m339j					
✓	Date	Day	Topic	Assignments Due	In class activities
☐	1/9/2023	M	Orientation. Setting up R and RStudio.		
☐	1/11/2023	W	Cumulative distribution function. Survival function. Percentiles. VaR. Types of random variables.	**Due:** Quiz#0	
☐	1/13/2023	F	Probability mass function. Probability density function.	**Due:** HW#0	
☐	1/16/2023	M	**MLK DAY.**		
☐	1/18/2023	W	The exponential distribution.	**Due:** Quiz#1	
☐	1/20/2023	F	Random number generation. The inverse transform method.	**Due:** HW#1	
☐	1/23/2023	M	Basics of R: Arithmetic. Vectors. R-scripts and R-notebooks. For loops.		
☐	1/25/2023	W	Functions in R. `If ... else` in R. Simulations of random variables.	**Due:** Quiz#2	
☐	1/27/2023	F	Focus on the expectation. TVaR.	Due: HW#2	
☐	1/30/2023	M	The tail formula for the expectation. SLLN. Monte Carlo simulation.		
☐	2/1/2023	W	Moments. Variance. Coefficient of variation.	**Due:** Quiz#3	
☐	2/3/2023	F	Deductibles. Per-payment and per-loss random variables.	Due: HW#3	
☐	2/6/2023	M	Loss elimination ratio. Other loss modifications (combined).		
☐	2/8/2023	W	Proportional and excess of loss reinsurance.	**Due:** Quiz#4	
☐	2/10/2023	F	Parametric distributions. Scale distributions.	Due: HW#4	
☐	2/13/2023	M	***In-Term Exam I***		
☐	2/15/2023	W	mgf and pgf. Sums of independent random variables.	**Due:** Quiz#5	
☐	2/17/2023	F	The Central Limit Theorem.	Due: HW#5	
☐	2/20/2023	M	The Poisson distribution.		
☐	2/22/2023	W	Poisson thinning. The negative binomial distribution.	**Due:** Quiz#6	
☐	2/24/2023	F	The binomial distribution. The binomial-Poisson connection.	Due: HW#6	
☐	2/27/2023	M	The $(a, b, 0)$ class. The $(a,b,1)$ class.		
☐	3/1/2023	W	The individual risk model. Monte Carlo for the individual risk model.	**Due:** Quiz#7	
☐	3/3/2023	F	The collective risk model. Its normal approximation.	Due: HW#7	
☐	3/6/2023	M	Compound Poisson.		
☐	3/8/2023	W	Monte Carlo for the collective risk model.	**Due:** Quiz#8	
☐	3/10/2023	F	Stop-loss insurance.	Due: HW#8	
☐	3/20/2023	M	Maximum-likelihood estimation: First principles. Individual unmodified data.		
☐	3/22/2023	W	Maximum-likelihood estimation: Grouped data.	**Due:** Quiz#9	
☐	3/24/2023	F	Maximum-likelihood estimation: Censoring.	Due: HW#9	
☐	3/27/2023	M	***In-Term Exam II***		
☐	3/29/2023	W	Maximum-likelihood estimation: Truncation.	**Due:** Quiz#10	
☐	3/31/2023	F	Maximum-likelihood estimation: Bernoulli and Poisson.	Due: HW#10	
☐	4/3/2023	M	Maximum-likelihood estimation: Negative binomial and binomial.		
☐	4/5/2023	W	Survival analysis.	**Due:** Quiz#11	
☐	4/7/2023	F	Non-parametric estimation.	Due: HW#11	
☐	4/10/2023	M	Maximum-likelihood estimation for mortality.		
☐	4/12/2023	W	Kaplan-Meier.	**Due:** Quiz#12	
☐	4/14/2023	F	Nelson-Aalen.	Due: HW#12	
☐	4/17/2023	M	Credibility.		
☐	4/19/2023	W	Limited fluctuation (classical) credibility.	**Due:** Quiz#13	
☐	4/21/2023	F	Problem-solving session.	Due: HW#13	
☐	4/24/2023	M	***In-Term Exam III***		