Fox Module 1 Statistical models

- Statistical models and actuarial science
- Observations and experiment
- Populations and samples

Section 1.1, "Statistical models and social reality," is a nice introduction, but it is not tested on the final exam. Skim these pages; don't worry about remembering the details.

Read Section 1.2, "Observations and experiment," on pages 4-7. Fox summarizes each sub-section a gray box. As you study this textbook, the gray boxes help you recall the key concepts.

Read Section 1.3, "Populations and samples," on pages 8-9.

This course does not require sophisticated statistical software. Excel has a REGRESSION add-in that is sufficient for the student project. If you want more advanced statistical tools, use R. Everything in John Fox's textbook is in his R package (called *car*). This is open software, freely available to everyone. All the data in the textbook examples is in the R package, and all the graphs in the textbook are drawn with R functions. Both the CAS and the SOA have working groups promoting the use of R for actuarial applications.