

MAT 284 - BUSINESS CALCULUS

Syllabus – Spring 2012

Instructor and Course Supervisor: Professor Thomas John

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Office Hours: Tuesday and Thursday: 9:45-10:45 AM or by appointment.

Lectures: Tue&Thu, Heroy Auditorium, 0800-0920 (Sec 100) & 1230-1350 (Sec 200)

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. TAs will consider homework problems in the recitations and that is the primary place to get questions answered. You are welcome to attend more than one recitation for additional support, but you must take any quizzes in the recitation for which you are registered.

Textbook (Required): *Introductory Mathematical Analysis, for Business, Economics and the Life and Social Sciences*, by Ernest F. Haeussler, Jr. and Richard S. Paul, Richard J. Wood, Prentice-Hall, Custom Edition for Syracuse University MAT 284, 13th Edition, ISBN # 9780558697129

HW Code (Required): MyMathLab Student Access Code, ISBN# 9780558647155.

Package: Available containing both text and access code, ISBN# 9780558661830.

Text Chapters: The course will cover most of chapters 1-4 and 10-14.

Calculator: A TI-83 calculator is recommended for this course. Students who already own and know how to use another equivalent calculator are free to use it. *But calculators with symbolic manipulation capabilities such as the TI-89 or TI-92 may not be used on quizzes or exams.*

Course Description: MAT 284 Business Calculus (3 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.

This course is designed for students in the School of Management, students planning to minor in management and other students with a serious interest in management and economics. It has less theory than the other introductory calculus courses, and extensive applications, all involving management and economics. MAT 284 is not a part of any sequence meeting the divisional perspectives requirement in the Natural Sciences and Mathematics, and so is usually not an appropriate course for students in the College of Arts and Sciences. However, it is a second course in the Quantitative Skills requirement for the Arts and Sciences core. It is certainly not appropriate for anyone planning to major in mathematics, science, or engineering.

Course Prerequisites: MAT 194 (Pre-calculus) or equivalent.

Homework: Homework will be assigned and collected via a webportal. The access code purchased will be used for this purpose. The details will be provided during the first week of classes. Written homework will not be collected, unless otherwise specified during lecture or recitation. Questions on examinations and quizzes will be modeled on homework questions, so it is essential to practice on homework problems.

Attendance: You are expected to attend every class, every recitation, every hour 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.

Tests: There will be a quiz in most recitations and possibly in some lectures. There will be three in-class midterm exams and a final exam covering the entire course. The midterm exams dates are: **Exam 1 – 2/14, Exam 2 – 3/27, and Exam 3 – 4/26.** Any changes to this schedule will be announced in lecture in advance.

Special Note on the Final Exam: All students must take the final exam at the scheduled time which will be a 2-hour block between 8 am and 2:30 pm on Monday, May 7. There will be no exceptions, and so ***you should not plan to leave campus before 2:30 pm on Monday, May 7.***

Make-up Exams: There will be no make-ups for the quizzes or the midterm exams. A missed examination counts as a zero unless you present a valid excuse from a physician or the Dean's office. With the written excuse, you may use your score on the relevant portion of the final exam to replace the missed exam.

Grading and Policies: Each of the semester examinations counts for 20% of your course grade. The final examination counts for 25%, with the remaining 15% coming from online homework and quizzes.

The final letter grade will be determined as follows:

Final grade points	Letter grade		Final grade points	Letter grade
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

Students with Disabilities: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), (web site: <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://academicintegrity.syr.edu>

Course Schedule (Tentative):

Date	Sections	Suggested problems to Practice (not turned in)
17-Jan	1.1 & 1.3	1.1: 9, 10, 11, 13, 17, 25, 27, 28, 29, 32, 33, 39, 40
		1.3: 1, 3, 5, 6, 7, 8, 9.
19-Jan	1.3 & 2.1	2.1: 5, 9, 13, 17, 21, 23, 25, 27, 29, 30, 31, 39, 41,
		42, 45, 46, 47, 48, 49.
24-Jan	2.2 & 2.3	2.2: 1, 3, 9, 11, 13, 15, 17, 19, 21, 31, 32, 33.
		2.3: 1, 3, 5, 7, 9, 11, 13, 14, 15, 17, 19.
26-Jan	2.5 & 3.1	2.5: 1, 3, 5, 9, 11, 13, 16, 18, 23, 39, 41, 44.
		3.1: 1-15 (odd), 19-25, 27-39 (odd), 51-61 (odd), 71, 72.
31-Jan	3.2 & 3.6	3.2: 1, 3, 5, 7, 9, 15, 17, 19, 21, 23, 25, 26, 27.
		3.6: 1, 3, 9, 15, 17, 18, 19, 21, 24.
2-Feb	3.6; 4.1 & 4.2	4.1: 1, 3, 11.
		4.2: 1, 3, 4, 5, 7, 9, 19-49 (odd).
7-Feb	4.2 & 4.3	4.2: 50, 51, 52, 53, 55, 59.
		4.3: 1-11 (odd), 12, 13, 15-21, 23-39 (odd), 40, 41, 45-48.
9-Feb	Review for Exam 1	
14-Feb	Exam 1	

Course Schedule (Tentative) – continued:

Date	Sections	Suggested problems to Practice (not turned in)
16-Feb	10.1 & 10.2	10.1: 1-17 (odd), 21, 22, 23, 25, 27, 28, 29-37 (odd), 38, 39.
		10.2: 10, 13, 21, 23, 25, 27, 29, 39, 49, 59.
21-Feb	10.3	10.3: 1, 5, 9, 12, 25. Know the definition of e.
23-Feb	11.1 & 11.2	11.1: 3, 5, 7, 9, 12, 15.
		11.2: 1, 2, 3, 7, 11, 15, 17, 23, 25, 33, 37.
28-Feb	11.2 & 11.4	11.2: 41, 45, 47, 57, 67, 69.
		11.4: 1, 3, 5, 15, 17, 21, 27, 33, 35.
1-Mar	11.1; 11.2 & 11.5	11.1: 19, 21, 23, 25.
		11.2: 75, 77, 83.
		11.5: 1, 3, 5, 7, 9, 11, 15, 19, 23, 25, 33, 41.
6-Mar	12.1 & 12.2	12.1: 1, 3, 5, 11, 15, 25, 27, 29, 31, 39, 41, 43.
		12.2: 1, 3, 5, 9, 10, 11, 12, 13, 15, 17, 21.
8-Mar	12.7; 11.1 & 12.2	12.7: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19.
		11.1: 11 (use the definition of derivative)
		12.2: 25, 27, 28.
20-Mar	11.3 & 11.4	11.3: 13, 15, 19, 21, 23, 25, 30, 41, 45.
		11.4: 59, 60, 65, 66, 72.
22-Mar	Review for Exam 2	
27-Mar	Exam 2	
29-Mar	11.5 & 12.2	11.5: 65, 66, 71.
		12.2: 33, 35, 41, 45
3-Apr	14.2 & 14.3	14.2: 1, 3, 5, 7, 9, 13, 15, 17, 21, 26, 27, 36, 38, 39, 41, 43.
		14.3: 1, 2, 13, 15, 9, 10, 11, 21.
5-Apr	13.1 & 13.3	13.1: 1-11 (odd), 14, 18, 23, 35. 53, 57, 59, 67, 68, 70, 71.
		13.3: 7, 9, 29, 35, 47, 53, 63, 65.
10-Apr	13.3; 13.4 & 13.6	13.3: 68.
		13.4: 3, 5, 8.
		13.6: 5, 7, 11, 17, 18.
12-Apr	13.6 & 12.3	13.6: 19, 20, 27.
		12.3: 1, 3, 5, 7, 9, 11, 15, 16, 17, 19.
17-Apr	Sec 13.6	13.6: 27, 29. [Hint: Read Example 5 in 13.6.]
19-Apr	13.6 & 14.3	13.6: 31, 32, 34.
		14.3: 20.
24-Apr	Review for Exam 3	
26-Apr	Exam 3	
1-May	Review for FINAL	