Kynsie’s Tips on Studying for Science Courses

Generally speaking, science professors lecture over (or teach) a concept, and on the exam day, they test you over application of that concept. The basic understanding of a concept and the application of said concept is very different. Many do not fully understand how big of a leap from one to the other is. The following are tips on studying specifically for sciences with this premise in mind. This is not an exhaustive or comprehensive study manual. It is meant to serve as a tool to help and guide students.

- Read the book – do this regardless of what anyone tells you. I have never had a student tell me they failed a class because they read the book.
- Prepare the day before class – review power point presentations, read the sections/chapters of the book related to what will be covered, etc. (refer to your course syllabus)
  - Do this with the intent to familiarize yourself with the information; NOT to learn it.
  - Don’t worry about highlighting, taking notes, etc.; just read it over.
- Review the day after class – go back over your notes from class, reference the book to help fill in the gaps, try to tie the information to previous lectures to attempt to see the “big picture”, etc.
- Avoid flash cards unless they are premade and come with your book.
  - Science courses are based on critically thinking through processes; they are not factual courses where knowing things vocabulary and definitions will provide you many answers on the exams.
- Attempt to explain, out-loud, the concepts/processes you are studying; usually if you can find a way of stating the information in your own words, and understanding what you said, then you have a fairly good grasp of that concept/process.

General studying tips:

- Give yourself breaks when studying and try not to study for more than 2 to 3 hours at a time.
  - Think of your brain as a muscle (though it is not 😊) – it needs time for “recovering” to process and to store the information you just fed it.
  - The “brain as a muscle” analogy holds for above tip of familiarizing yourself with the material the day before (warm-up before you work out) and the review the day after (cool-down after you work out). Also, you would not do your entire week’s worth of “working out” in one day because it can cause more harm than good to your muscles. Same goes for the cramming study method.
- Plan out your studying time each week.
  - Be specific. Don’t just say, “Oh I’m going to study for something on Wednesday.”
  - Setting days and times of studying for each course will help you from procrastinating.
  - If you stick to your schedule, it will also give you a sense of accomplishment and ensure you have studied sufficiently when it comes time to do the fun things.