Math 142-08
M T Th F 10:10 am–11:00 am
Room 38-221
Text: Calculus, 5th ed., by Stewart

Instructor: Linda Patton
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Office Hours: M 9:10 am–10:00 am, T 12:10 pm–1:00 pm, R 1:10 pm–3:00 pm, F 11:10 am–12:00 pm

Math 142 will cover Section 5.5, Chapters 6, 7, 8 (except 8.6), and 9.1-9.3 of the text. To contact me about the course, please email me or see me in office hours if possible. I check my email regularly (including on most evenings and weekends), but I only check my phone messages when I am on campus.

GRADING POLICY

- Best 6 of 8 quiz scores: 10%
- Project: 10%
- Homework: 5%
- Each of two midterm exams: 20%
- Final: 35%

EXAM SCHEDULE

- Quizzes (5-10 minutes): On the eight dates listed below
- Midterm 1 (50 minutes): Friday, October 14
- Midterm 2 (50 minutes): Monday, November 7
- Final (2 hours and 50 minutes, comprehensive): Tuesday, December 6, 10:10 am–1:00 pm

If you have to miss a scheduled exam (not quiz) due to illness or a family emergency, see me as soon as possible. I am sorry for the inconvenience, but programmable and graphing calculators with memory are NOT allowed on exams and quizzes. You may use a cheap scientific calculator to compute decimals, roots, and trigonometric function values, but the exam will be written so it is not necessary to have such a calculator. I will also require exact values for some trigonometric functions on exams and quizzes. It is important that exams reflect your own knowledge and ability. If I catch someone cheating on an exam or quiz, then they will receive an F in the course (not just on that exam) and I will report them to the university authorities.

QUIZZES

The quizzes will be given on most Fridays, excluding exam dates. The exact dates are 9-23, 9-30, 10-7, 10-21, 10-28, 11-18, 11-22 (that’s Tuesday!), 12-2. There will be no makeup quizzes for ANY reason. If you have to miss a quiz, it will count as one of the two dropped quizzes.

HOMEWORK

Homework will be collected almost every day near the beginning of class (after I answer a few questions about it). There is very little money for graders, so I will ask for a student volunteer to grade each homework assignment. This will take only one hour and each student will only have to do it once, so this should not take up too much of anyone’s time. The recorded score will be based primarily on the completeness of the assignment, so be sure to attempt all problems.

I will spend the first 10 minutes of each lecture on questions. There is not enough time in class
to do as many homework problems as most students would like to see, so PLEASE come to office hours if you need extra help. If you can’t make my posted office hours, please make an appointment so that we can meet another time. (If you don’t make an appointment, I may either be out of my office or in the middle of something complicated when you come by, so it’s more convenient if you make an appointment.) A schedule describing the homework assignments and what sections are covered in class and on quizzes and exams will be handed out and on Blackboard every two weeks.

PROJECT

There will be one project sometime during the quarter. The project will be a difficult problem or application. I prefer that you work in groups of 2, 3 or 4 on the projects. It is fine to work with someone in my other section of Math 142. If you work in a group, the group should turn in only one project with each group member’s name on it. Be sure that everyone who receives credit for the project actually contributes to it. If you really dislike working in groups, then you may work by yourself. However, I will expect you to solve the problem yourself without input from me.

SUCCEEDING IN MATH 142

Math 142 covers applications of integration (volumes and work), the theory of inverse functions and their derivatives, exponential functions, logarithmic functions, inverse trigonometric functions, techniques of integration, and more applications of integration (arclength, surface area, center of mass). You should already understand the definition of the integral as a limit of Riemann sums; you should also understand differentiation of polynomials, rational functions, and the cosine, sine and tangent functions. If you have trouble with trigonometry, please see the study guide on my web page and Appendix D of the text. Please review the product, quotient, and especially the chain rule for differentiation. Reviewing limits would also be a good idea; we’ll often be taking limits as $x$ approaches $\infty$.

The most successful students usually study regularly. Try to start studying hard the first week. If you can read the section to be covered before the lecture and do the homework problems on that section within a day, you will be able to follow the lectures more easily and you can ask questions on any material in the book that confused you. I will collect phone numbers from students interested in a study group and hand them out; unless you greatly prefer to work by yourself it’s a good idea to study in a group. As you may have heard, it is important to STUDY 25-35 HOURS PER WEEK OUTSIDE CLASS!. That includes at least two hours of study per one hour in class. Sometimes mathematics classes require even more work outside than this two-to-one ratio.

I know solution manuals for the homework in this course are readily available. However, reading the solution manual and copying the answer onto your homework page is a very poor substitute for struggling with the problems yourself. You will probably feel pressed for time and want to do the homework quickly, but in many cases that is not possible. You are actually wasting time by copying the answers. Don’t worry if you have to spend a long time thinking about the problems before you get anywhere. You are still learning when you go through this process. Good luck and have fun in the course!