Professor: David McClendon (2046 ASC, phone x2574 (231-591-2574 off campus), hours 9-10 MWR or by appointment, email: mcclend2@ferris.edu)

Meetings: Mondays 3-3:50 and Wednesdays 3-4:50, in SCI 137. You can participate virtually at http://zoom.us/j/93801288127.

My MATH 417 web page: http://mcclendonmath.com/417.html

Canvas: http://ferris.instructure.com/courses/15704

Prerequisites: C- or better in MATH 414.

Text: *Actex Study Manual for Exam P* (Spring 2018, 2^{nd} printing) by Sam Broverman, ISBN 978-1635881851. This text contains 10 practice exams at the end, which I will not use in class - you can (and should) complete them on your own time for additional practice.

Lecture notes: We will cover Chapter 9 in my MATH 414 lecture notes. You should have a copy of these notes from last semester.

Required calculator: TI-30X (this is the only permitted calculator on Exam P, so it will be the only permitted calculator in this course).

Information on Actuarial Exam P:

https://www.soa.org/education/exam-req/edu-exam-p-detail.aspx

This page contains sample paper/pencil questions, online exam questions, and information on how to register for the exam.

Learning outcomes: Upon completion of MATH 417, it is my hope and expectation that you will be able to able to pass Exam P. At the very least, I hope you will improve your chances of passing by:

1. learning to solve probability questions in the context of risk management and insurance (i.e. insurer's risk, deductibles, benefit limits, inflation, etc.)
2. memorizing relevant facts for the exam;
3. developing the ability to recall lists of concepts based on "key words" in exam questions;
4. developing problem-solving techniques and exam strategies; and
5. gaining extensive practice with sample Actuarial Exam P problems.

Grading policy: First, if you can provide documentation to me that you have passed Exam P, you get an A. If you pass the exam by Summer 2021, I will change any grade you earn in this course to an A.

Otherwise, I will use your performance on practice exams, your homework, your attendance and participation in class activities, and what you tell me in your journals to assign a grade to you on this scale:

A: you will almost certainly pass the exam if you take it.

A-: you will probably pass the exam if you take it, but if you have a bad day or are unlucky, you might fail.

B+: you're mostly ready for the exam, and you might pass if you took it, but you'd have to be a bit of a lucky guesser.

B: you probably aren't ready for the exam yet, but you worked really, really hard in the course and put in a lot of time on your own (as evidenced by your journals).

B-: you very likely aren't ready for the exam yet, but you put in a good (not great) amount of work on the course.

C: you almost assuredly aren't ready for the exam yet, and you did some work, but not really a sufficient amount.

F: worse than C.

Practice actuarial exams: There will be six 2-hour, 20 question practice actuarial exams on the dates listed on the course calendar. **There are no class meetings on those days - you take the exams on your own time and submit your answers through Canvas.** I am looking for overall strong performance and/or a general trend of improvement from one exam to the next. After each exam, we will have a "post-mortem" session where we discuss some of the problems–you will be required to present solutions to practice exam problems you have solved.

Homework: Some homework sets will be assigned to the entire class; other homework will be individualized for each student based on their results on practice exams. Homework can be submitted online at the Canvas page, or on paper.

Journals: Each of you is to keep a "journal" which records your activities outside of class as far as studying for the actuarial exam. Every day (including weekends) should have an entry which describes what you did **that day** to help prepare for the exam. This may include reading, solving sample problems, reviewing 414 notes, taking a practice exam, etc. Your entry should include the amount of time you spend studying, and a **brief but specific** description of what you did. If you did nothing, say you did nothing (your journal grade will depend on you keeping records, not whether or not you study).

Example of a good journal entry: I read p. 58-64 in Actex manual and solved problems 15-18 (1 hr 17 min total)

Example of a good journal entry: Reread 414 lecture notes on joint MGFs; watched a video at khanacademy.org on joint MGFs; made a summary sheet of properties of joint MGFs (34 min)

Example of a bad journal entry: I read and did some practice problems (about 1 hr)

The point of the journals is to try to get you to hold yourself accountable for studying for the exams on your own outside of class. The Society of Actuaries recommends that you spend 300 hours preparing for this exam! We only meet for 50 hours in class this semester.

Journals are due on the days on the attached course calendar marked with "J"; they can be submitted through Canvas or on paper.

Attendance policy: Attendance at every class meeting is expected; part of your grade comes from your presence in class and your participation in group work, activities, games, etc.

Students with disabilities who require reasonable accommodations to fully participate in course activities or meet course requirements should register with the Educational Counseling and Disability Services office (x3057, ecds@ferris.edu). While ECDS will send me a letter outlining the accommodations to make for you, I would appreciate it if you could contact me immediately for assistance with any necessary classroom accommodations.

Academic dishonesty: Issues with academic dishonesty are taken very seriously, will almost always result in an F for the class, and will be referred to the Office of Student Conduct.