NOTE: All documents of the form "A:…" are informational quizzes in the Canvas site for the course . If you do not have Canvas access, please request a copy by e-mail.

MATH 1060-90, TRIGONOMETRY ONLINE SYLLABUS, SUMMER 2019

INSTRUCTOR INFORMATION

Instructor: Kathryn Link

Pronouns: she/her/hers

What to call me: Katie

Office: LCB 317 (LCB is on President's circle, east of Kingsbury Hall & JWB)

Email: **link@math.utah.edu**

COMMUNICATION: You may contact the instructor by e-mail or through Canvas-mail. When e-mailing your instructor, please include "1060-90" 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 one in-person office hour once each week. No appointment is necessary to come to office hours.

- **Mondays 9:45-10:45 am** in **LCB 317** (LCB is on President's Circle, east of Kingsbury Hall)

ONLINE OFFICE HOURS:

- **Thursdays** from **7-8 pm**. Online office hours will be held on Thursday, **May 23, 30 and June 6th.** Depending on attendance, we will either keep this time or switch online office hours to be by appointment. Any changes will be announced in weekly announcements.

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.

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, there is a free 14-day trial for WebAssign, which starts the first Monday of the semester and ends the second Sunday. I recommend you use the free trial on WebAssign to complete assignments and access the e-book during the first week.

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!**

If you use the same textbook for Math 1050 or are repeating Math 1060, contact me (your instructor) about having your access extended. You do not have to pay a second time.

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.

WebAssign (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.

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.

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.

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:** (first half of this class's Week 5) **Wed 6/12 – Sat 6/15**
- **Exam 2:** (first half of this class's Week 10) **Wed 7/17 – Sat 7/20**
- **Final: Thurs 8/1 - Fri 8/2 (The final can be taken as early as Sat 7/27 by special arrangement.)**

Other dates:

- Drop date: Wednesday, May 22
- Withdraw/audit date: Friday, June 21

RECORDED LECTURE VIDEOS:

They are available through the Canvas modules or in both streamable and downloadable versions. There is an older version at http://www.math.utah.edu/lectures/math1060.html

and a newer version: http://www.math.utah.edu/lectures/math1060New.html. (It's good to save these addresses, in case Canvas is down)

TECHNOLOGY POLICY:

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: To 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, computer lab, group tutoring).** 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. 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.

- **Computer Lab:** also in the T. Benny Rushing Mathematics Student Center, Room 155C. See http://www.math.utah.edu/ugrad/lab.html.
- **ASUU Tutoring in the evenings at the Marriott Library.** See 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 **textbook**.
- **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 Quizzes:** There will be take-home quizzes weekly except in exam weeks. You can access them on Friday (earlier by special arrangement), and they are due on Tuesdays. You are responsible for submitting the assignment as a pdf with the correct format uploaded to the assignment in Canvas. If you submit something, not in the correct format, you will be given one day to resubmit, and there will be a penalty (see below) for turning the quiz in late. 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.
- **Final:** The final is comprehensive and worth 30% of your grade. The window to take the final exam is given above. Note that the window is only two-days (a Thursday and Friday), so you should schedule early to ensure you have a testing slot. If the testing window is not convenient, you can take it early (starting on the previous Saturday). Contact your instructor to set-up this special arrangement. 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), by spotting errors in course materials, or by reflecting on your exams. 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 **3** 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:

A	**93% - 100%**	**C+**	**77% – 79.9%**	**D-**	**50% - 59.9%**
A-	**90% - 92.9%**	**C**	**73% – 76.9%**	**E**	**below 55%**
B+	**87% - 89.9%**	**C-**	**70% – 72.9%**		
B	**83% - 86.9%**	**D+**	**66% – 69.9%**		
B-	**80% - 82.9%**	**D**	**60% – 65.9%**		

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.

LATE POLICY FOR HOMEWORK AND QUIZZES:

You are expected to turn things in on time. It is your responsibility to maintain your computer and related equipment in order to participate in this online course. Equipment failures will not be an acceptable excuse for late or absent assignments. Similarly, it is your responsibility to start assignments early enough, so that even if you are in traffic, your flight gets delayed, you are called into work, your run out of ink, you do work for another class, etc., you still have time to deal with the situation and then finish the assignment.

However, because things may happen that will prevent you from turning in assignments on time, this course provides multiple types of accommodations.

First, the three lowest HW and two lowest quiz scores are dropped at the end of the semester.

Second, you may turn in HW and quizzes late, but with a penalty.

- **WebAssign HW:** 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.

- **Quizzes:** You should submit the quiz in the same Canvas assignment where you download it. But if you are late, you should send it by e-mail instead.

- There is a 10 point penalty for sending it by e-mail before Wednesday, 6am. You get this penalty, even if you send it before the due-time. This is because it is more time consuming to get into Gradescope when sent this way.
- There is a 20 point penalty for submitting it between Wednesday 6am and Thursday 6am.
- There is a 30 point penalty for submitting it between Thursday 6am and Friday 6am.
- Quizzes will not be accepted after Friday, 6am.

LATE POLICY FOR 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.

EXTREME SITUATIONS:
If you have an extraordinarily severe situation, contact me, your instructor. We can discuss waiving penalties, granting longer extension periods for HW, excusing quizzes, extending exam dates, etc. Send documentation if possible. If not possible, still contact me to discuss alternatives.

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).