

MAT 296-002

Calculus II

Summer Session II, 2013

Course Meetings: M-Th 11:40 pm – 2:15 pm, Room 106 Physics Building

Instructor: Jeff McLean
Office: 400 Carnegie
Office Hours: M, W 2:30-3:30 pm
Email: jamcle01@syr.edu

Course Description: MAT 296 is the second 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 techniques of integration, applications of integration in a variety of contexts, exponential growth and decay, improper integrals, parametric curves in the plane, polar coordinates, sequences and series (including power series, Taylor and Maclaurin series).

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 less in MAT 295 are at great risk in MAT 296. For these students it is important to review material from earlier courses, especially as it comes up again. At the same time it is also vital not to fall behind with the current material.

Text: *Essential Calculus: Early Transcendentals*, by James Stewart; Thompson, Brooks/Cole, 2nd edition.

Calculators: A scientific graphics calculator is acceptable in this course. If you wish to use one and don't own one, the TI-83 calculator is recommended. Students who already own and know how to use another equivalent calculator are free to use it. **However, a symbolic calculator (one with CAS) such as a TI-89 or TI-92 may not be used on quizzes or exams.** On exams and quizzes complete solutions, and not merely answers, must be presented. For example a numerical computation of an integral by calculator is not acceptable.

Course Format: The course meets four times per week, 11:40 am to 2:15 pm. Most of the time will be used to introduce new material. During the remaining time, the instructor will answer questions on assigned homework. Quizzes will be given in some of the classes. Topic and date will be announced at least 1 day before the quiz.

Homework: There will be homework assignments on WebAssign, a web-based system for homework problems. These assignments will be scored based on completion of the assignments. It is very important that you attempt the homework problems **as soon as possible** after the material has been covered in class. The problems you see on the exams will be based on the

material presented in class and on the homework assignments.

Exams: There will be two midterm exams during the session. These exams will be given during the second half of class on the following dates:

Exam 1 Wednesday, July 17, 2013;

Exam 2 Thursday, August 1, 2013.

Make-up Exams and Quizzes: No make-up exams or quizzes will be given. The math department policy for a missed exam is that, if you can justify the absence to the satisfaction of your instructor, then your grade on the relevant portion of the final exam will be substituted for the missing grade. Typically, you will not be allowed to make up more than one exam this way. If you cannot justify your absence from an exam, then you will receive a grade of zero for that exam. Any exceptions to these procedures must be approved by the course supervisor. If you know in advance that you will have to miss a quiz or exam because of some major event, you should discuss this matter with your instructor well before the quiz/exam. **One quiz score will be dropped. There are no provisions beyond this for make-up quizzes.**

Final Exam: The final examination covers the entire course. It is a two-hour exam, and will be given on **Thursday, August 8, 2013** during class time: 11:40 am - 2:15 pm. **This time cannot be changed, and all students must take the final exam at this time.** Do not make plans to leave campus before 2:15 pm on Thursday, August 8, 2013.

Grades: Course grades will be determined by:

| | |
|------------|------|
| Exam 1 | 25% |
| Exam 2 | 25% |
| Final Exam | 30% |
| Quizzes | 10% |
| Homework | 10%. |

Your course grade will be assigned based on the following guidelines:

| | | | |
|--------|----|-------|----|
| 92-100 | A | 78-79 | C+ |
| 90-91 | A- | 72-77 | C |
| 88-89 | B+ | 70-71 | C- |
| 82-87 | B | 60-69 | D |
| 80-81 | B- | 0-59 | F |

Clinics: There will be a clinic for MAT 296 in room 233 Physics Building. Your instructor will announce the clinic hours soon after the summer session starts.

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://academic.integrity.syr.edu>

Course Supervisor:

Prof. A. Vogel 229F Physics, x1584

Email: alvogel@syr.edu

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 without delay.

How to Succeed:

- (1) It is absolutely essential that you understand how to solve all the assigned problems. Since quiz and exam questions will be similar to these problems, it is crucial that you know how to solve every one of them. Once you understand how to solve a problem, write your solution down neatly and in full detail with explanations that would make your reasoning clear to a friend who sees the problem for the first time. Save these solutions in a three-ring binder for review when you prepare for the exams.
- (2) Ask questions in lecture or at the clinic about anything that is not completely clear. Don't hesitate to bring questions to your course instructor during office hours.
- (3) Every day, read and study the sections in the textbook covered in the lecture. Reading 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! Calculus 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 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) We believe you can be successful in this course! You should expect to work hard. Don't get discouraged if you find some of the material difficult. Be persistent and patient! If you follow the above suggestions, your experience in this course will be a rewarding one.