

Introduction to Quantitative Reasoning

Math 1030-006 - Fall 2017

Instructor: Leif Zinn-Björkman

Tuesday, Thursday 10:45 am-12:05 pm

ST 205

Course Description: Math 1030 is a non-traditional, application-based course centered around the use of mathematics to model change in the real world, and the effective communication of mathematical ideas. The course is primarily intended for students who seek only to satisfy the QA requirement for the bachelor's degree and who (with the exception of a statistics class) will not take any further mathematics courses at the university. The purpose of the Math 1030 course is to develop skill in quantitative reasoning by examining how appropriate mathematical techniques can be used to analyze questions from many different areas. The mathematics covered in this course include ratios, percents, averages, estimation, basic financial mathematics, linear and exponential models of growth, basic geometric measurements and scaling. The course material is based on Chapters 1-4 and Chapters 8-10 of the text.

Prerequisites: The prerequisite for the course is a C or better in Math 980 (Algebra for College Success) or Math 1010 (Intermediate Algebra), OR an Accuplacer score of 60 or better, OR at least a 19 on the math portion of the ACT or 500 on the math portion of the SAT.

Textbook: *Using and Understanding Mathematics: A Quantitative Reasoning Approach*, Sixth Edition (custom version) by Jeffrey O. Bennett and William L. Briggs, ISBN: 9781269748506.

Calculator: You will need a scientific calculator for this course. Make sure that it has an e^x key, a power key y^x , and a $\log x$ key. Cell phones and graphing calculators are NOT allowed on quizzes or exams.

Office Hours: Tuesday 9:30-10:30, Wednesday 2:00-3:00, or by appointment. My office is LCB 302.

Email: lzinnbj@math.utah.edu [preferred method of contact]

Homework/Quizzes: Practice is important for the mastery of mathematical concepts. Homework will be assigned frequently but not collected. Although no grade is assigned for homeworks, you are strongly encouraged to complete (or at least attempt) assigned problems. Group quizzes will be given weekly (usually on Thursdays) on the material covered in class for that week. Quiz problems will be based on assigned homework problems. The lowest two quiz scores will be dropped. Because your lowest two scores are dropped, make-up quizzes will NOT be offered. If you need to miss class on the day of a quiz, that quiz will automatically become one of your dropped scores.

Canvas: The Canvas page for the course will serve as the course website. Canvas will be used for posting course announcements, homework assignments, grades, quiz solutions, practice midterms, etc. You can access Canvas through CIS or by logging in at utah.instructure.com.

Group Project: In order to develop the skill of communicating technical information, you will work in groups of 2-4 on a project and present your results in a written paper. The project will be due Tuesday, December 5. You will be given a list of topics approximately 7-9 weeks before the project is due. Format and grading criteria for this project will be discussed in class. Late projects will not be accepted.

Important dates: Class will meet every Tuesday and Thursday (except for Thanksgiving and Fall break) from Tuesday, August 22 to Thursday, December 7.

Last day to add without a permission code: Friday, August 25

Last day to drop the class: Friday, September 1

Last day to withdraw from the class: Friday, October 20

Midterm Exams: Thursday, September 28 and Thursday, November 9. Both midterms will be given during class time.

Comprehensive Departmental Final Exam: Tuesday, December 12 in ST 205 from 3:30-5:30 pm [in-class final]

Letter grades: Determined from your grade percentage (N) as follows:

$93 \leq N \leq 100$	A
$90 \leq N < 93$	A-
$87 \leq N < 90$	B+
$83 \leq N < 87$	B
$80 \leq N < 83$	B-
$77 \leq N < 80$	C+
$73 \leq N < 77$	C
$70 \leq N < 73$	C-
$67 \leq N < 70$	D+
$63 \leq N < 67$	D
$60 \leq N < 63$	D-
$N < 60$	E

There will be no extra credit, rounding up, or makeup exams.

Grading: Your grade will be based on the following:

Weekly Quizzes : 20%

Group Project : 20%

2 Midterms : 30% (15% each)

Comprehensive Departmental Final : 30%

Mathematics Tutoring Center: Drop in, sit down, and if you have a question, someone will come by who can help you. There are also group study rooms and tutoring sessions available. Located on 1st Floor of JWB or LCB. Open 8am-8pm MTWH; 8am-6pm F. The **ASUU Tutoring Center** at 330 SSB can arrange for private tutors at a reasonable rate.

Disclaimer: I reserve the right to make any necessary changes to this syllabus. Any such changes would be announced in class and via email.

ADA Statement: The University of Utah is fully committed to policies of nondiscrimination and equal opportunity. The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic learning, and psychiatric disabilities, and the University seeks to provide equal access to its programs, services, and activities for people with disabilities. Reasonable prior notice is necessary to arrange such accommodations, and students are responsible for obtaining the accommodations and notifying the instructor through official channels early in the semester.