When writing up your solutions, keep in mind the problem documentation requirements (Slide 6 of the Lecture 1 presentation). Be sure to include a complete problem statement in your writeup.

Turn in your homework (typeset, printed, and stapled, with your name, student number, and section) by 12:00 Noon on the due date. Homework collection boxes will be in either Prof. Reed’s office or on the shelf in the lounge area near the faculty offices.

Use Matlab to plot your graphs, draw histograms, and calculate statistics. Do NOT use Excel! (It’s ok to use a spreadsheet to tabulate and sort data, but it’s not a good idea to do calculations with it.)

Chapter 11 makes reference to Appendix C, Areas under the Standard Normal Curve from 0 to z. The Appendix C in your copy of the book may be different; the table of areas you need for the last two problems are here:

   http://faculty.virginia.edu/reed/scupi/intro_engr_1/materials/AppendixC.pdf

1. (20 points) Text problem 10.10. In addition, answer these questions:

   (d) Calculate the median and mode for the sample.

   (e) What fraction of students will flunk out (i.e., not return for sophomore year)?
   What fraction of students will make the Dean’s List (i.e., the list of high
   performers)?

2. (20 points) Text problem 10.11.

3. (20 points) Text problem 10.12. In part (b), also write an equation for R(P).

4. (20 points) Text problem 11.5.

5. (20 points) Text problem 11.8.

Preparation for Next Week

Read Chapter 14 in Eide.