## George Mason University Math 555 Course Syllabus

Date Fall 2022

Title Mathematics of Life Contingencies

Course Math 555
Location Horizon 4008
Time Wed 7:20PM
Professor: Douglas Eckley

deckley2@gmu.edu

mobile # 571 277 7927 (use sparingly)

office # 703 993 1682 office hours MW 1pm to 3pm

### Description

This course helps the student prepare for the Construction and Evaluation of Actuarial Models exam, ie exam "MLC", in the Society of Actuaries sequence. This course covers at least the first half of the required reading for the exam.

The book is <u>Actuarial Mathematics for Life Contingent Risks</u> by Dickson, Hardy, and Waters.

#### **Procedures**

The class will consist mostly of a series of lectures.

Grading will be divided as follows:

Progress tests (3) 60 Final exam 40

I will grade on a curve at the end of the semester. The curve will be no more harsh than 90/80/70/60, and may well be more lenient than that.

#### Attendance

I do not take attendance, but this is a small class and I will know. The exams will be online, so there is no excuse for missing them.

# Calendar

<u>Date</u>	<u>Topic</u>	Reference to Book
24-Aug	Distributions and Math of Finance	
31-Aug	Survival Models	Ch 2
07-Sep	Life Tables and Selection	Ch 3
14-Sep	Insurance Benefits	Ch 4
21-Sep	Progress Test #1	
28-Sep	Annuities	Ch 5
05-Oct	Premium Calculation	Ch 6
12-Oct	Multiple State Models	Ch 8
19-Oct	Progress Test #2	
26-Oct	Yield Curves	Ch 11
02-Nov	Option Pricing	Ch 15
09-Nov	Simulation	Appendix C
16-Nov	Progress Test #3	
23-Nov	Thanksgiving Break	
30-Nov	Review	
07-Dec	Final Exam 7:30pm – 10:15pm	