corresponding portion of the final exam as the missed exam grade. A valid excuse in writing must be received before the start of the next class in order to be considered.

Test Corrections: An essential part of the testing process is to learn from your mistakes. Hence students not getting an A on a test are required to submit correct solutions to all of the problems missed. Test corrections will count as a quiz grade.

Final Examination: The final exam will be cumulative. It will be given on
Thursday, August 10, 2017, 11:45-2:10.

The final exam will not be given at any other time.

Help: Your instructor will be available regularly during their office hours. You can also seek help at the Calculus Help Center in Carnegie Hall. The Help Center hours are posted by 215 Carnegie Hall or you can obtain a copy of the schedule in the Math Department Office.

Course Supervisor: Professor Dan Zacharia, telephone (315) 443-1580, email zacharia@syr.edu. Please inform your instructor of any problems you are having with the course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor without delay.

Cell Phones: all electronic devices other than the calculator should be turned off and put away during class. Calculators on cell phones are not to be used on tests or quizzes.

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. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations. Making arrangements with ODS takes time. Do not wait until just before the first test.

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. For more information and the complete policy, see http://supolicies.syr.edu/ethics/acad_integrity.htm

Religious Observances Policy: 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 holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that maybe 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.

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

1. 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. Quiz and exam questions will be similar to these problems.
2. Ask questions in lecture, recitation and/or at the clinic about anything that is not completely clear. Don't hesitate to bring questions to your instructors during office hours.
3. Every day, read and study the sections in the textbook covered in the lecture. Learning mathematics takes time! Read carefully and work through all the examples in complete detail. It can be helpful to try to work through an example on your own before reading the solution.
4. 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 your course instructor or your recitation instructor immediately and discuss the problem!
5. 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.
6. 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.

Important Dates: First day of class – July 3, 2017
Add class deadline – July 6, 2017
Pass/Fail or Audit deadline – July 7, 2017
Financial drop deadline – July 11, 2017
Academic drop deadline – July 26, 2017
Withdrawal deadline – August 4, 2017
Last day of classes – August 11, 2017

Tentative Class Calendar

	Date		Date		Date		Date	
July	3	5.5, 7.1	4	No Class	5	Quiz 1 7.1, 7.2	6	Quiz 2 7.3, 6.1
July	10	6.1 Wksht 1	11	Quiz 3 6.2, 6.3	12	Quiz 4 6.3 Review	13	Exam 1 6.6
July	17	6.6, 7.4	18	Wksht 2 7.5	19	Quiz 5 7.5, 7.6	20	Quiz 6 8.1, 8.2
July	24	8.2 Wksht 3	25	Quiz 7 8.3, 8.4	26	Quiz 8 8.4 Review	27	Exam 2 8.5
July/Aug	31	8.5, 8.6	1	Wksht 4 8.7	2	Quiz 9 8.7, 8.8	3	Quiz 10 9.3, 9.4
August	7	Quiz 11 9.4	8	Quiz 12 Review	9	Review Wksht 5	10	Final Exam

This is a tentative schedule and is subject to change. Any changes to exam or quiz dates will be announced in class.