

## MATH 491, Fall 2010

Instructor: Dr. Rachel Schwell

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Office: Marcus White 309 Office Phone: 832-2844

Office Hours: M 11:00-12:00; T 2:00-4:00; Th 10:30-12:30; or by appt.

**Course Description:** This course is a continuation of Calculus III, but will be taught at a higher level of mathematical maturity according to its 400-level designation. The course material includes topics from continuity and differentiability of functions of several variables, exterior differential forms, multiple and iterated integration, line integrals, and Gauss', Green's, and Stokes' Theorems.

**Text:** The text we will be using is **Vector Calculus**, Marsden and Tromba, 5th edition. There is a solution manual with detailed solutions to selected exercises available, if you choose to purchase it.

**Class Times:** The class will meet MW 5:15-6:30 in MS 207.

**Grading:** There will be homework due every other Monday (starting 9/13), two semester exams, the first of which will take place on Wednesday, October 13, and one final exam. Each exam will have both an in-class and take-home component. You must always show all work, even if not specifically directed to do so, and all work must be clearly articulated and explained using words, phrases, and sentences. Style, presentation, and clarity of exposition will all be taken into account in the grade, including physical appearance of the homework papers. (If your handwriting is sloppy, you may want to consider using LaTeX, a mathematical typesetting program. Be careful using MS Word equation editor – the result is often not professional-looking, especially for more complicated symbols such as limits and integrals.) Proofs must be written in formal proof style, with complete sentences and correct use of language. In-class exams must be taken in pencil. **Exams may only be made up in advance, or afterwards only in case of emergencies and with appropriate documentation justifying the absence.** Homework solutions will be posted on my website after I have handed back everyone's graded assignments from that particular set. The lowest two homework grades will be dropped at the end of the semester. Your grade will be calculated by the following distribution:

Homework – 30%

Final Exam – 30%

2 Exams – 20% each = 40%

**Attendance and Expectations:** Although I will not take attendance, I of course expect you to attend class—you are responsible for all notes, announcements, etc. that are given during class time. The general rule for a college course is that you as the student are expected to put in two hours of study outside of class for every hour in class. Thus, I expect that you will be putting in 6 hours of work outside of class each week.

**Homework Expectations:** All homework assignments will be posted on my website, and not necessarily announced in class. It is your responsibility to check regularly for these assignments. While you may collaborate with classmates on homework, the solutions you submit must be your own. Simply copying another student's work (or allowing another student to copy your work) is considered cheating and is not acceptable. Be very careful when working with others that you share only the *ideas*; i.e., make sure you have each written your assignments in your own words

and with your own structure.

### **University Policies:**

1. You must take the final examination at the time specified in the course selection book:  
**Monday, December 13, 5:00 – 7:00 pm.**
2. Please contact me privately to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Student Disability Services, room 241, Copernicus Hall if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with your faculty. Note my contact information given on the first page.
3. In the event of a weather emergency which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message.” You may also look on the main page of the CCSU website under “Cancellations and Delays”.
4. The last day to withdraw from a course is Monday, October 25. Approvals for withdrawal are not required; however, it is strongly recommended that students consult with their academic advisors prior to deciding to withdraw. Cessation of attendance, notice to the instructor, or telephone calls to the Enrollment Center are not considered official notice of a student’s intention to drop the course.

After October 25 withdrawals are allowed only under extenuating circumstances and require approval of the course instructor, department chair and dean of the School of Arts and Sciences. Poor academic performance is not considered an extenuating circumstance.

5. All students are expected to demonstrate integrity in the completion of their coursework. Academic integrity means doing one's own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct Report may be filed and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion. For further information on academic misconduct and its consequences, please consult the Student Code of Conduct (<http://www.ccsu.edu/StudentConduct>) and the Academic Misconduct Policy (<http://www.ccsu.edu/AcademicIntegrity>). This policy is rigorously enforced by the Department of Mathematical Sciences