Math 2-01 Syllabus - Summer 2020

Meeting time: On Zoom, MWF 9:00 - 11:30 AM PDT

Main text: College Algebra at OpenStax (Free at: https://openstax.org/details/books/college-algebra)

Reference: College Algebra, 2nd edition by Miller and Gerken

Zoom: I will be using Zoom to hold the lectures and office hours. Links and more details on Canvas.

Instructor	Maryam Nashed (you can call me Ms. Maryam)
Email	mmnashed@ucsc.edu (contact me between 8:00 AM - 8:00 PM)
Course website	https://canvas.ucsc.edu
Office Hours	Thursday from 10 AM- 11AM and Friday from 2:00 PM- 3:00 PM or by appointment (over Zoom). Office hours are for you to ask me any questions you have!

We will use Canvas during the quarter for announcements, recorded lectures, quizzes, exams and uploading assignments and grades. You will need to log in at https://canvas.ucsc.edu using your CruzID and Gold password.

Course description: College Algebra for Calculus provides an introduction to concepts essential as a preparation for the precalculus course as well as courses beyond, including the language and tools used to describe real-life situations mathematically. Functions and algebra are used to explore the mathematical concepts that may not be otherwise apparent. We will begin by reviewing prerequisites such as operations on real numbers, rational expressions and basic polynomial properties. We will then introduce functions and understand their notational representation and important properties. We'll look more deeply at specific kinds of functions: polynomials and rational and demonstrate their use in mathematical models of the real world.

Learning outcomes:

- Students will recall basic algebra skills such as Arithmetic operations and factoring.
- Students will learn the foundational concept of function and learn to apply that knowledge to describe real life situations.
- Students will build connections between mathematical thinking related to various functions and real life applications.
- Students will demonstrate strong knowledge of various examples of functions such as polynomial and rational functions.
- Students will compare and validate patterns and make connections between what they are learning using concept maps.

- Students will be able to appreciate the significance of mathematics by developing various kinds of examples, both from within mathematics and real life, for concepts introduced throughout the course.
    - Students will develop studying skills.

Grading Policy:

10% pre-lecture readings: You will complete readings and questions before attending the lecture. They are under “Modules” on Canvas.

15% post-class reflection: At the end of each lecture, there will be a two part quiz. The first part consists of problems similar to the one you see in the lecture. And the second part is a reflection that will require you to provide feedback on that day’s lecture.

20% homework: Each week you will have a homework assignment due Saturday at midnight. It will cover the content addressed during the week. You will upload your written work to Canvas using apps such as CamScanner or Office Lens to scan your work will be useful here.

25% midterm exam: You will have one midterm exam on Friday, July 10th. It will cover all the material covered in class from the beginning of the course until Wednesday, July 8th. I will upload a PDF with the exam questions at 6 PM and you will have until Monday 8 AM to work on the exam, scan your work, and upload it on Canvas.

30% final exam: The final exam will be on Friday, July 24th. It will be a comprehensive exam. I will upload a PDF with the exam questions at 8:00 AM and you will have until 5:00 PM that day to take the exam, scan your work, and upload it on Canvas.

5% extra credit: Participation in the lecture and in-class activities. I will keep track of the students who are participating in the group activities each lecture. You need to attend and participate in at least 2 classes a week in order to receive a full 5% extra credit.

On ProctorU: I will NOT be using ProctorU

Make-up Policy: You will have 2 days after your homework score is available to re-attempt and re-submit your homework with the corrections for full credit.

Late Submission: Due to the brevity of this course, I will not accept any late work.

Important deadlines:

- **Drop** the class is June 29 (tution reversed)
- Summer is unique. You will not be dropped for non-attendance or non-payment. You must drop yourself. Dropping before the deadline results in a full-tuition reversal/refund.
- **Request "W" Grade** - Friday, July 10 (no tuition reversal). If you withdraw, a W will be posted for the grade and full tuition is charged (no refund)

- **No Class** on Friday July 3rd (Holiday)
- **Change Grade Option** (P/NP) - Friday, July 10
- For a list of all important dates and deadlines, including grades due, check the summer academic calendar: https://summer.ucsc.edu/studentlife/index.html
- For questions about dropping, requesting a W grade for a course, or withdrawing from the summer quarter, email summer@ucsc.edu.

Weekly schedule for Summer 2020

Remember that you will have pre-lecture readings and questions to complete before lecture and a review lecture questions after each lecture!

Weeks	Monday	Wednesday	Friday
Week 1 **6/22 - 6/26**	• Overview of the syllabus • Small group activity • Section 1.1 (Real numbers) • Section 1.2 (Exponents)	• Section 1.3 (Radicals and Rational Exponents) • Section 1.4 (Polynomials)	• Section 1.5 (Factoring Polynomials) • Section 1.6 (Rational Expressions)
Week 2 **6/29 - 7/3**	• Section 2.2 and 2.3 (Linear equations and applications) • Section 2.5 (Quadratic equations)	• Section 2.5 Continued (Quadratic equations and applications) • Section 2.6 (Other types of equations)	**Holiday**
Week 3 **7/6 - 7/10**	• Section 2.7 (Linear inequalities and Absolute value inequalities) • Circles and lines	• Section 3.1 (Functions and relations) • Section 3.2 (Domain and Range)	• Piecewise functions • Section 3.3 (Rates of Change)

Week 4 **7/13 - 7/17**	• Section 3.5 (Transformation of functions)	• Section 5.1 (quadratic functions and applications)	• Section 5.2 (Polynomial functions) • Section 5.3 (graph of polynomials)
Week 5 **7/20- 7/24**	• Section 5.4 (Dividing polynomials) • Section 5.5 (Zeros of polynomial functions)	Final Exam Review	**Final Exam**

Academic Integrity: Academic integrity is the cornerstone of a university education. All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty. In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript. For the full policy and disciplinary procedures go to https://ue.ucsc.edu/academic-misconduct.html

Title IX: The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors.

The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. Information about the https://titleix.ucsc.edu, the online reporting link https://ucsc-gme-advocate.symplicity.com/public_report/index.php/pid731936, applicable campus resources, reporting responsibilities, the UC Policy on Sexual Violence and Sexual Harassment, and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment can be found at titleix.ucsc.edu.

The Title IX Office is actively responding to reports and requests for consultation. If you are not currently working with someone in the office and want to make a report/request a consult, you can

expect the fastest response by using our online reporting link. For more information please visit the Title IX Operations under Covid-19 page.

Campus Resources:

DRC (Disability Resources Center): The DRC is here to ensure that all students feel included and are able to fully participate in. If you need additional support, please contact the DRC to determine what academic accommodations may help. If you have questions or concerns about exam accommodations or any other disability-related matter, email the DRC Schedulers at **drc@ucsc.edu** for a remote appointment.

CAPS (Counseling and Psychological Services): It's a stressful time, remember it's okay to ask for help! If you are in distress, managing heightened stress and anxiety, or want to get more support and a counselor's perspective on something you're going through, CAPS provides a variety of services for your needs, please visit their website for more information.

MSI (Modified Supplemental Instruction): MSI provides weekly meetings where students have the opportunity to work with their peers and practice material from the course. In MSI sessions, students can expect to acquire effective learning strategies, work with peers to understand difficult course material and collaborate with their classmates. Sessions are facilitated by trained peer Learning Assistants who utilize collaborative activities to ensure peer-to-peer interaction in small groups. Visit their website for more information.

SGT (Small Group Tutoring): SGT provides a small interactive setting for students to be comfortable to engage in conversations about course material with other students. Each session is led by a current UCSC undergraduate student who has taken the course and done well in it. Tutoring sessions are 1-hour long and generally have a capacity of 6 students. When students sign up for tutoring, students make a commitment to attend tutoring weekly for the entire quarter. All students can sign up for up to 2-hours of tutoring a week per course they are enrolled in. Visit the website for more information.