# MAT 285 Spring 2017 (MWF)

## **CALCULUS FOR THE LIFE SCIENCES I**

**Course Description:** This is the first course in a two-course, terminal calculus sequence. It is designed to introduce students to the beauty and power of calculus. Topics include functions, limits, the derivative, tangent lines, curve sketching, exponential and logarithmic functions and the calculus of several variables. Applications to the life sciences are emphasized.

**Mathematics Prerequisites and Restrictions:** MAT 194 or an equivalent pre-calculus course must be successfully completed before taking MAT 285. MAT 285 may not be taken for credit after successful completion of MAT 284 or MAT 295. **Students planning to major or minor in a physical science, mathematics, or engineering should take MAT 295.** 

**Liberal Arts Core:** This course is the second course in the Quantitative Skills sequence MAT 194-285. This course is the first course in the Quantitative Skills sequence MAT 285-286.

**Text:** Calculus for the Life Sciences, by Greenwell, Ritchey and Lial; Addison Wesley. The course will cover Chapters 1 - 6 and 9 of the text.

**Calculator:** A graphing calculator is required. We will be using the TI-84 calculator. A calculator with symbolic calculus capability (such as the TI-89 or TI-92) is not allowed for exams and quizzes. Some class time may be devoted to instruction on how to use the calculator.

**Final Examination:** All mathematics courses numbered 400 and below have a departmental final exam during the time block 8:00am to 2:30 pm on Monday, May 8, 2017. The MAT 285 final exam will be scheduled for a two-hour period during this block. The precise exam time will be announced in class later this semester.

### **Grading and Testing**

**Homework and Quizzes:** Your instructor will announce the homework and quiz policy for the course.

**Tests:** There are three hour-exams, each accounting for 20% of your final grade. There will be no makeup tests. However, for excused absences, the corresponding portion of the final exam will be used in place of the missing test score.

**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. These corrections are to be submitted to your instructor one week after the test papers are returned.

**Final Exam:** The final exam is comprehensive and accounts for 20% of the final grade. It is on Monday, May 8, 2017, sometime between 8:00 am and 2:30 pm. **DO NOT MAKE PLANS TO LEAVE CAMPUS BEFORE 2:30 pm on May 8, 2017. THERE ARE NO PROVISIONS FOR TAKING THE FINAL EXAM EARLY OR LATE!!** 

**Grading:** The final score will be computed on a scale of 0% to 100% from the tests (60%); homework, quizzes and test corrections (20%), and the final exam (20%). The final letter grade will be determined as follows:

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 <a href="http://academicintegrity.syr.edu">http://academicintegrity.syr.edu</a>. The use of or availability of any electronic device during a midterm exam or final exam is a violation of the Academic Integrity Policy.

**Religious Observances Policy:** Syracuse University's religious observances policy, found at <u>http://supolicies.syr.edu/emp\_ben/religious\_observance.htm</u>, 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.

**Students with Disabilities:** If you need accommodations for a disability, please contact the Office of Disability Services (ODS), <u>http://disabilityservices.syr.edu</u>, 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.

### **Resolving Problems**

Please inform your instructor of any problems that you have with the course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the Course Supervisor without delay.

Course Supervisor: Professor Jeffrey Meyer (This is <u>not</u> your instructor!) Office: 206F Carnegie Phone: 443-1479 or 443-1473 Email: jlmeye01@mailbox.syr.edu

	Date		Date		Date	
January	16	no class	18	1.1	20	1.3, 1.4
	23	2.1	25	2.2	27	2.3
Jan/Feb	30	2.4	1	3.1	3	3.2
February	6	3.3	8	Review	10	Exam 1
	13	3.4	15	3.4, 3.5	17	4.1
	20	4.2	22	4.3	24	4.4
Feb/Mar	27	4.5	1	4.6	3	Review/Catch up
March	6	5.1	8	5.2	11	5.2
	13	no class	15	no class	18	no class
	20	5.3	22	Review	25	Exam 2
	27	6.1	29	6.1	31	6.2
April	3	6.2	5	6.3	7	6.3, 6.4
-	10	6.4	12	9.1	14	no class
	17	9.2	19	9.2	21	9.3
	24	9.3	26	Review	28	Exam 3
May	1	review, last class				
·	8	Final exam				

#### **Tentative Class Calendar**