Mathematics 141, Fall 2005 (Section #30420)
Honors Calculus I (5 credits)

Instructor: Jeremy Martin
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  Office hours: MWR 1:00 – 2:00 PM, or by appointment

Lecture time: MTWRF 10:30 – 11:20 AM, 306 Snow Hall.

Course website: The course website is $\boxed{\texttt{http://www.math.ku.edu/}\sim\texttt{jmartin/math141/}}$.
Check it frequently! The site will contain homework assignments, quiz solutions, announcements, and more.

Course description: Math 141 is an honors course in differential and integral calculus of one variable and applications. This is a good course to take if you are considering majoring in mathematics or a related field, such as computer science, physics, engineering or economics, and are willing to work hard to understand the concepts of calculus. The topics to be covered are the same as those in Math 121 (Calculus I); however, Math 141 will move at a faster pace and the material will be covered in greater depth and breadth.

Prerequisites: Three years of college preparatory mathematics including trigonometry, plus at least one of the following:
  (a) A score of 34 or more on the Enhanced ACT Mathematics test and a high school GPA of at least 3.5;
  (b) A score of 32 or more on the Enhanced ACT Mathematics test and a high school GPA of at least 3.7;
  (c) Permission of the Department of Mathematics.
For questions about eligibility, consult the Department of Mathematics (405 Snow Hall). Students lacking the necessary prerequisites are subject to being administratively disenrolled.

Textbook: *Calculus: Concepts and Contexts*, University of Kansas edition, by James Stewart. Available at KU Bookstore (`www.kubookstore.com`; (785) 864-4640). There are many different editions of this book, so be sure you have the right one (consult the instructor if you're unsure). We will cover most of Chapters 1–6.

Calculator: You will be allowed to use a basic graphing calculator such as the Texas Instruments TI-82, TI-83, or TI-85 on all coursework except the Gateway Exam. Calculators that can do symbolic integration, such as the TI-89 and TI-92, are not allowed. If in doubt, consult the instructor. It should be possible to complete all required coursework without use of a graphing calculator. Also, that using a calculator does not relieve you of the obligation to show all work.

Lectures: I expect and encourage you to participate in class. Don't be afraid to speak up; there is no such thing as a stupid question in mathematics! It's a good idea to get into the habit of reading a section or two ahead in the book, so as to be better prepared for lecture.

Homework: Homework is due in class on Tuesdays, starting on August 23. *Homework turned in after the end of class will not be accepted.* The course website will include lists of required and optional homework problems; you should turn in only the required problems. There will be a total of 15 problem sets; each one is worth 10 points, for a total of 150 points.

Quizzes: A short quiz will be given during the first half of lectures on most Fridays, starting on August 26. There will be a total of 12 quizzes; your two lowest scores will be dropped. The quizzes will be worth 20 points each, for a total of 200 points.

Participation: I'll give occasional pop quizzes and in-class assignments through which you can accumulate up to 50 points. If you attend lecture regularly, you will probably receive most or all of these 50 points.

Gateway exam: The gateway exam tests basic technical skill in differentiation and will be given during the month of October (details TBA). Passing the gateway exam is worth 100 points.

Midterm exam: All Math 121/141 students will take a common midterm on **Tuesday, October 11, 5:45–7:45 PM**, location TBA. The midterm is worth 200 points.

Final exam: All Math 121/141 students will take a common final exam on **Wednesday, December 14, 4:30–7:00 PM**, location TBA. The final is worth 300 points.

Aids permitted on quizzes and exams: You will be permitted to use a graphing calculator (see details above), *but no other aids*, on the weekly quizzes and the common midterm and final exams. No aids of any kind are permitted on the Gateway Exam.

Makeup exam policy: No makeups will be offered for in-class quizzes or the Gateway Exam. If for some legitimate and unavoidable reason you are unable to attend the scheduled midterm or final exam, notify the instructor soon as possible! Makeup exams (if any) will always be different from the regular ones, and will never be given before the regular ones.

Grading: Your final score in the class will be calculated as follows:
- Homework: 150 points
- Weekly quizzes: 200 points
- Pop quizzes and other in-class work: 50 points
- Gateway exam: 100 points
- Midterm exam: 200 points
- Final exam: 300 points
- **Total: 1000 points**

Letter grades will be calculated from your final score as follows:
- **A:** 900–1000
- **B:** 800–899
- **C:** 700–799
- **D:** 600–699
- **F:** <600

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* circumstances. If you think an I may be warranted, you must talk to the instructor *before* the final exam. Note that a grade of I cannot be made up by taking the course again.

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, 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, *intellectual honesty requires that each student write up his or her own solutions and acknowledge all collaborators.* Copying someone else's homework, or letting someone else copy yours, is considered to be a form of cheating.

For more information on academic honesty issues, see `www.ku.edu/~stlife/academics.shtml`.

Students with disabilities: The KU Office of Disability Resources (22 Strong Hall; 785-864-2620 (V/TTY); `www.ku.edu/~ssdis/`) 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.

Intellectual property issues: 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.