

Math 1070 Functions, Graphs and Analysis

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 FUNCTIONS GRAPHS AND ANALYSIS, WHICH I WILL USUALLY CALL FGA!

This class has one main goal: to prepare you to take calculus. Some people call this course Precalculus, but I do not like that term. This material has value on its own, not just as a preparation for something else, but that does not change our main objective.

The Text

The text we be using is MyMathLab for *Precalculus* by Lial, Hornsby, Schneider, and Daniels, seventh edition. From now on, I will refer to the textbook with the letters **LHSD**. We will cover Chapters 1-8 and some of the review material.

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!

Course Goals

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

- Succeed in calculus class.
- Solve polynomial and rational equations and inequalities.
- Find values for logarithmic, exponential, and trigonometric functions.
- Write mathematical material using correct notation and appropriate form.
- Demonstrate sufficient knowledge of the course content.

Topics Covered

This course will cover the following topics.

- Equations and Inequalities
- Functions: Defining, Evaluating, and Graphing
- Types of Functions: Polynomial, Rational, Logarithmic, Exponential, Trigonometric
- Triangle and Plane Trigonometry

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 technology when appropriate 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 certainly post grades there as often as I can, and I have included a link to the course website.

Quizzes

We will have quizzes at various times throughout the semester, and over each video assignment. 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!*

Grades

Your grade in this class will be based on the following items.

Homework	15%
Online Quizzes/In-Class Work	15%
Formal Quizzes	10%
Exams	60%
	100%

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.

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

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 may 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.

Four 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).
- **We do have class the day before break, and we may have quizzes those days.** If you have three final exams in one day during the final exam period, please let me know so that arrangements can be made.