

Fall 2026 Syllabus and Expectations

Math 2130: Mathematics of Actuarial Science

T/R 12:30-2:10 in DSC 257

Dr. Mark Snavely – DSC 292, Ph: X5714

msnavely@carthage.edu <https://www.marksnavey.us>

COURSE GOALS

I have one goal for this course. **By the end of the course, you should be able to solve problems that could appear on the first actuarial exam.** In addition, the structure of the course should prepare you to study for future actuarial exams and help you learn more about a career as an actuary.

To address the first goal, we will study appropriate topics in mathematics (mostly probability), and practice taking simulated actuarial exams. To address the second, I will be requiring you to do a significant amount of studying independently. For the last goal, we will do some reading and talk about the nature of the profession.

The quizzes are available on my website; follow the link on the left to Moodle Test Site. Your user name your first initial and last name (Fred Jones has user name fjones), and the initial password is Pass*123. Please change the password once you log in. The user name for the Help Page and the Study Log is student, and the password is mathhelp. These are separate from the quiz site.

TENTATIVE SCHEDULE provided on the web page.

EVALUATION

Attendance	10%
Quiz Grades and progress.....	40%
Practice Actuarial Exam	50%
TOTAL	100%

If you pass the practice actuarial exam at the end of the course (passing is 12 out of 20 questions), you will receive an A in the course.

TEXT: I recommend two books for this class, although only the first is required. We will cover the first text, cover to cover.

1. *Probability for Risk Management* by Hassett and Stewart, third edition, but the second and first are OK too
2. *Schaum's Outline in Probability and Statistics* by Spiegel, Schiller, and Srinivasan

CALCULATOR: Of the allowable calculators, I recommend the TI-30XIIS. The TI-BAll Plus is also good, and may be better for future exams, but the TI-30 is a bit easier to use for the material on this exam.

FINAL NOTES: I am looking forward to getting to know each one of you this semester. I believe we will have an interesting and dynamic learning experience. By the end of this course, I hope you know whether or not a career in the actuarial sciences is right for you.

Finally, please turn off all cell phones, pages, and other communication devices before class starts. If you have a reason to keep one of these devices on during class, please let me know before class begins.

The following information is provided by Carthage College. I include this at their request.

Title IX Statement

You can find resources on the Carthage website at www.carthage.edu/title-ix.

Mission Statement: *Seeking Truth, Building Strength, Inspiring Service - Together*

Student Support Resources

Learning Accessibility Service Information

Carthage College strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers due to your particular circumstances (including mental health, learning disorders, and chronic medical conditions), please let me know immediately so we can discuss options privately. To establish reasonable accommodations, you must register with the Director of Learning Accessibility Services, Warren Wolchuk (wwolchuk@carthage.edu).

Health and Counseling

The Health and Counseling Center (HCC) addresses student physical, mental, and emotional well-being. All services, provided by experienced professionals, are free and confidential to currently enrolled, full-time undergraduate students. Students must call or visit the HCC to schedule an appointment. Health services are available by walk-in or appointment from 8:30am to 1pm and 2pm to 4:00pm. Counseling walk-in sessions are available Monday through Friday from 11:30am to 1:00pm. Last walk-in appointment begins 30 minutes before the end of walk in hours. TWC, first floor (behind mailboxes), | Website | 262-551-5710. Mon-Fri 8:30 am to 1:00 pm and 2:00 pm to 4:00 pm. Students can visit Uwill to access teletherapy services. (Updated Aug 5)

Writing Center

The Brainard Writing Center is a free resource for student writers. The center is staffed by undergraduate Writing Fellows who have been recommended by Carthage faculty and trained to work with other students on their writing. They can work with you at all stages of the writing process, including understanding the assignment, brainstorming ideas, drafting, revising, and proofreading. This semester, they are offering in-person, Zoom live virtual, and written feedback appointments. Students can schedule an appointment up to seven days in advance on WC Online. For more information, visit carthage.edu/writing-center.

Peer Tutoring

Peer Tutoring is available to assist you with any aspect of the class, including understanding readings, preparing for quizzes, studying for exams, and developing effective study habits. This free campus resource is here to help everyone maximize their academic potential. You can see available tutors and make an appointment up to seven days in advance on WC Online. For more information, visit carthage.edu/tutoring.

Student-Athletes

If you are a student athlete, you should inform me of this status at the start of the semester by providing me with the Coach's Letter that you received (this letter should name your head coach and the competition dates, and should have been provided to you at the first meeting). In addition to sharing this information at the start of the semester, you need to notify me of any class days to be missed due to a Carthage Athletics-sponsored event in which you are participating. You should notify me in advance of each upcoming contest. (For example, if you know you are traveling with the team on Friday, please let me know several days in advance). You will need to make up any missed lectures, assignments, and/or exams. Some work that can happen only during class time, such as discussion points, is not possible to make up. Students are encouraged to be in communication often; excessive absences will necessitate conversations with the instructor and the associate athletic director, and may impact your grade. Please note: student athletes cannot miss class to attend a practice session or athletic training appointment.

Respect and Equity Statement

One of this course's priorities is to create an environment where everyone feels safe and welcome. All students are encouraged to participate, speak up, and express their viewpoints in a manner that is in keeping with the principles we seek to maintain as a community: mutual respect, tolerance of difference, kindness, and compassion. Please be considerate of others during class and in online communications. Carthage College is committed to equal access to programs, facilities, admission, and employment for all persons. It is the policy of the college to maintain an environment free of harassment and free of discrimination against any person because of actual or perceived age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, gender identity, gender expression, genetic information or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violate the dignity of individuals and impede the realization of the college's educational mission, and will not be tolerated.