

Math 1030 - 05: Introduction to Quantitative Reasoning

Monday + Wednesday 6:00 - 7:30 pm JTB 120

Marcus Robinson (robinson@math.utah.edu)

Office Hours: 5:00 - 6:00 pm Monday and Wednesday in JWB 219. I am also available by appointment.

Contacting Me: If at any point throughout the semester you have a question, concern or want to set up a time to meet, please do not hesitate to contact me. Your best chance of reaching me in a timely fashion is to email me (robinson@math.utah.edu). I do *NOT* check Canvas regularly so if you message me there I may not see it for a few days.

Textbook: Using and Understanding Mathematics : A Quantitative Reasoning Approach, by Jeffrey O. Bennett and William L. Briggs (custom edition for University of Utah, taken from the sixth edition)

Course Description: Math 1030 is an application-based course centered around the use of mathematics to model changes in the real world, and the effective communication of these mathematical ideas. The course is based on Chapters 1-4, 8, 9, and Chapter 10 (sec. A). You are expected to read each section that we cover.

By the end of the course you should be able to:

- use Venn diagrams to examine relationships between sets and the validity of simple deductive arguments,
- use an appropriate sentence to describe both the absolute and percent change in a given quantity and interpret such statements about the change,
- use simple and compound units, making conversions when necessary, and develop accurate comparisons between units,
- evaluate the impact of compound interest on simple financial decisions,
- 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,
- compare and illustrate the features of linear and exponential growth using practical examples,
- 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.

Homework: Homework will be assigned weekly and due on Mondays. Late homework will not be accepted. Homework will be graded based on both completion and correctness but I care much more about how you arrived at an answer rather than the answer itself.

Quizzes: Quizzes will be given weekly on Wednesdays. The problems on the quizzes will be similar to the assigned homework questions. *No make-up quizzes will be given*, but your two lowest scores will be dropped at the end of the semester.

Group Project: There will be one group project due during the last week of class (12/8). The objective of the project is to clearly describe, understand and communicate real world models using mathematics. More information about topics, format and expectations will be given roughly 8-9 weeks before the project is due.

Exams: There will be two 50 minute exams given in class. Absence from an exam will be excused only if you can provide verifiable and convincing evidence that you have a significant illness or serious family crisis that will prevent you from attending. Except under extremely unusual circumstances, you must inform me in advance of the missed test. You are expected to promptly make arrangements with me to make up the test.

Final Exam: There will be a *comprehensive* departmental final exam. The final exam is on Wednesday May 2nd from 3:30 - 5:30 pm. Room information will be announced as soon as that information is given to me.

Grading: Your grade will be based on

Homework:	10%
Quizzes:	10%
Group Project:	20%
Midterm 1:	15%
Midterm 2:	15%
Final Exam	30%

Your final letter grade will be determined by your overall percentage as follows:

	A	93% – 100%	A-	90% – 92.9%
B+		87% – 89.9%	B	83% – 86.9%
C+		77% – 79.9%	C	73% – 76.9%
D+		65% – 69.9%	D	60% – 64.9%
	E	below 55%	D-	55% – 59.9%

Calculator: You will need a calculator for this course. A scientific calculator will be sufficient.

Tutoring: The Rushing Math Center offers free drop-in tutoring, a computer lab, and study areas for undergraduates. The Rushing Student Center is adjacent to the LCB and JWB. The hours for the Fall/Spring semester are: 8 am - 8 pm Monday-Thursday and 8 am - 6 pm on Friday. The tutoring center will open the second week of classes.

ADA Statement: 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.

Important Dates: Please keep the following dates in mind:

1/9/2018	Last day to drop classes
2/14/2018	Midterm 1
3/2/2018	Last day to withdraw
4/4/2018	Midterm 2
4/23/2018	Group projects due
5/2/2018	Final Exam

Class Policies:

- I reserve the right to modify the class structure and syllabus at any time but I will notify you if and when any changes are made.
- If an emergency arises that prevents your from making it to an exam or turning in a homework it is your responsibility to communicate that information to me as soon as possible. I will do my best to accommodate any situation that comes up.
- If you are struggling with a concept *please* come talk to me or visit the tutoring center as soon as possible.
- I encourage you to work with others on the homework but anything that you turn in must be your own work.
- Regrade requests can only be made the class after the homework/quiz/exam was returned and in writing with an explanation why more credit is due.