

Math 1050-90, College Algebra Online

Syllabus, Spring 2018

(This material is also presented as an announcement-quiz on the course Canvas website.)

INSTRUCTOR INFORMATION

Instructor: Rebecca Noonan Heale

Office: JWB 213 (JWB is on President's circle, east of Kingsbury Hall)

Email: rebecca@math.utah.edu

COMMUNICATION: You may contact the instructor by e-mail or through Canvas-mail. When e-mailing your instructor, please include "1050" in the subject line. All announcements for the course will either be posted in quiz format on the Canvas website (these are graded) or sent by Canvas-mail.

OFFICE HOURS: There will be in-person office hours twice each week. No appointment is necessary to come to office hours.

- **Wednesdays, 1:30-2:30 pm**
- **Fridays, 10-11 am**

ONLINE OFFICE HOURS:

- **Mondays, 8-9 pm**

Participating in one of these is similar to making a Skype call while watching a math video. To attend, go to conferences in Canvas. You need speakers. If you have a microphone, you can ask questions; if not you can type them.

ALTERNATIVE MEETINGS: If the times above are not convenient for you, contact me about setting up a meeting or office hour at an alternative time.

COURSE INFORMATION:

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

PREREQUISITES:

The prerequisite for this course is at least a C (preferably a B) in mathematics 1010 or its equivalent 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.

WEEKLY WORKLOAD:

This is an online course, but still an intense course. According to the University of Utah, a 4-unit course should have about 4 hours of lecture and 8 hours of outside study/homework time. This means that our online course, will take the average student about 12 hours per week. (In the summer when we complete the semester in 12 weeks instead of 15, students should plan to spend about 14 hours on this course per week!) Some students will be able to get by on less, and some student will need more.

Each week, we cover specific sections. You can choose when you work on the material in the week, keeping your objective and topic goals in mind, but you can't complete the course at your own pace.

IS ONLINE RIGHT FOR YOU?

Before committing to this course, consider whether the online format matches your learning style. To aid in this, please look at: [A: Online? \(announcement-quiz about deciding to take an online course; it is found on Canvas\)](#).

TO PURCHASE COURSE MATERIALS, USE THIS LINK:

<http://www.cengagebrain.com/course/2765767>Links to an external site.

In the first week, use the free trial on WebAssign to complete assignments and access the e-book. After you are certain you will stay in the class, buy access to WebAssign and the e-book directly from the publisher using the link above. **DO NOT buy it at the WebAssign site, since the price on WebAssign is more expensive!**

Here is information about our course materials. Additional information can be found here: [A: WebAssign & Textbook](#) (announcement-quiz about the online homework website and textbook-purchase options which is found in Canvas).

COURSE WEBSITE:

Canvas <https://utah.instructure.com/> Since you are taking this quiz, you have found this site. It is a good idea to save this address, so that you can get to Canvas without going through CIS. Usually once or twice a term, CIS goes down, so the alternative access is useful.

TEXT:

PRECALCULUS, 9/e edition, Larson; Chapters 1-3, 7-9. You get access to the e-book version of the textbook when you buy the package described above. If you learn buy reading and writing, I'd recommend buying the physical book, either the version above or a used version.

HOMEWORK WEBSITE:

The homework website that accompanies the textbook is run by the company WebAssign. It has the weekly homework assignments and additional videos and tutorials including "the Personal Study Plan". In order to get to a WebAssign assignment, click on that assignment in Canvas. The first time you do this, your WebAssign account will be created.

There is a free 14-day trial for WebAssign, which starts the first Monday of the semester and ends the second Sunday. After this, you must pay to use this site.

RECORDED LECTURE VIDEOS:

They are available through the modules or in both streamable and downloadable versions at <http://www.math.utah.edu/lectures/math1050.html>. (It's good to save this address somewhere else, in case Canvas is down)

TECHNOLOGY:

The majority of the course work can be done without a calculator. **No calculators will be allowed on exams nor the final.** Calculators will be useful on some homework assignments and may be allowed on portions of quizzes. If you do not have a scientific or graphing a calculator, there are free calculator applications online.

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 (3×3 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.

THE STRUCTURE OF THE COURSE

Each week, we cover specific sections. You can choose when you work on the material in the week (as long as you meet deadlines), but you can not complete the course at your own pace, as there are specific due dates throughout the semester.

Here is a breakdown of the components in the course and what they are worth.

- **Reading Announcements on Canvas.** Course documents and announcements are given in quiz format and have a short quiz about the content at the end. These "quizzes" begin with "A:..." Completing these is worth 2% of your grade. Suggested due dates are shown, but these can be completed at any time.
- **Reading** from your **text book**.
- **Watching** the **video lectures**. These were produced by the UofU math department. They are available in Canvas or on the math department website. If you find a video isn't addressing your questions, ask your instructor for additional resources.
- **Solving Problems:** Working through problems helps you understand and master the material. In WebAssign, there are three types of materials:
 - **Practice Assignments:** These assignments are for you to get familiar with the concepts before you start the graded homework and/or use as reviews before exams. Doing these assignments is good practice for most students, but they are not required. You can work on them at any time in the semester.
 - **Graded Assignments** (worth 14%): These assignment are a transition between the practice assignments and quizzes and exams and have fewer help features/allowed submission than the practice assignments. These are due on Tuesday nights at 11: 55 pm or a few minutes later. The lowest three homework scores will be dropped at the end of the semester.
 - **Personal Study Plan (PSP) resources.** These are a collection of interactive practice problems, videos, and quizzes to be used for online tutoring, practice, and review.

For additional problems, use your textbook. There is a link in the Canvas modules to solutions of the odd textbook problems.

- **(Roughly) Bi-weekly Take-Home Quizzes:** There will be eight take-home quizzes, one at the end of weeks 1, 2, 4, 7, 9, 10, 13, and 14. You can access them on Friday (earlier by special arrangement) and they are due on Tuesdays. You will need to scan and upload them as pdfs. The quizzes are worth 14% of your grade. The lowest quiz score will be dropped at the end of the term.
- **Exams:** There will be two midterm exams and a comprehensive final exam at the end of the semester. Each exam is worth 20% of your grade and the final is 30%. You must schedule your exams and final through the "Schedule Exams" link on Canvas. Exams will be administered at the Uonline testing center (in the Marriott Library), at satellite testing center in Sandy, or if you are out of area, with a proctor that you set up and register with Uonline. There will be practice material provided prior to each exam. You are not allowed to use notes, a calculator, textbook, or phones during the exam. More information about More information about exams, including how to set up a proctor, can be found here [A: Exams \(announcement-quiz about exams which is found in Canvas\)](#).

- **Common Final:** The final is comprehensive and worth 30% of your grade. All the students in Math 1050 at the University of Utah take the same common final at the same time, including online students. However, if you are an online student and unable to be at the common final due to the time or location, you are allowed to take an alternative final exam at the testing center or with a proctor at an earlier time. See the exact dates below.
- **Extra Credit:** Extra credit, worth up to 3% or more of your course grade, can be earned for participating in online discussions (by asking or answering questions with significant mathematical content), or by spotting errors in course materials. See [A: Extra Credit \(announcement-quiz about extra credit which is found in Canvas\)](#) for details.

HELP:

Contacting me by my e-mail, coming into office hours, or setting up an appointment is the first way to get help. I am happy to talk about individual problems, mathematical concepts, or help you make a study/learning plan. Please seek help early in the term.

If you have a question about a WebAssign problem, you can contact me through WebAssign (good if it's a formatting question) or look/post in the Canvas discussion board (good for content questions/calculation issues).

You can also get tutoring through the following:

- **Math Tutoring Center (drop-in tutoring and computer lab).** This is free to all students. It is in the underground passage between JWB and LCB, Room 155. See <http://www.math.utah.edu/ugrad/mathcenter.html> [Links to an external site.](#) for hours.
- **Private Tutoring: University Tutoring Services, 330 SSB** (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB 233.
- **ASUU Tutoring in the evenings at the Marriott Library.** See <https://tutoringcenter.utah.edu/tutoring-services.php> [Links to an external site.](#) for details.

DATES:

Weekly Due Dates:

- WebAssign HW due each Tuesday at 11:55pm, or a few minutes later

Biweekly Due Dates

- Quiz approximately every second Tuesday night in Canvas at 11:59pm.
 - Quiz Wk1 Tues, Jan 16
 - Quiz Wk2 Tues, Jan 23
 - Quiz Wk4 Tues, Feb 6
 - Quiz Wk7 Tues, Feb 27
 - Quiz Wk9 Tues, Mar 13
 - Quiz Wk11 Tues, Apr 3
 - Quiz Wk13 Tues, Apr 17
 - Quiz Wk 14, Tues, Apr 24

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

- Exam 1: (end of Week 5/ start of Week 6) Mon 2/12 – Sat 2/17
- Exam 2: (end of Week 11/ start of Week 12) Mon 4/2 – Sat 4/7
- Alternative Final Exam: Wed 4/25 (testing as early as Sat 4/21 can be arranged by contacting your instructor)
- Final Exam: Fri 4/27, 1:00-3:00 PM, on U of U main campus, location TBA

Other dates:

- Drop/audit date: Fri 1/19
- Withdraw date: Fri 3/2

GRADING: Grades are calculated as follows:

- Announcement Quizzes (2%),
- Content Quizzes (14%),
- WebAssign Homework Assignments (14%),
- Midterms (40%)
- and Final (30%).

The lowest 3 WebAssign scores and the lowest 1 quiz score will be dropped at the end of the term.

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:

[0,50) E	[67,70) D+	[77,80) C+	[87,90) B+
[50,60) D-	[70-73) C-	[80,83) B-	[90,93) A-
[60-66) D	[73-77) C	[83-87) B	[93,∞) A

EARLY POLICY

- You can start WebAssign homework early at any time.
- You have a 5-day window to complete quizzes. Under special circumstances, you may request them up to two-days earlier than this. Please request this at least 48 hours before you would like to access the quiz.
- You can also take exams up to a week early, upon well-planned request. Please let me know at least 7 days before you wish to take the exam.
- Students are encouraged to take the departmental final. If this time or location is inconvenient, you may schedule an earlier alternative final either at the Uonline testing center or with a proctor.

LATE POLICY:

Unexpected events arise – you get sick, called into work, have computer or Internet problems, get back late from a trip, etc. If you know you will have a time conflict, busy week, be away, etc., please start work early.

Graded WebAssign assignments: You can request 5-day extensions of WebAssign assignments up to 2 weeks after they are due. This deduction is automatically granted by WebAssign. There is a penalty of 30% of the unearned points for using this feature (i.e. a penalty of 1-15 points per assignment). After 2 weeks, extensions are not given on graded assignments. Instead, you should use the practice assignments for practice.

The three lowest graded WebAssign assignment scores will be dropped as well at the end of the term.

If a situation arises in your life which will prevent you from completing your assignments within 2 weeks of the due date, please contact your instructor with documentation.

Quizzes and Exams: You have a 5-day window to take quizzes and a 6-day window to take exams. It is recommended that you complete these during the middle of the window, in case something arises at the end which would prevent you from completing them.

The following reasons are not sufficient to get an extension on a quiz: technical issues like failed computers or internet, running out of printer ink, being called into work or asked to work late, being stuck in traffic, etc. At the end of the semester, your lowest quiz score will be dropped. This will provide a buffer in the cases like this.

Similarly, there are very few reasons that qualify for extensions on exams.

Extensions on quizzes and exams are only given in the case of **BIG, UNANTICIPATED, DOCUMENTABLE** circumstances beyond your control. If this occurs, you must contact your instructor in a timely manner and provide documentation by a third party (for example, a Dr.'s note or police report).

Center for Disability & Access

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.

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/6-400.php>

In the online version of the syllabus, there is a quiz at the end of the syllabus which covers the syllabus content.