Instructor Dr. Zack Judson Email judsonzack@fhda.edu

**Prerequisite** Math 1A or an equivalent course

## **Required Materials**

1. XYZHomework

#### **Office Hours**

My office hours will be held Monday through Friday from 11:00 to 12:00 in the morning. Due to our current status, these office hours will be held online. During this hour I will answer questions of a personal nature over email, and I will answer math questions on the office hour discussion board on Canvas. Please be aware that I will be monitoring 2 different discussion boards during this time, so it may take some time to cycle through your questions. When asking math questions, please be specific. **Do not just reference a problem number.** 

#### **Accommodations**

Those of you who need additional accommodations, due to disability, campus-related activities, or some other reason, please meet email me during the first week of class to discuss your options.

#### Homework

This course will be designed to prepare you for Calculus. For the past two quarters we have been working on the reflex skills that are necessary to survive in Calculus. We will continue to work on these skills in XYZHomework. Homework will represent 10% of your grade.

# **Group Work**

Unfortunately, reflex skills will not be enough to help you do well in Calculus. You will need to learn to work on deeper problems. To help facilitate this process, we will separate into groups and work with our classmates on worksheets. At the end of class you will discuss the problems with each other as well as decide within your group who will be the primary representative for each question. (These tasks should be evenly distributed throughout the group.) For each group work assignment there will be a discussion board. You will have until the start of the next .class to contribute to your discussion board. The discussion board will be the place for you to share your work with each other. For each question the primary representative will be required to make the first post for that question. The primary representative can propose a solution, an idea about how to begin the problem or a specific question that is troubling them about the problem. After this initial post, all members of the group must respond to either agree or disagree, offer answers or insights, or pose new questions. At this point the whole group (including the primary representative) will continue to work together to arrive at a consensus solution.

The only way can learn is through struggle and mistakes. This is why group work will not be graded based on correctness or even completeness. Instead, you will be graded on your collaborations during class time, your work as a primary on problems, and your responses to your group mates on other problems. Group Work will account for 10% of your total grade.

### Labs

A half dozen times throughout the quarter we will have lab assignments. The intention behind lab assignments is to encourage students to think more deeply about the material. These labs will be worked on in groups of three or four. Although each member of the group will submit their own lab, you will be graded as a group.

There will be some initial time allotted to these lab assignments during class, but you will need to work on them outside of class to complete them. To help you coordinate this outside work, each lab group will be provided with a discussion board. Part of your grade will be based on your communications on the discussion board. You are more than welcome (and even encouraged) to interact with your group in other ways; however, you need to make sure to document this interaction on your discussion board. This documentation needs to show what interactions are happening in your group. Bad example: "we met in zoom today and did the lab" Good example: attach a transcript of the meeting.

For further information regarding the lab assignments please read the Lab Grading Policies. Each submitted lab will be graded out of 100 points and each lab discussion board will be graded out of 25 points. Labs will account for 10% of your total grade. Your lowest lab score will be dropped.

### **Midterms**

This course will consist of 3 midterms, each of which will represent 10% of your grade. These exams will be taken synchronously, that is to say they will take place during our class meeting time. The midterm will become available at 8:20. You will have until 9:20 to answer all of the questions, if you are unable to answer the question you must briefly state what you tried.

After you have finished the exam you will have until noon to upload a **pdf** of your solutions. If the work you upload does not match your answers you will score a zero for that problem. The bulk of your grade on the exam will be based on the work you show to justify your answers.

## Quizzes

Quizzes will represent 20% of your grade. However, all points that are missed on quizzes will be replaced by your final. For example if you average a 60% across all quizzes and then score a 75% on the final, you will earn back 75% of the points you had missed on quizzes so that your final quiz score will be a 90%. In this way quizzes are designed to be a place where you can make mistakes and learn from them. However, your work on this exam should be your own. All students with duplicated work will receive a zero on those questions.

Unlike midterms, quizzes will be given asynchronously. On the day a quiz is assigned, you can click on the quiz at any time after 10:30. You will have 40 minutes to answer the questions and upload a **pdf** of your solutions. You must upload your solutions before midnight on the day the quiz is assigned. In a face to face format, students are given 17-20 minutes for these quizzes, the additional 20 minutes is to give you time to take a picture or scan your solutions, convert them to a pdf if need be, and then upload them. Quizzes will be scored out of 20 points. Since all quizzes are protected by the final, I will not accept any quizzes that are not properly submitted.

## **Final Exam**

We are scheduled to take our exam on Wednesday, December 9, from 7am to 9am. Like our midterms the final will take place synchronously. The final will follow the same format as our midterms. As with the midterms, you will have until noon to upload a **pdf** of your work. The final will represent 20% of your grade.

## **Student Learning Outcome(s):**

- \*Analyze, investigate, and evaluate linear systems, vectors, and matrices related to two or three dimensional geometric objects.
- \*Graph and analyze regions/curves represented by inequalities or trigonometric, polar, and parametric equations, including conic sections.
- \*Analyze, develop, and evaluate formulas for sequences and series; Justify those formulas by mathematical induction.