MATH 31   SECTION MP1   CRN 27666

Instructor: Dr Zack Judson   Email: judsonzack@deanza.edu

Modality: Face to Face   Time: MTWTh   11:00-1:15   Room: MLC 270

Drop-in Hours: MTh   1:30-2:20   E36B   W   1:30-3:20   S44

Prerequisite: Intermediate algebra or equivalent or higher or appropriate placement beyond intermediate algebra

Required Materials

1. XYZHomework (Please do not purchase before class starts)
2. Scientific Calculator (i.e. TI 30X-IIs) [NO graphing calculators or cellphone]

Student Learning Objectives

1. Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.
2. Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.

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

The homework will be delivered through an online system called XYZHomework. More information about XYZHomework will be shared on the first day of class. Homeworks are assigned after each new lecture you will typically have 2 or 3 days to complete an assignment. Assignments will be due at 11:59pm.

You are advised to begin the homework assignments as soon as you have received the lectures for them.

Homework will be worth 10% of your grade.

Cooperation

Sadly, most students have experienced at least one math class where everyone worked independently in their own heads. This is not mathematics. At it's core mathematics is about the communication of precise ideas. Toward this end cooperation will represent 10% of your grade. Your cooperation grade will consist of daily group work assignments, occasional discussion days and two math labs.

In my experience, every math class understands the lecture right up until the point they have to work through a problem. To help facilitate this process, after lectures we will be breaking into groups and working together on the white boards. We will be working on developing the skills we learned in the lecture. These group work assignments will be graded based on your collaborations during class time. each group work will be worth 3 points.

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 have discussions. These discussions will either cover mathematical models or reviewing for exams. The discussion will become available the day before we cover it in class. You will be asked to do some amount of preparatory work before the discussion day. This will be worth 2 points. On the day of the discussion we will work together on the boards to try and figure out how to apply the knowledge we learned in lecture. This collaborative work will be worth 6 points.

To help prepare you for the complexity of some calculus assignments, we will have two math labs this quarter. 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. You will need to work on them outside of class to complete them. Although every student must turn in their own lab assignment, you will be graded as a group on the assignment. No late lab assignments will be accepted. Each Lab will be graded out of 100 points.

Approximately two days before the lab is due, we will have a lab check-in day. A rough draft of the lab will be due the night before the Lab Check-In. The rough draft will be worth 20 points and will be graded solely based upon attempting all parts of the exam and asking meaningful questions about those parts you do not know how to do up to that point.

Although the components of one lab add up to 120 points, these will be scaled to 30 points when computing your cooperation grade.

Midterms

This course will consist of 4 midterms, each of which will represent 10% of your grade. These exams will be taken during class. The bulk of your grade on the exam will be based on the work you show to justify your answers.

The intent of the midterms is to be able to learn from them. On the 4th through 11th Wednesdays of the quarter, you will have the opportunity to retake a midterm score that you are not happy with. This retake will take place during office hours (1:30pm). In order to retake an exam you

must submit test corrections to me by the the end of the prior week. The retake will only replace your exam score if it is higher than the original exam.

Final Exam

A two-hour comprehensive final exam will be given on Monday, December 11, from 11:30 to 1:30. The final will follow the same format as our midterms. The final will represent 20% to 40% of your grade. (see quizzes below)

Quizzes

Quizzes will represent up to 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.

As with your midterms, you are expected to do your own work on quizzes. However, unlike midterms, quizzes will be given asynchronously. On the day a quiz is assigned, you can click on the quiz at any time after class. The quizzes are designed to be completed in 20 minutes. You will have 40 minutes to answer the questions and upload a pdf of your solutions. **Due to the fact that all missed points are covered by the final, quizzes will only be graded if they are submitted as a single pdf through the CANVAS quiz.** Each quiz will be graded out of 20 points.

In addition to these more traditional quizzes, there will also be entrance and exit tickets to class on most days. Each of these will be scored out of 2 points.

Student Learning Outcome(s):

• Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.

• Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.

Office Hours:

M,TH	01:30 PM	02:20 PM	In-Person	E36B
W	01:30 PM	03:20 PM	In-Person	S44