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 access by e-mailing me.

MATH 1030-090 INTRODUCTION TO QUANTITATIVE REASONING (FALL 2019, 3 CR)

Instructor: Hallie Elich, call me Hallie (rhymes with "valley")

Office: LCB 311

Email: elich@math.utah.edu

COMMUNICATION: You may contact me via e-mail or in Canvas. Please include "1030" 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 and online office hours. No appointment is necessary to come to office hours. You may also e-mail me to set up an appointment if these times below do not work for you.

- **Mondays** from 8:00-8:50 pm (online and beginning Aug. 26th)
- **Wednesdays** 12:20-2**:**00 pm in LCB 311 (in person and beginning Aug. 21)

If at least one student is attending online office hours, they will continue to be held as indicated above; if students are not attending, then online office hours will instead be by appointment. The status of the online office hours will be announced in weekly announcements.

Participating in online office hours 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.

PREREQUISITES:

"C" or better in MATH 980 (Algebra for College Success) or Math 1010 (Intermediate Algebra) OR Accuplacer EA score of 60 or better OR ACT Math score of 19 or better OR SAT Math score of 500 or better. When entering 1030, you should already be able to manipulate variable expressions, work with simple linear equations and graphs, work with fractions and exponents, and know the basic properties of simple geometric shapes.

Going Forward: Math 1030 does <u>not</u> satisfy a Math 1050 or Math 1090 prerequisite.

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 intensive online 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. Some students will be able to get by on less, and some students 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 announcements, 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:

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

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

- Exam 1: Weds., 9/25 – Sat., 9/28
- Exam 2: Weds., 11/13 – Sat., 11/16
- Project Draft Due: Tues., 11/19
- Project Peer Review Due: Fri., 11/22
- Project Due: Tues., 11/26
- Final (there are two options):
    - Alternate Final: Fri., 12/6 - Tues., 12/10
    - Common Final: Thurs., 12/12 3:30-5:30

Other dates:

- Last day to add, drop (delete), elect CR/NC, or audit classes: Fri., 8/30
- Last day to withdraw: Fri., 10/18

GRADING:

Grades are calculated as follows: Announcements (2%), Quizzes (10%, lowest 5 quizzes dropped), Homework (10%, lowest 3 assignments dropped), Project (18%), Midterms (30%) and Final (30%). A score of 73% is required for a C, and 55% is required to earn a D- (which is the lowest grade that the U of U considers as "passing" for credit). 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 grade scale is:

A	**93% - 100%**	**C+**	**77% – 79.9%**	**D-**	**55% - 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+**	**65% – 69.9%**		
B-	**80% - 82.9%**	**D**	**60% – 64.9%**		

TEXT:

ISBN-10: 1-269-74850-5 ISBN-13: 978-1-269-74850-6

Using & Understanding Mathematics, A Quantitative Reasoning Approach, by Bennett and Briggs, Custom edition for University of Utah (taken from 6th edition)

** *Either 6th edition of the full text or custom 3rd edition is fine*.

ONLINE HOMEWORK WEBSITE:

Along with the text, we will be using *My Math Lab for Bennett: Using and Understanding Math 6th ed* (Pearson), which is an online website where you will find homework assignments, an online copy of the textbook, and other study resources. Using these materials is required and contributes to your grade.

PURCHASING ACCESS TO MYLAB & THE ONLINE TEXTBOOK:

The least expensive option for the MyLab course package (the online HW and textbook) is to buy access through the Inclusive Access Program. This is a program between the publisher and the UofU where the cost of your course materials is added to your tuition bill. This program reduces the cost of course materials for students because the purchase is made in bulk for all students in a course, rather than individually. The students' cost for math 1030 access is $58.85.

An email will go out to all math 1030 students (sent by the bookstore to your name/number@utah.edu email address) prior to the first day of class with information on what Inclusive Access is and instructions on how to access the digital course materials.

If you (the student) decide you don't want the instant access to the course materials you will have the option to OPT OUT and will be refunded accordingly. Students still need to pay for the course materials cost along with their tuition, but once you OPT OUT, a full refund of the course materials cost will be sent to you during the first two weeks of class. However, you are then responsible for obtaining your own course material/textbook for that course. You could purchase the access directly from the publisher (Pearson), but the cost would be higher than through inclusive access. If you choose to purchase through any site other than the publisher, there is no guarantee that the access materials you get will work.

GETTING A HARDCOPY OF THE TEXTBOOK

If, in addition to the access you buy above, you also want to obtain a hardcopy of the textbook, here are some options for obtaining it:

A. If a student wishes to order a hardcopy of the book, he/she can talk to Shane Girton (U of U Bookstore) and a copy of the book can be special ordered. The new copy of the custom version for the U of U is $110.

B. Used and new copies of the book can be purchased through a variety of vendors, such as eBay, Amazon or similar websites.

CALCULATOR REQUIRED:

A scientific calculator is necessary in this course. A graphing calculator is allowed. On exams, calculator applications on phones or computers are NOT allowed.

COURSE OBJECTIVES:

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

1. Use Venn diagrams to examine relationships between sets and the validity of simple deductive arguments.
2. Use an appropriate sentence to describe both the absolute and percent change in a given quantity and interpret such statements about the change.
3. Use simple and compound units, making conversions when necessary, and develop accurate comparisons between units.
4. Evaluate the impact of compound interest on simple financial decisions.
5. Use the savings plan and loan formulas to calculate the payment amount into the savings plan when a certain financial goal needs to be achieved, to calculate the mortgage payment or interest paid over the life of the loan and discuss whether those results are realistic (or not), compare several loans with different interest rates in order to financial decisions.
6. Compare and illustrate the features of linear and exponential growth using practical examples.
7. Determine simple areas, volumes, and explain the differential effect of scaling on perimeter, area, volume as well as some of the practical implications of scaling.

HELP:

Contacting me by 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:

- **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 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 Tuesdays. 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 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.
- **Online Homework:** Working through problems helps you understand and master the material. Completing homework is worth 10% of the grade. The lowest three assignment scores are dropped at the end of the semester.
- **Weekly Take-Home Quizzes:** There will be take-home quizzes weekly, except for exam weeks. Any exceptions will be communicated in the weekly announcements. You can access them on Friday (earlier by special arrangement), and they are due on Tuesdays, though you can submit as late as 5am Wednesday without penalty. You are responsible for submitting the assignment with the correct format and correct file extension. If you submit with the wrong format, the first time you will be warned and asked to resubmit in a given window. There will be no penalty the first time. After this, submissions with incorrect format will get a 0. The quizzes are worth 10% of your grade. The lowest five quiz scores will be dropped at the end of the term. No late quizzes beyond Weds. 5 am are accepted.
- **Project:** (WITH PEER REVIEW) This project is intended to be an in-depth exercise implementing some of the mathematics of the course. The project is worth 18% of your grade . You will have the option to work in groups or individually. You will submit the project, then there will be a three-day period for peer review (done individually, rather than in groups), then you may revise and resubmit. Doing a peer review is part of your project grade. If you do not submit your project for the first deadline on time, you will not be eligible to do the peer review and you will not get credit for this part. Late projects are not accepted.
- **Pre-test:** This can be taken in Week 1 or 2 of the semester. The pre-test is optional but counts towards your grade for completion (treated as a quiz with 100% score if you complete it regardless of performance). If you do not take it, it will count as a quiz with 0 score (and will be one of your three dropped quizzes). We use your pre-test, in conjunction with the final, to measure what you learn in this course. You must schedule your pret-test through the "Schedule Exams" link on Canvas. This is good practice for scheduling an exam.
- **Exams:** There will be two midterm exams. Each exam is worth 15% 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 allowed to use a calculator on all exams; for some exams, you will be given a list of formulas. You are not allowed to use other notes, a textbook, or phones during the exam. 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 1030 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 above.
- **Extra Credit:** Extra credit, worth up to 4% of your course grade, can be earned for participating in online discussions (by asking or answering questions with significant mathematical content). See A: Extra Credit for details.

EARLY POLICY:

- You can start online HW early upon special request. Please request this at least 48 hours before you would like to access the HW.

- 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 a 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 five lowest quiz scores are dropped at the end of the semester. Second, you may turn in HW late but with a penalty.

- **HW:** If you aren't able to complete a few problems or a whole assignment on time, you can complete the late portion for 70% credit. Simply go to the assignment in Canvas and open it up. There will be a screen where you acknowledge that the work is late, but you can complete it as usual.
- **Quizzes:** You should submit the quiz in the same Canvas assignment where you download it. E-mailed quizzes will not be accepted. 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. You must contact me in advance if an extraordinarily severe situation arises. 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

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).

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 safeu.utah.edu.

SYLLABUS AMENDMENT

I reserve the right to make reasonable changes to this syllabus and will announce any such changes to the class in advance.