# Reading List for Econ 4130 autumn 2018 – for Rice ed. 3

(May be subjected to revision later in the course.)

**Chapter 2**

2.1 Review of discrete distributions. Read all.
2.2 Read all.
2.3 Read all.
2.4 Read all.

**Chapter 3**

3.1 Read all.
3.2 Read all.
3.3 Skip example E and paragraph before. Otherwise read the rest.
3.4 Skip example E. Otherwise read the rest.
3.5.1 Read all.
3.5.2 Skip examples B and D and E. Otherwise read the rest.
3.6.1 Skip example B and the preceding paragraph starting with "Let us next …".
3.6.2 Skip example A and B. Read proposition A and the paragraph before, starting with, "For the general case….". In addition read example C.
**3.7 Can be skipped.**

**Chapter 4**

4.1 Introduction. Read all.
4.1.1 Skip example A. Otherwise read the rest.
4.1.2 Read theorem A and example A until the paragraph starting with, "An application of the binomial distribution and ….". Read also example E.
4.2 Read all.
4.3 Read all.
4.4 Read all.
4.5 Read all until and including example G. Skip the rest.
4.6 Skip example A and C. Otherwise read the rest.

**Chapter 5 – Basics about asymptotic theory and approximations**

Read all in conjunction with the supplementary "Lecture notes to Rice chap.5" on the net.

**Chapter 6 –** Read the construction of T- and F-distributions. The proofs are **optional reading**.

**Chapter 8 – On estimation.**

Read all of "Lecture notes to Rice chapter 8" to be put on the net later in the course. This is a supplementary lecture note introducing matrices sufficiently to understand the multivariate normal distribution, the concept of a covariance matrix and its use in inference.

**Sections in the book:**

8.1 Read all.
8.2 Read all.
8.3 Read all.
8.4 Skip example D. (The text between example C and example D on bootstrap-simulation can be taken as **optional reading**.)
8.5 Skip example D. ( The last two paragraphs before example D can be taken as **optional reading**.)
8.5.1 Skip example A.
8.5.2 Skip the "proofs" of Lemma A and Theorem B.
8.5.3 Skip examples C, D and E, and the text between them on the bootstrap confidence intervals.
**8.6 Can be skipped.**
8.7 Skip example A and the proof of Theorem A.
**8.7.1, 8.8, 8.8.1, 8.8.2 can be skipped.**
8.9 Read all.

**Chapter 9 – On hypothesis testing**

**9.1 Can be skipped.**
**9.2 Can be skipped.**
9.3 Read all.
9.4 Read all.
9.5 Read all.
**9.6, 9.7,9.8 can be skipped.**
9.9, 9.10 Optional reading

**Chapter 10 - 15 can be skipped.** (But note that some topics and special cases from the more applied chapters 10, 11, 13, and 14 will, as before in previous versions of the course, occur in examples and exercises.)

**Additional supplementary lecture notes and exercises**

For some of the topics the textbook is too thin and supplementary material will be supplied on the net when needed (for example, bivariate normal distribution, approximation methods, meaning of regression coefficients, prediction, F-test, introduction to logistic regression if time allows). This material is part of the curriculum and should be known – except sections marked as "optional reading" that will not be required for the exam. It is also important to study well all exercises given in the course that may contain some minor theoretical points not covered in the lectures.