Math 79 Quantitative Reasoning
Course Syllabus for Fall 2017
Instructor: Dr. Fred Park

Course Description

This is a semester long course in quantitative reasoning. This course is designed to help students develop their ability to create, analyze, and communicate quantitative and scientific arguments. It will emphasize critical thinking and problem-solving skills while also giving students practice in computation and symbolic manipulation. Topics to be covered include elementary linear equations, polynomial modeling, working with and understanding graphs and graphical presentations, and elementary probability and statistics. Some basic computer programming will be used for computations and visualization. These topics will be presented in the context of applications and models from various disciplines. (Not open to those who have had 81, 85, 139A, or 141A.) Prerequisite: Math 74 or 76 or a score of 1 on the Math Placement Exam. One semester, 3 credits.

Instructor Information

Instructor: Dr. Fred Park
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Office: SLC 216
Phone: 562-907-4200, ext. 4880
OH's: T/R: 10:00-11:00am, R: 2-3pm, or by Appointment

Course Information

Times and Location: TR 11:00-12:20 SLC 507
Textbook: "A Mathematical View of Our World" by Harold Parks, Gary Musser, Lynn Trimpe, Vikki Maurer, Roger Maurer

Additional items needed:

1. A small stapler and staples.
2. Texas Instruments TI-30X IIS 2-Line Scientific Calculator. (roughly $13 on amazon.com etc.)

Course Breakdown

Scheme #1:

- HW 10%
- MT #1 25%
- MT #2 25%
- Final 40%

Scheme #2 (Emergencies Only!!):

- HW 10%
- One Midterm 25%
- Final 65%

No makeup exams whatsoever. I highly recommend you taking both midterm exams since scheme #2 is only for emergencies. I will automatically take the higher of both schemes at the end of the course when determining your final grade.

Final Course Evaluations

Final Evaluations: 1% total bump in course grade. For example if your final total course average from the higher of scheme #1 and #2 is an 89% total (B+ grade), your final average gets bumped to 90% (Now an A- grade). I highly recommend that everyone does the final course evaluations.

Grading Scale

In this course, I will utilize an A-F scale with +/- grading. The percentage breakdowns based on the highest average from scheme #1 and #2 above are as follows:

- 90-100% A Range
- 80-89.9% B Range
- 68-79.9% C Range
- 58-67.9% D Range

The minimum grading guidelines in terms of percentage of the class are as follows:

- 20% of the class will be in the A Range
- 30% of the class will be in the B Range
- 35% of the class will be in the C Range
- 15% of the class will be in the D/F range

To obtain an "A" grade in my course, you will have to work very hard. In general, there are no easy "A's" in my courses or in the Math Department. There have been cases when no "A" grades have been awarded in math courses as well.

Exam Dates

The exam dates are set in stone and will not change. Please write these down in your scheduler ASAP.

- MT #1: Thurs Oct. 19th from 11:00-12:20pm in SLC 507
- MT #2: Thurs Nov. 30th from 11:00-12:20pm in SLC 507
- Final: TBA

Homework

HW will not be formally collected but you will be called upon periodically to present a problem from the HW in front of the class. This constitutes your HW grade. Note: you may be called on multiple times. Please keep up with HW since I will guarantee that you will be called upon to present a problem in front of the class at least one time.

Computer Labs

This course will involve some computer work with Matlab, a high level programming language and industry standard in science and engineering. The class will be a Bring Your Own Device (BYOD) in regard to computers. If you have a laptop with wifi, you will be able to access the software from any location on campus. If you do not have a laptop, you can borrow one from library. I will specify days for you to bring in your computer.

Class Attendance

Class attendance is mandatory! If you will miss more than 2 total lectures (unexcused) throughout the course, you will be asked to drop the course. For excused sports travel, you must bring in the necessary forms ahead of time for me to sign or else your absence will be counted towards the two allowed. If you are absent during the first 2 lectures, you will be dropped from the course.

Active Learning

Active learning will be a large component of the class time. You will be required to work in groups, challenged to think, and work problems out in class on a regular basis. There will be a 50/50 split between lecture and group work. Active learning exercises will be graded and required to be turned in. This includes both group work and individual work. There will also be quizzes throughout the semester. You may drop only 1 graded active learning exercise or quiz. No make up quizzes or exercises whatsoever under any circumstances.

Study Time and Class Expectations

For every 1 hour of lecture you should be studying 3 hours outside of class. That is at least 9 hours a week outside of class of studying and HW. Math is a difficult and time consuming subject. Please keep up with the work and do not 'Cram' for any exams or HW deadlines since this usually results in very poor results. I recommend at least 12 hours a week of study outside the classroom for this course. The skills you will obtain are well worth the time and effort, especially in this quantitative age we now live in.

Cheating

Cheating will absolutely not be tolerated in any way, shape, or form in this course!! I have not had any issues in the past and do not plan on starting. Cheating in any form will be recorded and the student will be sent to the Dean. The student will receive an automatic failing grade ('F' grade) in the course. Cheating has far reaching consequences that can affect your future career path. Quite simply put: Don't Do It!

Group Work

I encourage group work and you may work together. But you must have your own write ups of your HW and only if you completely understand the problem being solved.

Disruptive Behavior

Disruptive behavior will absolutely not be tolerated in any way, shape, or form in this class! This includes cell phone use (talking, texting, email, etc), computer use unrelated to the course, internet browsing, talking, chatting, or any other general disruptions. If you are being disruptive in class to the instructor and/or your fellow students, you will be asked to leave. I will not allow any disruptions to compromise the learning environment whatsoever.

(*** this syllabus is subject to change ***)