

**Syllabus**  
**Math 1050-3, Summer 2020**  
**Instructor: Rebecca Noonan Heale**

**COURSE INFORMATION:**

Math 1050, College Algebra is a 4-credit semester course.

Math 1050-3 is a remote learning class. We will meet Mondays to Thursdays from 10:00-12:15 in Zoom. These meetings will be interactive, and will incorporate lecture, discussions, individual work and group problem solving. There will be a short "in-class" quiz delivered in Zoom each day. There will be two exam and a final held during class time.

The Zoom link and password will be posted in Canvas and sent to you through Canvas mail before the first class.

Math 1050-3 is a 5.5-week long course. Each week, we will cover what a Fall/Spring 1050 College Algebra course covers in 3 weeks. If you miss one day of class, this is similar to missing 3 days during the Fall and Spring. There will be 6 to 8 homework assignments per week. In this course students should expect at least 16 to 24 hours of work outside of class per week.

(For reference, in the Fall and Spring semesters, there are 2 to 4 assignments per week and students are expected to spend 8 to 12 hours working on them.)

**REQUIRED COURSE MATERIALS**

For both quality learning and proctored testing, you are required to have access to the following equipment:

- **internet** (in order to access course materials and take exams):
- a **webcam on your computer or camera on your phone** (this is necessary for taking exams in Zoom; it is useful for online meetings):
- a **scanning device** (smartphones can be used as scanning devices) which is different than the device you are using for your camera;
- a **microphone** (used for online meetings);

The following are recommended, but not required:

- a **printer** (if you don't have one, you will need to make hand-written templates);

The textbook and online HW were created in a joint project sponsored by the Utah System of Higher Education, with contributions from the University of Utah and Salt Lake Community College. A pdf of the textbook is free and available in Canvas. The online HW is also free to students.

**PREREQUISITES:**

The prerequisite for this course is at least a C (preferably a B) in mathematics 1010 or its equivalent, an Accuplacer CLM score of 60 or better, or an ACT score of at least 23. Students are expected to already have the basic algebra skills.

*Important Note:* The mathematics department DOES enforce prerequisites for all undergraduate courses. If you were able to register for this class based on your enrollment in the prerequisite course last semester and you did not receive the minimum grade in that course to enter this class, then you will be dropped from this class on Friday of the first week of classes. If you are in this situation, it is in your best interest to drop yourself from this class and enroll in a class for which you have the prerequisites before you are forcibly dropped.

**MAKE SURE YOU ARE IN THE RIGHT CLASS:**

Few majors on campus require Math 1050. Math 1050 is a technical mathematics course designed primarily to prepare students for calculus. The general education QA requirement is also fulfilled by Math 1030 or Math 2000 for students not needing 1050 for their degree program. These courses are a better fit for those majors that do not require 1050.

If you are learn well independently and are just taking Math 1050 as a prerequisite for a future class, you would also have the option to study on your own and take the Accuplacer as a way to test into a future class.

Also, if you would prefer an online class with no class meetings (video lectures instead) or a slower paced class, consider switching to the 12-week Math 1050-90.

**COURSE GOAL:** Improve quantitative reasoning and prepare for future math learning in calculus, linear algebra, and discrete mathematics.

**INSTRUCTOR'S GOAL:** Provide a well-structured course in which each student is successful, enjoys the learning experience, and c) gains skill and confidence in logical reasoning.

**TOPICS TO BE COVERED:** Numbers, functions, sequences, series, counting problems, graphs of functions, inverse functions, polynomials, rational functions, exponential functions, logarithms, piecewise defined functions, matrices, and matrix equations.

## EXPECTED LEARNING OUTCOMES:

Upon successful completion of this course, a student should be able to:

1. Sketch the graph of basic polynomials (second and third order), rational, radical, exponential, logarithmic, and piece-wise functions with or without transformations. Be able to identify important points such as x and y intercepts, maximum or minimum values; domain and range; and any symmetry.
2. For rational functions, identify x and y intercepts, vertical, horizontal and oblique asymptotes (end behavior), and domain. Use information to sketch graphs of functions.
3. For polynomial functions, identify all zeros (real and complex), factors, x and y intercepts, end behavior and where the function is positive or negative. Use information to sketch graphs.
4. Understand the connections between graphic, algebraic, and verbal descriptions of functions.
5. Given the graph of a function, be able to identify the domain, range, any asymptotes and/or symmetry, x and y intercepts, as well as find a rule for the function if it is obtained from a standard function through transformations.
6. Define  $i$  as the square root of  $-1$  and know the complex arithmetic necessary for solving quadratic equations with complex roots.
7. Solve absolute value, linear, polynomial, rational, radical, exponential and logarithmic equations and inequalities.
8. Find the inverse of a function algebraically and graphically.
9. Perform composition of functions and operations on functions.
10. Understand sequences and be able to differentiate between geometric, arithmetic, and others such as Fibonacci-type sequences giving direct formulas where available.
11. Understand series notation and know how to compute sums of finite or infinite arithmetic or geometric series.
12. Solve systems of equations (3x3 linear) and non-linear equations in two variables.
13. Make sense of algebraic expressions and explain relationship among algebraic quantities including quadratic, exponential, logarithmic, rational, radical, and polynomial expressions, equations and functions.
14. Represent and interpret "real world" situations using quadratic, exponential, logarithmic, rational, radical and polynomial expressions, equations, and functions.

**COMMUNICATION:** You may contact me by e-mail or through Canvas-mail. I will contact the class by sending Canvas messages and posting announcements in Canvas's announcement page. Also, I am usually working from the early morning (5 or 6 am) to the early afternoon (2 or 3 pm). If you e-mail or post in the mid-afternoon or evening, expect a response from me the next day.

**ONLINE OFFICE HOURS:** I will be available in Zoom for up to 30 minutes after every class. If you would like to meet at a different time, please contact me to set something up.

## RESOURCES TO HELP YOU:

Here are various resources for students, some math-related and some human-related.

## RECORDED LECTURE VIDEOS:

They are available through the modules or in both streamable and downloadable versions at

<http://www.math.utah.edu/lectures/math1050.php>. (It's good to save this address somewhere else, in case Canvas is down)

## CANVAS DISCUSSION BOARDS

- Please post questions and answers. Your classmates are often the faster and most knowledgeable people to respond! If something is urgent, send me an e-mail too.

## TUTORING HELP

- **UofU Math Tutoring Center ("drop-in" online tutoring).** The math center offers online tutoring. You can find more information here: <https://utah.instructure.com/courses/613503/>
- **UofU Learning Center (formerly ASUU Tutoring; offers subsidized one-on-one tutoring)** The Learning Center offers three free tutoring sessions per student per semester. Additional hours can be purchased after that. Scholarship assistance also available. Here is a link to more information: <https://learningcenter.utah.edu/>

## EQUIPMENT HELP

- The UofU has a laptop and mobile hotspot loan program – laptops, mobile hotspots mailed to current U students on a first-come, first-served basis. You can find out more information about this through this link: <https://union.utah.edu/covid-19/>

## GENERAL HELP, IN PARTICULAR IN LIGHT OF COVID-19

Here is information from the University about logistics in light of COVID-19. There is also information about financial assistance, counselling, the food pantry, and much more. <https://coronavirus.utah.edu/#students>

**DATES:**

Weekly Due Dates:

- Daily "In-Class" quizzes
- Online Homework: Due Mondays, Wednesdays and Fridays

Exams (Schedule at a time between the dates below):

- Exam 1 (1+ hours): Thursday May 21st during class time or at a time set by the class
- Exam 2 (2 hours): Thursday June 4th during class time or at a time set by the class
- Final (2+ hours): Wednesday, June 17th, 10:00 am -1:00 pm

Other dates:

- Drop/audit date: Thur 5/11
- Withdraw date: Fri 5/29

**GRADING:** Grades are calculated as follows:

- 15% homework,
- 15% quizzes,
- 20% each midterm exam,
- 30% final exam.

The lowest 3 HW scores and the lowest 2 quiz scores will be dropped at the end of the term. The lowest Midterm may be replaced with the Final Exam score, if the Final Exam score is higher. There are no "make-up" exams or quizzes. Students who miss an exam or quiz will receive a "0" on the missed exam or quiz. The 0 on the exam can be replaced by the score on the final exam.

A score of 73% is required for a C, which is the prerequisite to take the next class. You should monitor your course grade throughout the semester by looking at "Grades" in Canvas. At the end of the semester, the "current grade", not the "final grade" is used to determine the course letter grade.

The grading scale is:

<b>A</b>	<b>93% - 100%</b>	<b>C+</b>	<b>78% – 79.9%</b>	<b>D-</b>	<b>60% - 62.9%</b>
<b>A-</b>	<b>90% - 92.9%</b>	<b>C</b>	<b>73% – 77.9%</b>	<b>E</b>	<b>below 60%</b>
<b>B+</b>	<b>88% - 89.9%</b>	<b>C-</b>	<b>70% – 72.9%</b>		
<b>B</b>	<b>83% - 87.9%</b>	<b>D+</b>	<b>68% – 69.9%</b>		
<b>B-</b>	<b>80% - 82.9%</b>	<b>D</b>	<b>63% – 67.9%</b>		

## **ONLINE PROCTORING OF EXAMS**

There will be two midterm exams. Exams will be given in Canvas and proctored through Zoom. For the exams you will need a camera (web cam or phone cam) and a separate device for scanning. You are allowed to use one page of notes. You are not allowed to use any computer or online resources (including math sites and online calculators), notebooks or books, or to communicate about the exam with other humans. Not following these rules is considered academic misconduct and will be penalized as such. See further comments about academic misconduct below.

## **CALCULATOR POLICY:**

Calculators will be useful on some homework assignments, but will not be allowed on exams nor the final. If you do not have a scientific or graphing a calculator, there are free calculator applications online.

## **HW EARLY POLICY:**

- You can start homework early at any time.

## **HW LATE POLICY:**

- If you are not able to complete HW on time, you can submit it late by using a "Late Pass" for 70% credit. You need to request the late pass in the homework system BEFORE the due date. If you are not able to do this and need help opening up a past assignment, contact me.

## **EXTREME SITUATIONS**

If you have an extraordinarily severe situation, contact me, your instructor.

**CLASSROOM SOCIAL EQUITY.** I strive to be ethical, kind, fair, inclusive and respectful in my classroom and expect students to behave likewise. In this regard, I have these requests of students:

1) Please do tell me, discreetly, if you have any sort of anxiety disorder, TBI, PTSD, C-PTSD, or any other challenge that would cause psychological harm to you by me calling on you in class. I want students to feel a little uncomfortable and stretched during class, while working on problems as a large group, but I definitely don't want to cause any human being harm. So, please discreetly tell me if that is the case for you and I will confidentially accommodate your request.

2) Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any my meetings or entire due-date windows conflict with your religious events, please let me know so that we can make arrangements for you.

**PREFERRED NAME AND PRONOUN.** Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account, which managed can be managed at any time). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class or on assignments. Please advise me of any name or pronoun changes so I can help create a learning environment in which you, your name, and your pronoun are respected. If you need any assistance or support, please reach out to the LGBT Resource Center.  
[https://lgbt.utah.edu/campus/faculty\\_resources.php](https://lgbt.utah.edu/campus/faculty_resources.php)

## **UNIVERSITY OF UTAH POLICIES**

**DROP, WITHDRAWAL, and INCOMPLETE.** The University of Utah drop and withdrawal dates are on the class schedule. Also see <http://registrar.utah.edu/academic-calendars/index.php>. University policy allows assignment of a grade of incomplete (I) if 80% or more of the course work has been completed. We will consider assigning an "incomplete (I)" only under EXCEPTIONAL circumstances unrelated to academic performance, and only if a student is passing the course with a C or better when the "Incomplete" is requested.

**ACADEMIC MISCONDUCT.** All suspected cases of academic misconduct including cheating and plagiarizing will be dealt with according to rules in the Code of Student's Rights and Responsibility: <http://regulations.utah.edu/academics/6-400.php> Take note of B 2 a, b, and c

Cheating and plagiarism are serious offenses and can result in getting a zero on the assignment, failing a class, a note in your record or being expelled. Please know that looking at someone else's exam is cheating and will be dealt with seriously as stated above. By accepting admission to the University you have agreed to abide by the University rules provided to you in the student handbook.

(I replaced the policy below with the one above, because I thought it was clearer:

**STUDENT RESPONSIBILITIES.** All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee. <http://regulations.utah.edu/academics/6400.php>. (Links to an external site.)

**THE AMERICANS WITH DISABILITIES ACT.** The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability & Access, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations.

All written information in this course can be made available in alternative format with prior notification to the Center for Disability & Access.

**ADDRESSING SEXUAL MISCONDUCT.** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

**WELLNESS STATEMENT.** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at [www.wellness.utah.edu](http://www.wellness.utah.edu) or 801-581-7776.

**SAFETY STATEMENT.** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit [safeu.utah.edu](http://safeu.utah.edu) ([Links to an external site.](#)).

**UNDOCUMENTED STUDENT SUPPORT.** Immigration is a complex phenomenon with broad impact—those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center. Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. To learn more, please contact the Dream Center at 801.213.3697 or visit [dream.utah.edu](http://dream.utah.edu).

**STUDENT VETERANS.** If you are a student veteran, the U of Utah has a Veterans Support Center located in Room 161 in the Olpin Union Building. Hours: M---F 8---5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason.

**Disclaimer:**

The instructor reserves the right to modify this syllabus to better suit class needs at any time during this semester. Any changes that are made will be immediately communicated during class and via Canvas.