

Math 1220 Calculus II

Vital Information

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Office Hours (In-Person and Zoom):
Monday, Friday: 11:45-12:45; Wednesday: 2:45-3:45
Tuesday, Thursday: 10:30-11:30
or just stop by! I don't mind drop-ins!

WELCOME TO CALCULUS II! Calculus II is to integrals what Calculus I is to derivatives. While Calculus I is all about slopes and rates of change, our main focus in this course is adding, particularly adding together an infinite number of values. This has applications in computing areas and volumes, average values, probabilities and more.

The Text

The text we be using is MyMathLab for *Calculus: Early Transcendentals* by Haas, Heil and Wier, fourteenth edition. From now on, I will refer to the textbook with the letters **HHW**. We will cover Chapters 2-5 and most of Chapter 6. Much of Chapter 1 will be done through review exercises. **MyMathLab includes an eBook copy of the text! If you want a print copy of the text, you can purchase one online from many outlets. You must have access to MyMathLab!** How and where you purchased your text affects your access to this important online tool.

If you purchased your textbook through the bookstore, you should have purchased an access code for MyMathLab. This code will work for 24 months. If you purchased your text through another vendor, you may need to purchase MyMathLab individually. If you are unable to purchase access to

MyMathLab right away, there is a temporary access option that you can use immediately. Instructions on how to register are provided on the website. This option WILL run out in a few weeks, so do not think that you can string together a series of temporary access codes!

Grades

If you ever have any questions or concerns about your grade please come and talk to me. We may not be able to iron out every problem but at least we can talk about the situation and understand each other's concerns. Your grade in this class will be based on the following assessment measures.

Homework	15%
Online Quizzes/In-Class Work	15%
Formal Quizzes	10%
Three Exams	45%
Cumulative Final Exam	15%
	100%

My grading scale for a score of x is given below.

$92 \leq x \leq 100$	A
$90 \leq x < 92$	A-
$88 \leq x < 90$	B+
$82 \leq x < 88$	B
$80 \leq x < 82$	B-
$78 \leq x < 80$	C+
$72 \leq x < 78$	C
$70 \leq x < 72$	C-
$68 \leq x < 70$	D+
$62 \leq x < 68$	D
$60 \leq x < 62$	D-
$0 \leq x < 60$	F

Course Goals

By the end of the course, you should be able to do the following.

- Use appropriate techniques of integration to compute reasonable antiderivatives.
- Use the Fundamental Theorem of Calculus correctly and where appropriate.

- Apply integral calculus to appropriate situations.
- Write calculus-related statements using correct notation and appropriate form.
- Demonstrate sufficient knowledge of the course content.

Topics Covered

- Differential calculus, including derivatives and antiderivatives.
- Applications of derivatives.
- Definite and indefinite integrals, including Riemann sums and the Fundamental Theorem of Calculus.
- Techniques of integration, including standard techniques, tables, and computers.
- Applications of integration.
- Series and Power Series, including Taylor's Theorem.

Skills

In this course we will spend a significant amount of time developing these skills.

- Writing mathematics using *complete sentences, correct notation, proper organization, and clear explanations*.
- Using appropriate technology for computation and communication.
- Deciding whether to use technology or hand computation in a given situation.
- Problem solving using quantitative reasoning.

Homework Assignments

I maintain a web page containing the homework assignments for this course, together with other information. The main page is at the following address.

<http://www.marksnavelly.us>

You can go directly to the course website, or use the link in the Schoology site. Homework assignments will be collected as specified on the web page and on MyMathLab, usually at the beginning of every class meeting except review days and exam days. Check the web page for specific assignments and due dates. I provide homework solutions as requested on the Help Page on the course website. The user name is **student** and the password is **mathhelp**. This is the user name and password that you will use everywhere on my website!

I will be collecting the homework as indicated on the course website. **I strongly encourage you to work in pairs or trios on these assignments, but everyone must turn in their own work. I recommend working together to figure out the problems but writing by yourself. I will not answer questions over homework on the day it is due, and I ask that you not stop by my office before class with questions. I also will not “pre-grade” your work (“Would you look at this and tell me if it’s right?”).** If you think your work is correct, turn it in. If you don’t think it’s correct, why don’t you think it’s correct? I *love* to answer questions you have about the problems you’re working on, but “Tell me if this is right” isn’t a question.

Schoology

Carthage uses a course management system called Schoology. You’ve probably been introduced to this package elsewhere. I will post grades there as often as I can, and I have included a link to the course website.

Quizzes

We will have a quiz most Tuesdays, and other quizzes when needed. You should view these as a learning experience. You have the chance to see how much of the material you understand when the books and notes are put away, and to get a feel for what types of questions I will be asking on the exams. If you have trouble with a quiz question, you should review your notes and homework *before the next class period!*

Office Hours

During office hours, I promise to be in my office and ready to help you in any way I can. I realize that you may have a another class during my office hours, so I welcome appointments and drop-ins. If you stop by and the blind is up, tap on the door and I’ll let you know if I can help you at that time! If I’m on the phone, after I see you, please go to the chairs in the hallway and wait. I’ll come to you when I get off the phone. If the blind is down or the light is off in my office, there is a reason. You don’t need to bother to knock - if I’m not in, I won’t answer; if I’m in but the blind is down, it is down for a reason.

Computers and Calculators

We use a computer program called *Mathematica* in this course. This program is available in the MathLab next door, and you can download and install the entire package on your computer for free. If you do not want to install Mathematica on your computer, there is an online version available through user.wolfram.com that runs through a web browser. More information is on the course website. While this is not a course in *Mathematica*, the mathematics department at Carthage teaches the computer program as a tool, and a very important tool. We may also use *Microsoft Excel* from time to time.

Questions always arise about graphing calculators. Any calculator that has trigonometric functions, exponential functions and logarithms will do just fine. The TI-30 IIS is a great calculator at a very reasonable price. On tests and quizzes, I may ask those of you who have graphing calculators not to use the calculator's graphing or equation solving capabilities.

Three Important Items

- **If you're working online, whether taking a quiz or working homework, the same rules apply as if you were working in person.** For homework, I encourage you to work together, but you should be working on problems together, not just sharing answers. If you're taking a quiz or exam online, you should do your own work, with no assistance from any other person, website, book, text, notes, or anything that you would not be permitted to use in class. You should not go to any website during the exam other than the exam itself. You should not use the graphing capabilities of your calculator, nor should you use your calculator to compute any derivatives.
- **Please turn off all cell phones, music players, and other electronic devices before class, including exam days.** If you need to have your communication equipment on during class, please talk to me before class starts. Texting during class is rude and not appropriate behavior.
- **Carthage College strives to make all learning experiences as accessible as possible.** If you anticipate or experience academic barriers due to your disability (including mental health, learning disorders and chronic medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, you also need to register with Diane Schowalter in Learning Accessibility Services (dschowalter1@carthage.edu).