**NOTE:** This syllabus refers to documents of the form "A:...". These 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, Summer 2020 SYLLABUS

#### INSTRUCTOR INFORMATION

Instructor: Andrew Watson Pronouns: he/him/his What to call me: Andrew Office when campus is open: LCB 315 (LCB is on President's circle, just northwest of the Park Building) Email: <u>awatson@math.utah.edu</u>

**COMMUNICATION:** You may contact the instructor by e-mail or through Canvas-mail. 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 two online office hours each week. No appointment is necessary to come to office hours. Online office hours will be held on:

- Mondays from 7:00--7:50 pm
- Fridays 12:00--12:50 pm

Online office hours will be held in Zoom. A link will be posted and/or sent out in Canvas. You can connect by internet or by phone.

**ADDITIONAL ONLINE MEETINGS:** If the times above are not convenient for you, contact me about setting up an online meeting or office hour at an alternative time. I am most available on Friday mornings or afternoons, but can find other times too. Also, if campus reopens, we may be able to meet in-person. I will announce this in announcements if available.

#### 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.

#### **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 webcam

The following are recommended, but not required;

- a **microphone** (used for online meetings);
- 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.

#### 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 6-9 hours of outside study/homework time. This means that our online course, will take the average student about 9-12 hours per week. (In the summer when we complete the semester in 12 weeks instead of 15, students should plan to spend about 11-14 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.

#### 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?

Most semesters, we recommend that students consider whether an online course will work for them by looking at <u>A: Online?</u> In Summer 2020, we know there are fewer choices, however it is still really important to think about whether you have the motivation and time to be successful in this course. Also, there are sections of this course where online meetings are being held in place of classroom classes. These would provide an experience more similar to a classroom experience.

DATES:

Weekly Due Dates (see late policy later in syllabus):

- Online HW due each Tuesday at 11:59 pm
- Quiz due each Tuesday at 11:59 pm in Canvas (grace period through 5am the next morning)

Exams: Students are asked to fill out polls found in the Week 1 module to determine the exam times and dates. Exam dates will be set in Week 2 of the course.

- Exam 1: (Week 5) date will fall between Thursday 6/11 and Sat 6/13
- Exam 2: (Week 9) date will fall between Thursday 7/9 and Sat 7/11
- Final Exam: (Week 12) date will fall between Thursday 7/30 and Sat 8/1

Other dates:

- Drop/audit date: Wednesday, May 20<sup>th</sup>
- Withdraw date: Friday, June 19th

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

- Announcement Quizzes (2%),
- Weekly Quizzes (11%),
- Small Group Discussions (4%)
- Homework Assignments (13%),
- Midterms (40%)
- and Final (30%).

The lowest 4 discussion scores, 3 homework scores and 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:

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

Canvas <u>https://utah.instructure.com/</u> 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:

The course uses OER Math 1060 – Trigonometry, 1st Edition (Created Fall 2017 by Salt Lake Community College and the University of Utah). You can access the text for free in Canvas.

#### **ONLINE HOMEWORK:**

The homework can be accessed in Canvas. It is free.

#### **RECORDED LECTURE VIDEOS:**

They are available through the modules or in both streamable and downloadable versions at <u>http://www.math.utah.edu/lectures/math1060New.html (Links to an external site)</u>. (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:** To improve quantitative reasoning and prepare for future math learning in calculus, linear algebra, and discrete mathematics.

#### **EXPECTED LEARNING OUTCOMES:**

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

#### **RESOURCES TO HELP YOU:**

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.

You can also get tutoring through the following:

#### 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: <a href="https://utah.instructure.com/courses/613503/">https://utah.instructure.com/courses/613503/</a>
- **UofU Learning Center (fomerly 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: <a href="https://learningcenter.utah.edu/">https://learningcenter.utah.edu/</a>

#### 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: <a href="https://union.utah.edu/covid-19/">https://union.utah.edu/covid-19/</a>

#### 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, counseling, the food pantry, and much more. https://coronavirus.utah.edu/#students

#### 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 cannot 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.
- Online Homework: Working through problems helps you understand and master the material. Completing homework is worth 13% of the grade. The lowest three assignment scores are dropped at the end of the semester.
- Weekly "On-Paper" Quizzes: There will be quizzes weekly, except for exam weeks. You can access them on Friday (earlier by special arrangement) and they are due on Tuesdays. You will either need to print your quiz, or make a handwritten version of the quiz. (If handwriting, you need to have as many pages as the template and have the same questions in the same places on the same pages. You don't need to copy the questions.) You are responsible for submitting the assignment with the correct format and correct file extension. If you submit with the wrong format, there will either be a deduction (for small format issues) or you will be asked to resubmit by Thursday (for large issues) and there will be a late penalty. The quizzes are worth 11% of your grade. There are 12 quizzes and the lowest two quiz scores will be dropped at the end of the term.
- Weekly Small Group Discussions: Talking about mathematical ideas reinforces understanding. Students are expected to participate in small group discussions every week AFTER completing their quiz and BEFORE turning it in. You will be assigned a small group to work with in Canvas. Groups will change throughout the semester. You will need to coordinate a time when you can "meet" with the other group members through an online conference tool that your group chooses (for example Zoom, Google Hangouts, Skype, etc.). Meetings should be about 30-40 minutes. Participation will be checked via a survey on the last page of the quiz. For each quiz, your discussion grade will be the same as the grade you get on the quiz you discuss. The discussions are worth 4% of your grade. There are 9 discussion opportunities and the lowest three scores will be dropped at the end of the term.
- **Exams:** There will be two midterm exams. Exams will be given in Canvas and proctored through Zoom. A time and date will be set for each exam in the second week of classes, based on class polls. 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.
- **Final:** The final is comprehensive and worth 30% of your grade. It will be given in Canvas and proctored through Zoom, like the midterm exams.
- **Extra Credit:** Extra credit, worth 3-6% 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.

## EARLY POLICY:

- You can start homework early at any time.
- You have a 5-day window to complete quizzes. If you have 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.

#### COMMENTS ON THE LATE POLICY

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

#### THE LATE POLICY FOR HW:

We will be trying out the online HW systems "late-pass" system, which is a way of getting extensions on homework due dates. You can request an extension on homework and earn up to 70% credit on work turned in late. You have to request the extension before the original due date. More information will be given in the weekly announcements.

#### LATE POLICY FOR QUIZZES:

You should submit the quiz in the same Canvas assignment where you download it. If the due date is not before an exam week, you can submit the quiz up to two days late. You should send it by e-mail instead of being uploaded in Canvas.

- There is a 10-point penalty for sending it by e-mail before Wednesday, 5am. 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 5am and Thursday 5am.
- There is a 30-point penalty for submitting it between Thursday 5am and Friday 5am.
- Quizzes will not be accepted after Friday, 5am.

# If the due date of a quiz is directly before an exam week, no late quizzes are accepted (after 5 am on Wednesday).

#### 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:

- Posting photos or comments that would be off-topic in a classroom are still off-topic in an online posting.
- Disrespectful language and photos are never appropriate.
- Using angry or abusive language is not acceptable, and will be dealt with according to the Student Code. The instructor may remove online postings that are inappropriate.
- Do not use ALL CAPS, except for titles or overuse of certain punctuation marks such as exclamation points !!!!! and question marks ?????
- Course e-mails, e-journals, and other online course communications are part of the classroom, and as such are University property and subject to the Student Code. Privacy regarding these communications between correspondents must not be assumed and should be mutually agreed upon in advance, in writing.

#### **DIVERSITY STATEMENT**

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. 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). 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 <u>bpeacock@sa.utah.edu</u> to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

#### UNIVERSITY OF UTAH POLICIES

**DROP, WITHDRAWAL, and INCOMPLETE.** The University of Utah drop and withdrawal dates are on the class schedule. Also see <u>http://registrar.utah.edu/academic-calendars/index.php</u>. 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: <u>http://regulations.utah.edu/academics/6-400.php.</u> 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.

**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 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 <u>safeu.utah.edu.</u>

**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 <u>dream.utah.edu</u>

**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: <u>http://veteranscenter.utah.edu/</u>. Please also let me know if you need any additional support in this class for any reason.

**PLAGIARISM SOFTWARE POLICY.** I have elected to use a plagiarism detection service in this course, in which case you will be required to submit your paper to such a service as part of your assignment.

### **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.