

Math 142 – Calculus II

Term: Fall 2015

Professor: Erich Friedman

About the course: We will meet 10:00–10:50 every MWF and 10:00–11:15 every Tuesday in Elizabeth 205. This course will cover material from chapters 6–8 and 11 of the text, the 8th edition of *Calculus (Early Transcendentals)* by Stewart. If you have the 7th edition left over from last year, the book hasn't changed much but the exercises have been renumbered. Topics of the course include techniques of integration, applications of integration, differential equations, infinite sequences and series. You will be expected to understand why calculus works, as well as how to do the calculations involved. The development of calculus some 300 years ago was perhaps the greatest mathematical achievement in history. I hope you enjoy discovering it with me.

About me: My e-mail address is efriedma@stetson.edu, and my web page can be found at <http://www.stetson.edu/~efriedma/>. My office is Elizabeth 214–2, and my phone extension is x7552. My office hours for this semester are: MWF 10:50 – 12:00 and Tuesday 11:15 – 12:00. I am always in my office during these times. If you cannot make my regularly scheduled hours, let me know and we can set up another time to talk. Please come by if you need help, or if you just want to chat. You will soon see that my lecture style is informal. I will be calling you by your first names (or a nickname if you prefer), so please call me Erich.

About your math background: You should have passed Calculus I, received AP or IB credit for this course, or taken an equivalent calculus course elsewhere. You should be comfortable with limits, taking derivatives, and using derivatives to find relative extrema. You should remember what an integral is, and how to calculate one with a Riemann sum. You should worship the Fundamental Theorem of Calculus. If you need to review this material, do so now, as there will be no time for it later. Attendance in this class is not mandatory, but do not expect me to help you if you do not help yourself. Please be respectful of both me and your classmates. This means coming to class on time and not socializing in class.

About your responsibility as a student: You should read the book. You should do the homework assigned. You should ask questions in class about things you don't understand or problems you couldn't do. You should come to my office hours (or make an appointment at another time if they are inconvenient for you) if you need additional help. You should inform me beforehand if you are unable to take a quiz or test at the scheduled time.

About the math department: I am usually available to answer your questions, in and out of class, but the math department offers several additional ways to get help. Much of the day, a free math tutor can be found in the math office, Elizabeth 211. Also, the math secretary has a list of paid tutors available at other times. There is also a math clinic which runs every MW 2:30–4:30 pm and SuMTWTh 7:00–10:00 pm. Please seek help as soon as you fall behind.

About calculators and computers: Use of a graphing calculator is encouraged in this course, and you will need a calculator for the quizzes and tests. You are not allowed to share calculators, or use your cell phone as a calculator. You are responsible for knowing how your calculator works, and I do not offer calculator help the day of a quiz or test. We will also be using computers to run Mathematica, a computer algebra system that is helpful in calculus.

About cell phones: It is polite to silence your cell phones during class. If one goes off in class, for any reason, it's mine for the rest of the day.

About the honor code: Stetson has an honor code. You are not only expected to do your own work, but to tell me if another student is not. The punishment for cheating is an F in the course.

About Quantitative Reasoning: In order to assure that Stetson University is meeting its goals in providing an excellent General Education, the College has established specific General Education Learning Outcomes for all courses meeting a particular area requirement in the General Education curriculum. To monitor how well students are meeting those outcomes, instructors of those courses regularly submit work to the committees assessing each outcome. While the outcomes of these assessments are primarily for our internal use in monitoring and enhancing our curriculum, we may occasionally report the results of these assessments in published research or academic conferences. All such reports will include aggregate (not individual) data and will not include information that could identify the student or the instructor. While the use of this information within the institution is part of normal educational practice, you may choose not to allow data derived from your own work to be used for published reports or presentations by signing an “opt out” form in the Registrars office.

About Accommodations: If you anticipate barriers related to the format or requirements of this course, you should meet with the course instructor to discuss ways to ensure full participation. If disability-related accommodations are necessary, you should register with the Academic Success Center (386-822-7127; stetson.edu/asc) and notify the course instructor of your eligibility for reasonable accommodations. You, your instructor, and the Academic Success Center will plan how best to coordinate accommodations.

About your grade:

- **Homework** will not be collected, but I will answer questions in class as time permits. Only odd numbered homework problems are assigned, and the answers are in the back of the book so you can check your work. These problems are designed to help you prepare for the tests, though the test problems will be similar to the second half of the homework in each section. I encourage you to work together on the homework problems. You should do as much or as little homework as you need, but the leading cause of doing poorly in this course is not doing enough homework.
- **Quizzes** will be given on the 7 dates announced on the syllabus. Each quiz will be one page, and will cover material since the last quiz or test. Each quiz is worth 50 points.
- **Pop Quizzes** may be given occasionally to make sure you are keeping up with recent material and doing your homework. They would be short, and would be worth 10 points each.
- **Tests** will be given on the 3 dates shown on the syllabus. Please check your schedule now to see that there are no conflicts. If you are going to miss a quiz or test, please arrange something with me beforehand. If you miss a quiz or test without telling me beforehand, you will lose 10% of your grade per day, no exceptions. On the quizzes and tests, you will be expected to show your work and explain your answers. Each test is worth 100 points.
- **Mathematica Lab Projects** will give you a chance to do longer problems outside of class with the help of a computer. Mathematica is a computer algebra system that we will be using extensively – it does algebra, calculus, graphics, and much more. I will hand out a sheet on how each section of the book can be utilized in Mathematica. On the Tuesdays announced on the syllabus, we will use class time to work on your projects. I will be there to help, and you should ask for help when you need it. You are expected to do your own work, and to explain your solutions. You may work with a partner on each lab, though you may not work with the same partner twice. These 6 labs will be due on the dates announced on the syllabus. The labs should be completely typed and stapled, and should include explanation of any computation longer than 1 Mathematica command. No error messages or incorrect computations should be shown. Each lab will each be worth 20 points. Late labs will not be graded.
- **The Final Exam** will be comprehensive, and worth 230 points. Excluding pop quizzes, there are 1000 points total. There is no extra credit available.