

Department of Mathematics
Central Washington University
Fall 2022

Math 130 Finite Mathematics

Instructor: Dr. Yvonne C.M. Chueh
Office and Contact: SAMU 218 I, Tel: 963-2124, e-mail: chueh@cwu.edu,
Webpage: www.cwu.edu/faculty/chueh
Office Hours: 9-9:50AM Monday-Friday

Course description: This course meets General Education "Reasoning" requirement and prepares student for introductory statistics courses in various departments. It covers the language of sets, counting procedures, introductory probability, and introductory descriptive statistics.

Course goals: This course is designed to help you become capable of critical thinking by understanding and then mastering the basic principles of counting and probabilities at first, and ultimately applying the necessary techniques to quantitative decision makings in real life. Descriptive statistics will be explored right after probability distributions (models) are established for random events of an experiment. At the end of this course, students are expected to have gained solid probability reasoning skills to learn statistics and apply the content knowledge to real world random phenomena.

Required Text: MyLab Math for Finite Mathematics & Its Applications + Third Party eBook
(Inclusive Access)
ISBN: 9780137616862
By: Larry Goldstein

Calculator: A calculator with statistical functions is required in class and writing exams. TI-83 Plus graphing calculator or similar model is required.

Course outlines:

- Introductory counting and probability
- More counting and probability including conditional probability, independence, Bayes' theorem
- Random variables and probability distributions
- Descriptive statistics

Grading: Your course grade will be determined by the following:

1. **MyLab exercises:** 100 points
2. **Tests:** three 100-point in MyLab. You get to drop the lowest of your three scores
3. **Worksheets:** 100 points. Available on the Canvas Modules.
4. **A comprehensive final exam** worth 100 points.

A perfect score on both of the above categories would result in a total of **500 points**. Your course grade will be determined by the percentage *p* of these points you earn, according the following scale.

A (100-94%) A- (93-90%) B+ (89-87%) B (86-83%) B- (82-80%) C+ (79-77%)
 C (76-73%) C- (72-70%) D+ (69-67%) D (66-63%) D- (62-60%) F (59-0%)

Note: No makeup exams will be given without a written request providing proof of evidence. If you miss an exam, it will be the one you drop. You **must** take the final exam to pass the course.

Students with Disability. Students with disabilities who require academic adjustments in this class are encouraged to meet with me during my office hours to discuss their disability-related needs. Please bring a copy of your Confirmation of Eligibility for Academic Adjustments. We will then discuss how the approved adjustments will be implemented in this class. Students without this but in need of requesting services should contact the CDS for additional information at Bouillon 205, or via [cgsrecept@cwu.edu](mailto:cdsrecept@cwu.edu) or 963-2171.

CWU expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. As a student in this course, you are expected to treat your professors, fellow students, and other people affiliated with your work at CWU with respect, regardless of their sex, race and color, religion and creed, national origin, sexual orientation, gender identify and gender expression, disability and use of assistive devices or a service animal, and veteran or military status.

Expectations for Student Conduct:

Students in this class are expected to interact with students and the professor professionally. Instances of disruptive conduct, obstructive conduct, or harassment will be referred to the Dean of Student Success.

Per WAC 106-125-020, the term "disruptive" or "obstructive" conduct means conduct, not protected by law, that interferes with, impedes, or otherwise unreasonably hinders the normal teaching, learning, research, administrative, or other functions, procedures, services, programs, or activities of the university. The term includes disorderly conduct, breach of the peace, violation of local or university noise policies, lewd or obscene conduct, obstruction of pedestrian or vehicular traffic, tampering with student election processes, or interfering with the orderly conduct of university investigations or disciplinary proceedings, including interfering with or retaliating against any witness, party, or other participant.

The term "harassment" means unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit the ability of a student to participate in or benefit from the

university's educational program, or that creates an intimidating, hostile, or offensive environment for any campus community member(s). Protected status includes a person's actual or perceived race, color, national origin, gender, disability, or other status protected by law.

SCHEDULE OF CLASS TOPICS AND ASSIGNMENTS

**This schedule posted on Canvas Modules is tentative, the instructor reserves the right to make changes in the syllabus by the needs of the class.*

Topic coverage and test schedule are presented below. In order to perform well in this class, **preliminary textbook reading** before each class and reviewing class notes throughout the entire quarter is necessary. Students are advised to complete the homework assignments soon after the each topic is covered. **Daily assignments are all the odd-numbered textbook exercises** although students are encouraged to solve even-numbered exercises with answers available on my webpage.