## Mathematics 223, Fall 2010 (Section #63722) Vector Calculus (3 credits)

Lectures: MWF 11:00–11:50 AM, Wescoe 4051

Instructor: Prof. Jeremy Martin E-mail: jmartin@math.ku.edu (the best way to contact me) Office: 623 Snow Hall, (785) 864-7114 Office hours: Wed 2:00-2:50, Thu 1-2:15, or by appointment

Website: The course website is:

http://www.math.ku.edu/~jmartin/math223/

Bookmark it and check it frequently! You are responsible for all information posted on the website, including announcements and homework assignments.

**Prerequisites:** Math 122/142 (Calculus II). You should have some experience with the basics of vectors (see, e.g., chapters 9–10 of Stewart's *Calculus: Concepts and Contexts*, KU edition) and with some multivariable calculus (chapters 11–12 of Stewart). A linear algebra course such as Math 290 is helpful, but not required.

**Textbook:** *Vector Calculus*, 3rd edition, by Susan Jane Colley. Available at KU Bookstore (800-458-1111, http://www.kubookstore.com). We will cover most of chapters 1–7, working fairly quickly through chapters 1–2 (which overlap with the material of 122/142).

**Calculator:** You should have a graphing calculator, such as the TI-83. You may use a more powerful calculator, such as the TI-89, but it is not necessary. You will be permitted to use your calculator on all tests. Two students may not share a calculator on a test.

**Blackboard:** There is a Blackboard site for the course, but its only use will be to post grades. For all other information, use the website.

**Homework:** Homework is due in class every Friday (with some exceptions), starting August 27. I'll post each assignment on the website at least one week before the due date. There will be 12 homework assignments. I will drop your two lowest scores, including any missed assignments. Homework is worth 30% of your grade. If you will not be in class on a due date, you can turn in your homework in advance to my mailbox in the Math Department office, 405 Snow, or to my office, 623 Snow. Your homework should be as neat and legible as if it were typed, and all sheets should be stapled together. *Homework turned in late will not be accepted*.

In-class tests: There will be two in-class tests, on Friday, October 1 and Friday, November 12. Each test is worth 20% of your grade.

Final exam: The final exam is scheduled for Monday, December 13, from 10:30 AM–1:00 PM, in the regular classroom (Wescoe 4051). The exam is worth 30% of your grade.

**Makeup tests and exams:** If for some legitimate and unavoidable reason you are unable to attend a scheduled midterm or final exam, it is your responsibility to notify me *beforehand* to arrange a makeup exam. KU policy is that no student is required to take more than two final exams on a single day; check the Registrar's website *now* to find out the dates of your exams.

**Approximate time commitment:** This is a 3-credit course, so I would guess that the average student should spend at least 6 hours per week outside of class to get a decent grade. In addition to spending time on homework problems, you should get into the habit of reading a section or two ahead in the book, so as to be better prepared for lecture.

Grading: I will calculate each student's raw score as follows:

- Homework: 300 points
- Test #1: 200 points
- Test #2: 200 points
- Final exam: 300 points
- Total: 1000 points

Scoring 900 points guarantees you an A, scoring 800 guarantees you at least a B, etc. I may lower these requirements and/or use +/- grades at my discretion.

**Incompletes:** A grade of I is a rare occurrence and is reserved for cases in which a student has completed most of the course work at an acceptable level, but is prevented from completing the course due to extraordinary nonacademic circumstances. If you think an incomplete may be warranted, you must talk to me *before* the final exam.

Academic honesty and collaboration: You are required to abide by all KU policies on academic integrity. Cheating, plagiarism or other academic misconduct will result in a failing grade on the assignment in question, notification of the student's dean, and usually further disciplinary sanctions, possibly including a failing grade in the course.

You are encouraged to collaborate with other students on the homework assignments. However, *each* student must write up his or her own solutions and acknowledge all collaborators. Copying someone else's homework, or allowing someone else to copy yours, is considered to be a form of cheating.

Official KU policies on academic misconduct can be found at https://documents.ku.edu/policies/governance/USRR.htm#art2sect6

**Disability accommodations:** The KU Office of Disability Resources (22 Strong Hall; 785-864-2620 (V/TTY); achieve@ku.edu; http://www.disability.ku.edu) coordinates accommodations and services for all students who are eligible. If you have a disability for which you wish to request accommodations, please contact Disability Resources as soon as possible. Please also contact me privately in regard to your needs in this course.

**Religious accommodations:** If you know that a scheduled assignment will conflict with a mandated religious observance, please contact me in advance to make appopriate arrangements.

**Intellectual property:** Course materials prepared by the instructor, together with the content of all lectures and review sessions, are the intellectual property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. Upon reasonable request, the instructor will usually grant permission to record lectures, on the condition that such recording is used only as a study aid by the student making the recording, and is not modified or distributed in any way. Course materials posted online are intended for the personal use of students in the class and must not be redistributed without the instructor's consent.