

Assignment #8

Due Wednesday, 11 November, 2015 at the start of class

Please read Lectures 11, 12, 13, 14, 15 in Trefethen & Bau.

P17. Reproduce Figures 11.1 and 11.2 on pages 79 and 80 of the textbook. Show the code you used. (*Hint: Type* `help vander.`)

Exercise 12.1 in Lecture 12.

Exercise 12.2 in Lecture 12.

Exercise 13.2 in Lecture 13. Do parts (a) and (b) only.

Exercise 13.3 in Lecture 13. In my textbook, which is the first printing I think, there is a mistake. It should say “for $x = 1.920, 1.921, 1.922, \dots, 2.080$ ”, and it might well say that in your book. In fact, I suggest using this slightly-restricted range for x , to make the point more obvious:

$$x = 1.930:0.001:2.070$$

Exercise 14.1 in Lecture 14. Do parts (f) and (g) only.

Exercise 14.2 in Lecture 14.