

Departmental Syllabus: MAT 284 (Business Calculus) Spring 2017

This is the common syllabus for all MAT-284 sections. Each section lecture instructor will provide a supplement with additional information for their individual section(s). Please make sure that you are familiar with both the common syllabus as well as your section specific supplement. Contact information and office hours for all math faculty and teaching assistants are also available at <http://math.syr.edu/people/office-hours.html>.

Course Supervisor: 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:

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Course Description: MAT 284 Business Calculus (4 credits). One-variable differential and integral calculus. Applications to business and economics. MAT 284 may not be taken for credit after successful completion of MAT 285 or MAT 295.

Liberal Arts Core: The sequence MAT 183-284, taken in either order, satisfies the Quantitative Skills requirement of the Liberal Arts Core in the College of Arts and Sciences. However, this sequence is specifically designed for students in the School of Management.

Recitations: Each student enrolled in a lecture section must also be enrolled in a recitation section. In most recitation classes there will be a quiz, so be sure that you attend your recitation. Recitation instructors will consider homework problems in the recitations and that is the primary place to get questions answered.

Mathematics Prerequisite: Although there are no formal prerequisites, the knowledge of pre-calculus material at the level of MAT 194 is essential for success in this course.

Textbooks: *Introductory Mathematical Analysis* by Haeussler, Paul, and Wood, Custom edition for SU. Pearson, ISBN: 9780558697129. Only the textbook is required. Used copies are fine. The course will cover most of chapters 1-4 and 10-14.

Calculator: A TI-83 calculator or equivalent is required. Calculators with symbolic manipulation capabilities such as the TI-89 or TI-92 may not be used on quizzes or exams. Further, calculators are not to be shared during exams and quizzes.

Exams: There will be two midterm examinations which will be held on the last lecture day of the following weeks:

Exam 1 last lecture day of week of February 20th

Exam 2 last lecture day of week of April 10th

Final Exam: The final exam will be cumulative. All students must take the final exam at the scheduled time which will be a 2-hour block between 8 a.m. and 2:30 p.m. on **Monday, May 8, 2017**. There will be no exceptions, and so you should not make plans to leave campus before 2:30 p.m. on Monday, May 8, 2017.

Exam Policies: All exams (including the final exam) are closed book and closed notes. Cell phones or any other devices capable of wireless communication are not allowed. Student ID's

will be checked at the exams. There will be no make-up exams. Please see make-up policy below.

Exam Time Limit: Due to the large number of students in the lectures, the instructor may use part of the exam day lecture time for exam administration purposes (setting up exams at the beginning and collecting exams at the end). As such, the time provided to complete the exam may be slightly less than the entire lecture time and exam will have correspondingly appropriate reduced length. If such an adjustment is to be used, it will be announced by the lecture before the exam.

Quiz: Starting from the second week of classes, there will be a quiz in recitation similar to the homework problems. Moreover, there might be some quizzes given during the lecture. The specific sections covered by each quiz will be announced in lecture. There will be no make-up quizzes. The lowest (one) quiz score will be dropped.

Make-up Policy: There will be absolutely no make-ups for any reason. If you miss a quiz/test for a valid reason (which must be verified by a note from a physician or your dean's office), the missing score will be replaced based on the test that follows or the final exam. For the specific replacement policy for your section, please contact your lecture instructor.

Homework: Homework will be done online using WeBWorK, an open-source homework system for math and sciences courses. The number of attempts is unlimited. Problems can be done in any order. You do not have to do them all at once. Two lowest WeBWorK scores will be dropped.

WeBWorK access information:

1. Go to <http://webwork.syr.edu/>
2. Click on the class name "MAT_284_Spring_2017_xxxx" (depending on your lecture instructor's last name).
3. Your username is your NetID in lower case letters (for example, "jqpublic").
4. Your password is initially set to be your 9-digit SUID. You should change it after logging in for the first time. Also, note that even if you used WeBWorK before for another course, the password is reset to the 9-digit student id number.

Additional practice HW problems may be assigned occasionally by the lecture instructor. The instructor will clarify whether or not those problems will be collected.

Grading: Your final grade will be based on two midterm exams (25% each), a cumulative final exam (30%), weekly quizzes (10%), and HW (10%). Final letter grades will be given according to the following scale:

Raw Grade x	Letter Grade	Raw Grade x	Letter Grade
$93 \leq x \leq 100$	A	$77 \leq x < 80$	C+
$90 \leq x < 93$	A-	$73 \leq x < 77$	C
$87 \leq x < 90$	B+	$70 \leq x < 73$	C-
$83 \leq x < 87$	B	$60 \leq x < 70$	D
$80 \leq x < 83$	B-	$0 \leq x < 60$	F

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

Attendance: You are expected to attend every class, every exam, and the final exam. If you miss a class, it is your responsibility to obtain a copy of the lecture notes for that class from another student. You are also responsible for any announcements about changes to the course schedule, the exam schedule, or the course requirements that were made during that class.

Learning Goal: Students will be expected to

1. use and understand basic mathematical notations;
2. select and apply an appropriate mathematical model for a given business/ economics problem;
3. do hand calculations accurately and appropriately; and
4. do calculations with the aid of appropriate hardware and/or software.

Available Student Assistance: Your recitation instructor will hold regular office hours and will make appointments with students having class conflicts with their scheduled office hours. Your lecture instructor will also have office hours. In addition, the Mathematics Department offers regular free math and calculus clinics which will be set up by the second week of the semester. A schedule of the clinics will be posted outside the math office and will be available online at math.syr.edu.

Academic Integrity: Syracuse University sets high standards for academic integrity. Those standards are supported and enforced by students, including those who serve as academic integrity hearing panel members and hearing officers. The presumptive sanction for a first offense is course failure, accompanied by the transcript notation "Violation of the Academic Integrity Policy". Students should review the Office of Academic Integrity online resource "Twenty Questions and Answers About the Syracuse University Academic Integrity Policy" and confer with instructors about course-specific citation methods, permitted collaboration (if any), and rules for examinations. The Policy also governs the veracity of signatures on attendance sheets and other verification of participation in class activities. For more information and the complete policy, see <http://academicintegrity.syr.edu>.

For this course in particular, the use of any notes or the use of any devices capable of wireless communication during quizzes and exams (until quiz/exam is handed in to the instructor) is considered to be a violation of the academic integrity policy.

All violations will be reported to the Academic Integrity Office (AIO).

Students with Disabilities: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS) at

<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. 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. Please do not wait until just before the first exam.

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. 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.

Tentative Course Schedule:

This schedule is only tentative. It is your responsibility to find out which topics are covered in class each week.

Week of Jan-16	Sec 1.1, 1.3	Week of Mar-13	Spring Break
Week of Jan-23	Sec 2.1-2.3, 2.5	Week of Mar-20	Sec 12.3, 12.7
Week of Jan-30	Sec 3.1-3.2, 3.6, 4.1	Week of Mar-27	Sec 13.1-13.3
Week of Feb-06	Sec 4.2-4.3, 10.1-10.2	Week of Apr-03	Sec 13.4, 13.6
Week of Feb-13	Sec 10.3, 11.1-11.2	Week of Apr-10	Catchup & Exam 2
Week of Feb-20	Catchup & Exam 1	Week of Apr-17	Sec 14.2
Week of Feb-27	Sec 11.3-11.5	Week of Apr-24	Sec 14.3
Week of Mar-06	Sec 11.5, 12.1-12.2	Week of May-01	Catchup/Review

Additional practice HW problems (from the textbook):

(1.1) 11, 17, 29, 33, 40	(11.1) 3, 5, 7, 12, 15
(1.3) 1, 3, 5, 7, 9	(11.2) 17, 25, 33, 45, 47
	(11.3) 13, 19, 21, 23, 30
(2.1) 5, 13, 23, 31, 39	(11.4) 3, 15, 21, 27, 33
(2.2) 1, 3, 11, 32, 33	(11.5) 1, 7, 11, 19, 25
(2.3) 3, 7, 11, 15, 17	
(2.5) 3, 9, 16, 18, 39	(12.1) 3, 5, 11, 25, 43
	(12.2) 3, 5, 11, 13, 25
(3.1) 23, 27, 39, 55, 61	(12.3) 3, 5, 15, 17, 19
(3.2) 5, 15, 17, 21, 23	(12.7) 1, 3, 5, 9, 11
(3.6) 1, 9, 17, 19, 21	
	(13.1) 1, 3, 35, 57, 71
(4.1) 3, 7, 9, 11	(13.3) 7, 9, 29, 35, 63
(4.2) 3, 9, 19, 31, 59	(13.4) 3, 5, 8
(4.3) 5, 21, 35, 45, 47	(13.6) 17, 19, 27, 32, 33
(10.1) 3, 11, 15, 25, 33	(14.2) 3, 5, 9, 15, 21
(10.2) 13, 21, 23, 33, 41	(14.3) 1, 11, 13, 15, 21
(10.3) 1, 5, 9, 12, 25	