SCHEDULE

PRE-WORK
- Install R, RStudio. Please access these <u>helpful links.</u>
- Read the **raw book**.
- Complete a few basic exercises.

Days	Date	Activity	Time
Sess 1 - Tue	July 26	***Day 1 – Getting Comfortable with the Environment, Preliminary Programing*** o RStudio setup o Basics review and more ▪ Saving and sourcing scripts ▪ Installing and using packages ▪ Data structures • Vectors, lists • Working with data frames ▪ Reading/writing data • Reading to/from CSV, readr and readxl packages • Reading to/from a database ▪ Basic data analysis in R • Linear regression • Fit a distribution • Histograms/kernel density plots ▪ Basic visualization Lunch Break o AM review o Advanced visualization with ggplot2 o Introduction to capstone projects o Overview of online resources: StackOverflow, r-bloggers	8:00 AM – 12:00 PM (break at 9:30 AM) Lunch 12:00 PM – 1:00 PM 1:00 PM – 5:00 PM (break at 2:30 PM)
Sess 2 - Wed	July 27	***Day 2 – RMarkdown, dplyr and Loss Reserving*** o Day 1 review/questions o Augment R scripts with RMarkdown o dplyr to select, summarize and transform data Lunch break	8:00 AM – 12:00 PM (break at 9:30 AM) Lunch 12:00 PM – 1:00 PM

		o Begin capstone work	1:00 PM – 5:00 PM (break at 2:30 PM)

Sess 3 - Thu	July 28	**Day 3 – GLMs and Advanced Models**
		
		    o Day 2 review/questions
		    o GLMs
		    o Decision trees
		
		Lunch break
		
		    o Assisted work on capstone
			8:00 AM – 12:00 PM (break at 9:30 AM)
			
			Lunch 12:00 PM – 1:00 PM
			
			1:00 PM – 5:00 PM (break at 2:30 PM)

Sess 4 - Fri	July 29	**Day 4 – Further Practice, Capstone**
		    o Day 3 review
		    o Complete capstone
		    o Generate actuarial report document in Word or PDF (or HTML)
		
		Lunch break
		
		    o Complete actuarial report
		    o Present to larger group
			8:00 AM – 12:00 PM (break at 9:30 AM)
			
			Lunch 12:00 PM – 1:00 PM
			
			1:00 PM – 3:00 PM (break at 2:00 PM)