Study Goals: Biochemistry

Exam Weight: ___________  Days Until Exam: ___________

Reflect on your study habits using the suggestions below
Have you tried some of them? What worked and what didn’t? Ready to try something new? Check off which tasks you’d like to accomplish in preparation for your Biochemistry exam.

Structure and Organization
Organized notes make it easier to find information, as well as help you study in more effective ways. Developing a structured note-taking system is the foundational step to fully understanding the information.

- Create condensed and organized summary guides on different topics
  *(Summary guides can include outlines, cheat sheets, mind maps, etc. It may also be helpful to organize material from different sources - course package, lecture notes, textbook readings - into one comprehensive source.)*

- Try to structure the information in different ways in order to help you remember the content in various contexts
  *(For example: you can create charts or diagrams that compare different enzymes in either the same pathway or different pathways, you can create tables that compare the main purpose/mechanism/outcome of different pathways, etc. The main purpose of this exercise is to help you create connections between details that may not be explicitly stated in lecture/notes.)*

- Create mind maps to help you visualize the big picture
  *(Many details can be bridged together by focusing on the main topic e.g. protein structure and function, metabolism pathways, DNA replication, transcription, etc. The lecture schedule gives a good idea of what main topics are discussed.)*

Comprehension/Understanding
For conceptual courses like biochemistry, it is important to actively review the material regularly so that you fully understand it. Try to develop a deeper understanding of the material by asking yourself questions about it (questions such as those mentioned below). This may prompt you to connect ideas and topics within the course, which is an important step in preparing for biochemistry exams.

- Try using cue cards to help you review specific details on a regular basis
  *(This can include mechanisms and pathways, names of important proteins, etc.)*

- The details are important but don’t lose sight of the big picture
  *(The details may be related to the mechanism of the specific pathway, such as transcription. The big picture can represent the overall purpose of the pathway – Why is the cell undergoing this? What is the outcome for this cell? What is the effect on other cells/tissues/organs/organism as a whole?)*
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Self-Testing
There are many possible ways to self-test with the biochemistry course material, however, most students don’t allow enough time for this study step. Aim to prove to yourself that you understand and remember the course material, and can apply it to unique situations.

1. Explain concepts and question solutions out loud to a friend/PAL peer/yourself
2. Work on identifying and improving areas of weakness by doing practice problems
3. If you got a question wrong, be sure to fully understand why
   (Reflection is a big factor in helping you achieve success if a similar question-style or if the same concept is tested on exams. If necessary, you may wish to return to the first two steps – structuring the information and working on comprehension.)
4. Create your own exam-style multiple-choice questions
   (This can be a challenging but effective learning strategy as it allows you to recall and apply the information. Try using the professor’s practice questions as a guide.)

Tackling Multiple-Choice Problems
When approaching biochemistry multiple-choice questions, here are some important aspects to consider:

1. Reading the question
   (Read carefully: underline/circle key words and strike out extraneous information.
   Know what concept(s) is/are being tested, and what the question is asking you to find.)
2. Reading the answer choices
   (Read every choice carefully since one answer choice may have multiple components. If one of the components is wrong, the answer choice is wrong.)
3. Utilize the blank space – draw simple pathways, graphs, DNA replication diagrams etc.
4. Manage your time while considering the length of the exam & the number of questions

Helpful Tips
These are some final reminders to help you achieve success in your biochemistry course.

1. Stay caught up with lectures and preview lecture material ahead of class
   (This is very important because biochemistry builds on previous details.)
2. Practice both comprehension and application questions, and focus on understanding:
   why that question is asked, what concept(s) the question illustrates, and how you should approach the question
   (Such exam-style questions can be found in the course package.)
3. If you need assistance with a concept/question, seek help early!
   (Go to the professor, Biochemistry forum on OWL, PAL Centre.)