

Syllabus Quick Facts

MATH 307: Quantitative Literacy II for Educators — Spring 2023

Course Information

Instructor Email: cmcwhort@stac.edu

Course Webpage: <https://coffeeintotheorems.com/courses/2023-2/spring/math-307/>

Office Hours:

Mon.	11:30 am – 12:30 pm
Tues.	1:00 pm – 2:00 pm
Wed.	11:30 am – 12:30 pm
Thurs.	1:00 pm – 2:00 pm
Fri.	11:30 am – 1:30 pm

Grading Components

Course grades are determined by the following components:

Reflections	10%
Quizzes	10%
Project	20%
Homework	30%
Exams	30%

Attendance

Attend each lecture and show up on time. Anticipated absences should be addressed with the instructor in advance of the absence. Address any absences—anticipated or otherwise—with the instructor. If you miss a lecture, you are responsible for any material covered, any work assigned, any course changes made, etc. during the class. Four or more unexcused absences from lectures could result in receiving a grade penalty per additional absence or an 'F' in the course. Furthermore, excessive lateness will also count as an absence.

Reflections

Students will be assigned reflections throughout the course. These may be self-reflections, videos, articles, etc. Each reflection will be an approximately one-half to one-page paper (single spaced, size 11 font, 1 in margins) addressing questions related to the source(s) assigned. Reflections will be submitted electronically via a GoogleDrive folder shared with you. Students should be sure to actively engage with these source(s) and respond deeply and reflectively with the assigned question(s). *Do not simply repeat words, phrases, ideas, etc. in a 'word dump' to fill space.* Is it better to have a (slightly) shorter reflection that is meaningful than a long reflection that is hollow. Late submissions may not be accepted. Any extensions, due dates, and grade penalties for late assignments will be determined by the instructor on a student-by-student basis.

Quizzes

There will be a quiz *every* class, typically at the start of class. Because solutions will often then be immediately discussed, no make-up quizzes will be given (except under extraordinary circumstances).

Project

Students will both write a paper and create a poster during this course. The topic for both the paper and the poster must be the same but should not contain the exact same information ‘verbatim.’ The topic of both the paper and the poster must be a topic related to Probability, Statistics, or Data Science and to fulfill the course gateway requirement must also be related to global learning or social responsibility. The exact topic(s) will be chosen by the student(s) and approved by the instructor. With permission of the instructor, it may be possible to work in *small* groups for the poster. It is strongly suggested that you work to make your poster ‘Ignite quality’ and apply to present during Ignite. The paper portion of the project must be written individually. Details about the projects, e.g. grading guidelines, suggested topics, etc., will be announced after the corresponding course topic lectures—likely during lecture but possibly via email.

Homeworks

There will typically be a homework assigned each class/week, due the next class/week. Homework is a large portion of your grade, so your best work should be put into them. Your solutions should be neat, organized, display effort and clear mathematical thinking, and they should be submitted using the homework packets. You may request extensions on homework assignments in a timely fashion (possibly incurring a grade penalty) but do not simply assume that you will be able to receive extra time on an assignment and plan your schedule carefully. You are encouraged to work with others on homeworks; however, be sure to carefully abide by the academic integrity standards excepted by the college and instructor.

Exams

There will be a total of 3 exams that are each worth 10% of the course grade for a total of 30%. While the exams are not cumulative, topics from previous exams can appear in an exam if the material is relevant—but it will not be the focus of the exam. You should be present, seated, and prepared for a scheduled exam before the exam begins. If you are late, you should not expect extra exam time. There are no make-up exams except under extraordinary circumstances.

Course Schedule

The following is a *tentative* schedule for the course and is subject to change.

Date	Topic(s)	Date	Topic(s)
01/23	Rates, %'s, Functions	03/15	Spring Break
01/25	Cost & Revenue, Surplus & Demand	03/20	Normal Distributions
01/30	Simple Interest, Discount Notes, Inflation	03/22	Binomial Distributions
02/01	Discrete & Compound Interest	03/27	Binomial Distributions
02/06	Annuities	03/29	Central Limit Theorem
02/08	Amortizations	04/03	Central Limit Theorem & Review
02/13	Review	04/05	Exam 2
02/15	Exam 1	04/10	Introductory Linear Algebra
02/20	Introduction to Probability	04/12	Linear Algebra & Regressions
02/22	Applications of Probability	04/17	Applications of Linear Algebra
02/27	Review	04/19	Linear Programming
03/01	Random Variables	04/24	Linear Programming
03/06	Topics in Probability/Statistics	04/26	Linear Programming
03/08	Normal Distributions	05/01	Review
03/13	Spring Break	05/03	Exam 3