Syllabus for Math 5

Course Information

Semester & Year: Fall 2019
Course ID & Section #: Math 5, D7331
Instructor's name: Levi Gill
Day/Time: TTh 12:30-1:55PM
Location: DM __
Number of units: 3

Instructor Contact Information

Office location: E2
Office hours: By Appointment
Phone number: 707-465-2361
Email address: levi-gill@redwoods.edu (preferred method of contact)

Required Materials

Textbook Title: *Math in Society*
Edition: 2nd ed
Author: David Lippman
ISBN: 1479276537 Other requirements: materials, equipment or technology skills

Catalog Description

An introduction to mathematics for students not pursuing science, business, and math majors. Surveys selected topics with a focus on history, utility, and artistry to promote appreciation and critical understanding of the foundational importance of mathematics to contemporary society.

Course Student Learning Outcomes *(from course outline of record)*

1. Demonstrate critical thinking skills through analyzing mathematical ideas in the context of contemporary society.
2. Use mathematical skills and techniques when arguing a position on a contemporary issue.

Evaluation & Grading Policy

Exams ……..25%
Homework……50%
Final Project ……25%

A	$92 \leq Grade$
A-	$90 \leq Grade < 92$
B+	$87 \leq Grade < 90$
B	$82 < Grade < 87$
B-	$80 \leq Grade \leq 82$

C+	$78 \leq Grade < 80$
C	$70 \leq Grade < 78$
D	$60 \leq Grade < 70$
F	$Grade < 60$

Prerequisites/co-requisites/ recommended preparation

None

Welcome to Class!

I bet that when you think of math, you think of algebra. Maybe when you think of a typical math homework you conjure up an image of an endless parade of equations ending with a few impossible word problems that, if we're honest, didn't seem to be that applicable.

Now I don't want to disparage algebra at all. As a math teacher, I really enjoy teaching the topic. As a mathematician, I know its value in society. But also as a mathematician, if you were to ask me what I love about math, or what cool things people do with it, I'd be telling you - with way too much enthusiasm - about the stuff we're going to talk about in this class. And algebra (or at least, algebra as you know it)? Well… I don't want to disparage algebra, but I probably would forget to mention it.

This class is an Exploratorium. We're going to explore topics both modern and ancient that have shaped society. And by explore I mean I'm not going to lecture the class away. You're going to jump in and see how things work. My goal is to show you that mathematics has many branches of which you've probably only seen one or two, and there are a lot of neat things out there that would be a shame for you to miss.

So the best thing you can bring to class is curiosity and grit.

Things to Know

Time Commitment
If I were to put a number on how many hours you need to study for the class, I'd say six to eight. However, every topic is different, and every person learns differently. You'll have to find what works for you, but give yourself the time you need to be successful.

Class Rules
As a general rule, *be respectful to your classmates and help provide a healthy environment for learning*. Give your full attention to the material or activities we are working on (i.e. cell phones are productivity killers). When working in groups be mindful to engage everyone. My favorite phrase for group activities is, "Step back; Step forward." Some of you will be more prone to step forward and take charge – take step back and give others a chance to engage! Others of us will naturally want to hang back – your contributions are important, so step forward!

Grading

Exams ……25%

We'll have a midterm and final exam. The final won't be cumulative; it will just cover the new material since the midterm. The exams will have two parts. In the first part will be essay questions that ask you to tell me what you know about a given topic. The second part will have calculation problems where you do the math part. Because this class covers a large variety of topics, I'll give you the option to skip one or two questions simply because you don't feel that comfortable with them. But you need to have mastery over the rest!

Homework……50%

Because this is not a stereotypical math class, you're not going to just be doing a bunch of calculations (though you will be doing calculations). You're also going to do things like small research projects, reading articles, responding to videos, building things, growing things, counting things… A bunch of times I'm going to use the homework in the next class. When I'm grading, I'm going to be primarily looking for whether or not you've completed the homework, and give you feedback where you need improvement. Mastery isn't expected until the exams. Also, please keep your returned homework! You'll want it for studying and for record in case I make an error recording your grade (it doesn't happen often, but it happens).

Final Project…….25%

The theme of this class is "Math in Society" and I want the final project to reflect something that interests *you*. Here are some suggestions:

Essays (Approximately 5 pages)

- An essay on a topic of the use of math in society (however it cannot be about something that was covered in class).
- An essay on a topic of the history or mathematics.
- A biographic essay on a mathematician (or mathematicians if there's a theme you want to explore).

Multimedia/Art

- You can make a video interview of somebody using math in society, or make an audio podcast on a topic. If you do this, the video/audio must be edited.
- You can create a piece of art exploring a theme of mathematics.

If you can think of something else you would like to do that intersects with your interest, then come talk to me. I'm pretty open so long as it requires an adequate level of rigor and effort on your part.

Falling Behind or Not Showing Up

First of all, I want to make it clear: *I will never judge you for falling behind or not showing up.* Despite our best efforts, sometimes life gets in the way of school. Sometimes other classes end up requiring more work than expected, so school gets in the way of school! I've been there in both cases and have had to drop classes mid-semester because I had too much on my plate. So I totally understand. I'm here to help you and don't feel like you owe me an apology for doing your best to balance your life.

But let's assume the worst happens, and for some reason your fall behind or stop showing up.

> **Falling Behind**. If I notice that you are falling behind, I'm going to reach out by email and offer to help. Guaranteed. But at some point you can get so far behind that there's no way you'll pass the class. *If you fall more than two weeks behind in your work, I reserve the right to withdraw you from the class.* This means you get a W instead of an F on your transcript, which is much better for your GPA. I'll never do this without discussing with it with you first and giving you plenty of heads up. My first impulse is always to get you caught up.
>
> **Not Showing Up**. This isn't an online class. To meet all the learning goals and objectives of this class, it is expected that you attend class and participate in the activities. So even if you're online doing the work but not showing up to class, I still have to consider you absent. Similar to the previous situation, *if you disappear from class and miss more than two weeks, then I reserve the right to withdraw you from the class*. I'll make an attempt to reach out to you first.

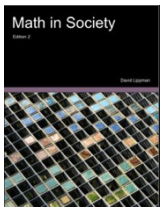
Are there exceptions? Yes, there's no way for me to predict every situation. That's why I use the language "I reserve the right." Ultimately I have to make a judgment call that makes sense for the each situation, and that's why I'll always try to reach out and discuss the situation with you. But in my experience, the critical amount of time/work from which it becomes nearly impossible to catch up from is two weeks.

Appealing a Grade

If you believe you have received the wrong (or an unfair) grade for an assignment, please come talk! I'm totally willing to admit when the mistake is on my end. If you earned the points, you deserve the points.

Stuff You'll Need

Textbook



We'll be using Math in Society, by David Lippman. I'd suggest using the online version, because it's free. But if you're someone who needs a book in front of them, you can get a copy from the library, buy it online, or buy it through the bookstore.

Basic Scientific Calculator

You want a calculator for **basic** computations. At the very least it needs to be able to take a square root, so look for the $\sqrt{\ }$ button. You don't need a big, fancy graphing calculator, but if you already have one you can use it.

Computer Access

Most assignments will require the use of a computer and access to the internet.

Important Dates

Deadlines

Last Day to Register for Classes*	**08/23/19**
Last Day to Add a Class** ……..	**08/30/19**
Last Day to Drop w/out a "W" ……. & Receive a Refund	**09/06/19**
Census Date ……	**09/09/19**
Last Day to File P/NP Option……..	**09/20/19**
Last Day to Petition to Graduate & Petition for Certificate ……..	**10/31/19**
Last Day for Student Initiated Withdrawal **(No Refund) ……**	**11/01/19**
Last Day for Faculty Initiated Withdrawal **(No Refund) ……**	**11/01/19**
Final Examinations ……...	**12/14/19 – 12/20/19**

Holidays

Labor Day	(Campus Closed)	**09/02/19**
Veteran's Day	(Campus Closed)	**11/11/19**
Fall Break	(No Classes)	**11/25/19 – 11/30/19**
Thanksgiving	(Campus Closed)	**11/28/19 – 11/29/19**