Thoughts on Studying and Learning the Content of 4170

The textbook gives a complete coverage of this subject. Many, many drugs are shown and discussed. Due to time limitations, in this class, we will discuss only selected examples (we'll call them “case studies”). Many of the examples that we cover do appear in the textbook, but some do not (for example, the course notes include examples and concepts that have emerged since the text was sent to press). Accordingly, the lecture material is your best guide to the things that you need to learn in this course. The problem sets allow you to test your knowledge on the material. The textbook is a resource that provides an excellent overview of the subject and can be used to “fill-in” complex or confusing passages in your notes.

I offer the following recommendations for learning the material in this course:

1. It is useful to read the assigned chapters once. The text is well written and interesting.
2. The “core” of your studying should involve reading, revising, and supplementing your notes from class. Use relevant information in the textbook to fill in, or add detail to, spots that are difficult or confusing. Rewrite portions of the notes in your own words. This should be done soon after class, if possible. Integrate the handouts (and possibly some of the material posted on the course website) into the notes in the proper places. This creates your own “mini-textbook” for our class.
3. As we near the end of each section, work the relevant problem sets posted on the course website. First, try to solve problems completely – without referring to your notes or the text. For problems that prove refractory to your efforts, use the notes and text to help construct an answer to these difficult problems.
4. Wait a 2-24 h and then rework the problems, without assistance from your notes or the text. Again, use the notes and text to help answer the problems that you could not solve.
5. Wait a day or two, then repeat, with special focus on the problems that you have not been able to solve without looking at the text or notes. Read notes again.

A few specifics regarding exams: (this list is not intended as a comprehensive list of what you do – or do not – need to know on exams). I will not ever ask you to draw specific drug structures from memory. You do need to know specific facts and concepts associated with the “case studies” covered in class (for example sulfa drugs and H2-blockers). You do not need to recall all of your undergraduate organic chemistry; but you do need to understand the reactions that we discuss in class. Knowledge of organic reactions and mechanisms is an important part of drug synthesis and drug action. The types of problems appearing in the homework are representative of the style that might appear on the exam. You do need to know the amino acid side chains. You do need to know the equations that we discuss in class. You do not need to know constants like the gas constant, R. There will be a list of “things to know”. This list is posted on the course website. You are responsible for only the yellow highlighted information on this sheet. Use of notes, calculators, cell phones, and other electronic devices will not be allowed during the exams.