

COURSE INFORMATION: MATH 251 Multivariable and Vector Calculus
Spring 2011

Lecture Time and Place: 3:15pm, Monday-Wednesday-Friday at 116, Wishnick Hall

Instructor: Hemanshu Kaul

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Office Hours: 1pm-2pm Monday and Wednesday; also by appointment. Emailed questions are also encouraged.

Course Webpage: <http://www.math.iit.edu/~kaul/TeachingSpr11/Math251.html>

Check the course webpage regularly, especially on Monday, Wednesday, and Friday evenings, for announcements, and a lecture log (useful when you miss a class and when reviewing for an exam).

Tutoring Service: Academic Resource Center. Check the schedule at "<http://arc.iit.edu>".

Online Problem Practice: WebAssign "<https://www.webassign.net/>", and/or COW (Calculus on Web) "<http://www.math.temple.edu/~cow/>".

Course Topics: Analytic geometry in three-dimensional space. Partial derivatives. Multiple integrals. Vector analysis. A detailed description of the lecture topics and the course objectives is available at

"http://www.iit.edu/csl/am/programs/course_descriptions.shtml"

Textbook: James Stewart, Calculus, Sixth edition, Brooks/Cole.

Grade Break-down: Homework assignments are worth 15%. Quizzes are worth 10%. Two mid-term exams are worth 20% each. The final exam is worth 35%. The grading scale will be no more strict than A:90-100, B:80-89, C:70-79, D:60-69.

Attendance and Class Participation: You are expected to attend the lectures, and participate in class discussions. Regular class participation and strong attendance will be positively considered for borderline grades at the discretion of the instructor.

Examinations: The mid-term exam dates and their precise topics will be announced in class and on the course webpage. The final exam will be on all the topics covered during the semester. Make-up exams will be given only in case of a documented emergency.

An **improved performance in the final exam** (indicating better understanding of the course material over the whole semester) will help you improve your course grade. The score of one of the mid-term exams will be replaced by the (appropriately scaled) final exam score if the final exam score is higher.

Homework: Homework will be assigned each week through WebAssign. It is your responsibility to check for assignments and their due dates. HW will typically be due on Thursday night.

Quizzes: Most Fridays, at the beginning of the class, there will be a short quiz based on the HW problems due that week.

Grading Policy: You are allowed to discuss homework problems with your classmates. However, the solutions should be written by you alone. Solutions for quizzes and exams must be written clearly, legibly, and concisely, and will be graded for mathematical correctness and presentation.

Use the homework solutions (visible soon after the due time) to prepare for the in-class quiz on Friday (next day). Especially note the way of writing and describing the solutions. I use the same descriptive details when I solve examples in class, so pay attention in class also.

For the quizzes and exams, you need to be able to describe the intermediate steps/ calculations/ substitutions for the solution. Just writing the final answer without justifying it will lead to deduction of points.

Advice for Homework on WebAssign:

Log-in Directions:

You will be required to set up your own account using the "class key" that I will give you in class. Go to WebAssign. Click on the I Have A Class Key link. The Class Key is composed of three fields - iit (lower case) followed by two four digit numbers unique to your section. Click Submit. If the information about your section is correct, click Yes, This Is My Class. Then follow the instructions to create a username and password. Once your account is set up, you will not have to use the Class Key again.

You will be given a grace period of approximately 14 days from the first day of classes to access WebAssign before you need to purchase your account online.

Important Advice for Homework:

1. You should first attempt each assigned problem on paper (log off the WebAssign website) like regular paper and pen assignments. Save this written work for review before quizzes and exams. and in case you have to discuss your solution with me. Instructor cannot help you if you don't record your work carefully on paper when you need help from him.
2. Carefully read the WebAssign Student Guide to understand how to format your solutions.
3. When you have finished entering your answers, click on "Submit" and WebAssign will immediately grade your solutions. You can then re-work your incorrect problems and re-submit them to improve your score. You can submit your assignment up to 5 times without penalty.
4. After two incorrect attempts, look at the book again, review your notes and re-do the problem from scratch. Do not guess an answer. Remember you have only 5 attempts for each problem, so do not waste your attempts on frivolous trial and error solutions.
5. Do not enter an equivalent expression when your answer is marked wrong. $x * (2 * x - 5)$ is the same as $(2 * x - 5) * x$, changing from one form to another will not change the validity of your answer. The software behind Webassign matches equivalent expressions, so do not send an email to your instructor that "WebAssign is marking your correct answer wrong". Its extremely rare for such errors to occur.
6. Avoid simple mistakes like: wrong syntax; incorrect usage of parentheses, $x * (2 * x - 5)$ is not the same as $x * 2 * x - 5$; using the incorrect letter for a parameter or a variable in a symbolic solution.
7. If you have technical difficulties with the WebAssign website, please contact their technical support directly online.

Resources for Learning: You are encouraged to utilize the three basic resources available to you. First, your **instructor**, by asking questions during class, or in office hours, or through email. I am here to help you learn outside the class also, but I cannot help you if you don't take the initiative. Second, the tutors at the **Academic Resource Center** in the Galvin library. Third, utilize the **WebAssign** (and/ or the Calculus III exercise book online at the **COW (Calculus on Web)** webpage ("<http://www.math.temple.edu/~cow/>")) to practice problems and get immediate feedback.