# George Mason University Math 555 Course Syllabus

Date	Fall 2020		
Title	Mathematics of Life Contingencies		
Course	Math 555		
Location	Online (Blackboard Collaborate Ultra)		
Time	Wed 7:20PM		
Professor:	Douglas Eckley		
	deckley2@gmu.edu		
	mobile #	571 277 7927 (use sparingly)	
	office #	N/A due to COVID	
	office hours	N/A due to COVID	

# 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, and I will TRY to remember to record each lecture. DON'T MISS any of the progress exams (or the final).

# Calendar

Date	Topic	Reference to Book
26-Aug	Distributions and Math of Finance	
02-Sep	Survival Models	Ch 2
09-Sep	Life Tables and Selection	Ch 3
16-Sep	Insurance Benefits	Ch 4
23-Sep	Progress Test #1	
30-Sep	Annuities	Ch 5
07-Oct	Premium Calculation	Ch 6
14-Oct	Multiple State Models	Ch 8
21-Oct	Progress Test #2	
28-Oct	Yield Curves	Ch 11
04-Nov	Option Pricing	Ch 15
11-Nov	Simulation	Appendix C
18-Nov	Progress Test #3	
25-Nov	Thanksgiving Break	
02-Dec	Review	
09-Dec	Reading Day	
16-Dec	Final Exam	