# Fall 2018 Math 1060-90 Syllabus

**INSTRUCTOR INFORMATION**

Instructor: Kevin Childers

Office: LCB 112

Email: childers@math.utah.edu

**COMMUNICATION:** You may contact the instructor by e-mail or through Canvas-mail. When e-mailing your instructor, please include "1060" 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 once each week. No appointment is necessary to come to office hours.

- **Mondays 10:30-11:30 am**
- **Tuesday 10:30-11:30 am**

I am also happy to schedule office hours by appointment.

**ONLINE OFFICE HOURS:**

- **Thursdays** 12:00-1:00 pm. If attendance is low during the first 4 weeks, online office hours will switch to being by appointment.
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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 1060, Trigonometry is a 3-credit semester course.

**PREREQUISITES:**

*Prerequisites:* "C" or better in MATH 1050 OR Accuplacer CLM score of 80 or higher.

*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 3-unit course should have about 3 hours of lecture and 6 hours of outside study/homework time.  This means that our online course, will take the average student about 9 hours per week.  (In the summer when we complete the semester in 12 weeks instead of 15, students should plan to spend about 11 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.

**COMMUNICATION EXPECTATIONS IN AN ONLINE COURSE:**

Most course announcements will be posted in announcement quizzes on Canvas.  You are expected to take the course information quizzes at the start of the course, the weekly quizzes at the start of each week, and the exam-related quizzes when posted.  In between announcement, I will send updates and reminders by e-mail in Canvas. You should check your Canvas mail approximately every 2-3 days, including late Wednesday or early Thursday (when I will send out e-mails if students need to resubmit quizzes.)

**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?

**DATES:**

Weekly Due Dates:

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

- Quiz every Tuesday night in Canvas at 11:59pm.

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

- Exam 1: Wed Sep. 26 - Sat Sep. 29
- Exam 2: Wed Nov. 14 - Sat Nov. 17
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- Alternative Final: Sat Dec 8 - Wed Dec 12

OR

- Common Final: Fri Dec 14

Other dates:

- Drop date: Fri Aug 31
- Withdraw/audit date: Fri Oct 19

## COURSE MATERIALS:

Our course uses WebAssign (a homework website), *PRECALCULUS*, 9/e by Larson (textbook), and many resources on Canvas (course website).   Information about each of these is below.

You must purchase WebAssign and E-book access.  However, in the first week, we recommend you 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.  A link to do this is in the first Canvas module (look for the module "WebAssign Link.")  **DO NOT buy it at the WebAssign homework site, since the price on WebAssign is more expensive!**

Note: WebAssign will not be available until the first day of the semester.  If you need to purchase WebAssign access before the Canvas site is published, please contact your instructor.


## 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 4-6 & 10.  You get access to the e-book version of the textbook when you buy the package described above. If you learn by reading and writing, I'd recommend buying the physical book, either the version above or a used version. More information about the text can be found here: A: WebAssign & Textbook.

 **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.  To learn more about using WebAssign, go to A: WebAssign & Textbook.

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/math1060.htmlLinks to an external site.. (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.

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

**Topics to be covered:** Trigonometry, Topics in Analytic Geometry, and the Complex Numbers.

**Expected Learning Outcomes:**

1. Understand trigonometric function definitions in the context of the right triangles and on the unit circle.

2. Graph basic trigonometric functions and those with basic transformations. Be able to write an equation given a graph. Identify amplitude, periods, phase shifts from graphic and algebraic representations of functions.
3. Solve applications problems using principles in trigonometry.
4. Represent and interpret "real world" contexts situations using radian trigonometric functions.
5. Use trigonometric inverses correctly, understanding the domain/range restrictions.
6. Verify trigonometric identities, using proper logic and use trigonometric identities to evaluate expressions.
7. Solve trigonometric equations.
8. Solve for all measurements in any triangle, using the Pythagorean Theorem, trigonometric functions, the Law of Sines, and Law of Cosines in a variety of contexts and applications.
9. Be able to convert to and from rectangular and trigonometric-form coordinates (polar coordinates).
10. Graph complex numbers in a plane, perform operations on such numbers and use DeMoivre's theorem to find roots and powers of complex numbers.
11. Understand geometry and arithmetic operations with vectors and use vectors in application problems.
12. Use parametric equations in application problems and be able to convert between parametric and non-parametric representation of functions.
13. Understand and explain arithmetic with complex numbers using trigonometry.
14. Recognize the formulas for parabolas, hyperbolas and ellipses (including circles). Be able to manipulate these basic conics to find foci, any asymptotes, and important points and to graph these conics. Use conics in real world context situation.

**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.htmlLinks to an external site.](http://www.math.utah.edu/ugrad/mathcenter.html) 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.)Links to an external site.](https://tutoringcenter.utah.edu/tutoring-services.php) for details.

## 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.

The course week starts on a Wednesday and ends on a Tuesday. Due dates for assignments and quizzes are on a Tuesday. This allows students to get more feedback on the last two days of the week. (So , Week 2 in our class spans the end of University Week 2 and the start of University Week 3).

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 U of U 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.

- **Weekly Take-Home Quizzes:** There will be take-home quizzes weekly (any exceptions will be announced in weekly announcements.)  You can access them on Friday (earlier by special arrangement) and they are due on Tuesdays.  You are responsible for submitting the assignment with the correct format, correct file extension, and using the software type and version required for the assignment. If you submit with the wrong format, the first two times you will be warned and asked to resubmit in a given window. There will be no penalty the first time and a 10 point deduction (out of 100 points) the second time.  After this, submissions with incorrect format will get a 0.  The quizzes are worth 14% of your grade.  The lowest two quiz scores will be dropped at the end of the term.
- **Exams:** There will be two midterm exams.  Each exam is worth 20% of your grade. You must schedule your exams and final through the "Schedule Exams" link on Canvas.  Exams will be administered at the Uonline Exam Services 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.
- **Common Final:** The final is comprehensive and worth 30% of your grade. All the students in Math 1060 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 for details.

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

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

The lowest 2 WebAssign scored and the lowest 2 quiz scores will be dropped at the end of the term.

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

[50,60) D-

[60-66) D

[66,70) D+

[70-73) C-

[73-77) C

[77,80) C+

[80,83) B-

[83-87) B

[87,90) B+

[90,93) A-

[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 might have a time conflict, busy week, be away, etc., please start work early.

**Graded WebAssign assignments:**

All students can request 5-day extensions on 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, automatic extensions are not give on graded assignments.  Instead, you should use the practice assignments for practice.

If you have a documentable excuse for submitting assignments late and it's within 2 weeks of the due date, use the automatic extension option to complete the assignments, then send documentation to your instructor and ask for the penalty to be removed.  If the due date was more than two weeks ago, send documentation and your instructor can extend assignments manually.

**Quizzes:**  You have a 5-day window to take quizzes.  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.

Quizzes should be uploaded in Canvas before the time indicated.  If you are unable to meet this deadline or have technical difficulties, you may send them by e-mail to your

instructor by 6 am on the day after the quiz was due.  If you do this, your score (out of 100) will be reduced by 10 points.

1-2 day extensions on quizzes 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).

It is your responsibility to maintain your computer and related equipment in order to participate in the online portion of the course.  Equipment failures will not be an acceptable excuse for late or absent assignments.  Similarly, the following are not acceptable excuses for not turning in an excitement: running out of ink or not having access to a printer/scanner, being called into work or asked to work late, being stuck in traffic, etc. At the end of the semester, your lowest two quiz scores will be dropped. This will provide a buffer in the cases like this.

**Exams:**  You have a multi-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.

As in the case of quizzes, if you miss an exam for big, documentable reasons, contact your instructor in a timely way about rescheduling the exam.  You will need to provide documentation for the exam score to be used.

## COMMUNICATION IN AN ONLINE COURSE

Discussion threads, e-mails, and chat rooms are all considered to be equivalent to classrooms, and student behavior within those environments shall conform to the Student Code. Specifically:

- Using angry or abusive language is called "flaming", is not acceptable, and will be dealt with according to the Student Code.
- Do not use ALL CAPS, except for titles, since it is the equivalent of shouting online, as is overuse of certain punctuation marks such as exclamation points !!!! and question marks ?????.

## 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 (Links to an external site.)Links to an external site.


**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). 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 correspondence, discussions, in office hours and on assignments, etc.  Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name on your UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.


**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).