Our text is by Morris Hirsch, Stephen Smale & Robert Devaney, *Differential Equations, Dynamical Systems, and an Introduction to Chaos* 3rd ed., Academic Press, 2013. Please read the relevant sections in the text as well as any cited reference. Assignments are due the following Friday, or on Nov. 30, whichever comes first.

Your written work reflects your professionalism. Make answers complete and self contained. This means that you should copy or paraphrase each question, provide adequate explanation to help the reader understand the structure of your argument, be thorough in the details, state any theorem that you use and proofread your answer.

Homework from Wednesday to Tuesday will be due Friday. Homework is to be uploaded to Canvas by 4:00 pm, Fridays to be considered on time. Late homework that is up to one week late will receive half credit. Homework that is more than one week late will receive no credit at all.

Please hand in problems A1 on Friday, August 28.

**A1.** Exercises from the text by Hirsch, Smale & Devaney:

18[1-4, 9, 14]

Please hand in problems B1 on Friday, Sept. 4.

**B1.** Exercises from the text by Hirsch, Smale & Devaney:

37[2b, 7, 9, 10, 11, 14]

Please hand in problems C1 on Friday, Sept. 8.

**C1.** Exercises from the text by Hirsch, Smale & Devaney:

57[4, 5, 7, 10, 11, 14]

Please hand in problems D1 on Friday, Sept. 19.

**D1.** Exercises from the text by Hirsch, Smale & Devaney:

71[1, 2, 3, 4, 5]
Please hand in problems E1 on Friday, Sept. 25.

**E1.** Exercises from the text by Hirsch, Smale & Devaney:

103[4, 7, 8, 11, 12]