TS Module 1 Time series overview

(The attached PDF file has better formatting.)

- Model building
- Time series plots

Read Section 1.1, "Examples of time series," on pages 1-8. These example introduce the book; you are not tested on them.

Read Section 1.2, "Model building strategy," on page 8. Know the three steps in the Box and Jenkins ARIMA modeling approach: specification, filling, and diagnostics (top of page 8), and the principle of parsimony (middle of page 8). The final exam tests these concepts.

The authors provide an R packages that draws the graphics in the textbook and produces the figures. Their appendix explains how to run the R functions.

You don't need to know R for this course, but it is well worth learning R for your general actuarial career. An hour or two spent downloading R and learning its basics help you in many ways, not just in the time series on-line course.

This module and the last four modules (discussing the student project) have no homework assignments. The course has 19 modules with homework assignments. You must complete 80% of these, or 15 homework assignments.

The on-line course has a final exam date, but no due dates for homework assignments or the student project. Actuarial candidates have many responsibilities, and you may not have the time to complete a homework assignment or the student project.

To avoid falling behind, do the homework assignments as you review the textbook. Send in the homework assignments (by regular mail) to the NEAS office in batches, such as modules 2-7, 8-13, and 14-20. Put each homework assignment on a separate page.