- Orbits, (eventually) fixed and periodic points, intermediate value theorem

  ○ Suggested review: homework #1 problems 1, 2, 6, 7, 8
  ○ Suggested reading: lecture notes 1.2.1-1.2.3.

- Classification of attracting/repelling fixed points and cycles

  ○ Suggested review: homework #1 problems 3, 4, 5 and homework #2 problems 3 and 6a
  ○ Suggested reading: lecture notes 1.3.1-1.3.3.

- Neutral fixed points and cycles, weak attraction and weak repulsion

  ○ Suggested review: homework #2 problem 1, 2, 4, 5
  ○ Suggested reading: lecture notes 1.3.4.

- Basins of attraction, immediate basin of attraction

  ○ Suggested review: homework #3 problems 1, 4 and homework #4 problem 1
  ○ Suggested reading: lecture notes 1.3.5.

- Newton's method, Newton's fixed point theorem

  ○ Suggested review: homework #3 problems 2, 3, 5, 6.
  ○ Suggested reading: lecture notes 1.4.

- Bifurcations and bifurcation diagrams, saddle-node bifurcations, period-doubling bifurcations

  ○ Suggested review: homework #4 problems 2, 4
  ○ Suggested reading: lecture notes 2.1.1-2.1.4.

- The Schwarzian derivative

  ○ Suggested review: homework #4 problem 3
  ○ Suggested reading: lecture notes 2.2.1.