1. Read section 1.10 in Peskin/Hoppensteadt and do problem 1.15 in the end of chapter 1 (p. 72).

2. One aspect of fetal circulation that we did not address is the source of oxygen exchange. As the lungs of an unborn baby are collapsed, the oxygenation of blood must take place outside of the fetal organism. Find out the mechanism of oxygen exchange in the fetal circulation (from outside sources - e.g. the WWW has a trove of info) and describe it in a two-paragraph summary. Don’t forget to cite your sources (this exercise is also to give you a chance to research your own reliable sources).

3. Read section 1.12 in Peskin/Hoppensteadt and do problems 1.21, 1.22 in the end of chapter 1 (p. 73).

4. Read section 1.13 in Peskin/Hoppensteadt and try to do one (your choice) of the suggested computing projects on p. 64. Submit a short paragraph answering the questions posed in the respective paragraph in the text, and a figure illustrating your findings.