Success in BIOL 255/256
Academic Success Center
Iowa State University

Students committed to learning will find many possible paths to success. No path is error free, but the path best for you may not look like the same path as another student. For this reason, students should continuously assess their academic progress in courses and adjust their academic strategies accordingly.

While there is no magic formula, the following suggestions may improve your ability to succeed in Biology and increase your retention of knowledge.

**Repetition is key.** The more times you expose yourself to the material covered in lecture the better you will be able to recall it for exams and transfer the concepts to long term memory and recall in future classes, i.e. Human Physiology, Human Diseases, Microbiology, Chemistry.

**Find which learning style works for you.** Do you learn by reading, are concepts reinforced by pictures, do you need to hear the material to remember it, or are you a hands-on type of learner? Do you learn better in groups or are you more of a solitary learner? Human Anatomy and Physiology lean themselves to all learning styles and exposing yourself to a new learning style and incorporating it into your favorite learning style will enhance your overall understanding and enable you to transfer knowledge into long term memory.

**Take every opportunity to share your knowledge with classmates.** Setting up a study group in which each person talks about a certain concept. Share what you understand and listen how others see the same concept. This helps broaden your total understanding and through verbalizing your understanding the concepts are reinforced in your memory. Remember: Through teaching one learns!

**Learn the root of key vocabulary words.** In Anatomy and Physiology learning the root of words helps you to understand future concepts as prefixes and root words are used in each system and understanding the basic meaning of words helps piece concepts together as you move through the human body and the multiple systems i.e. ecto, meso, and endo, these prefixes will be used over and over again in front of root words that are specific to each system.

**Attend and listen in class.** Your lecturer has a deep understanding of the concepts presented and may as a sidebar tell a story to further explain a difficult concept. Don’t tune out! This side stories contain important information that will trigger answers to exam questions.

**Write down all clicker questions and case studies, and note their answers in your lecture notes.** Important concepts will come up as clicker questions and case studies in each unit. Talking these questions over with your classmates is encouraged and helps test your grasp of just presented material. If these concepts are contained in clicker questions and case studies be assured you will see them again as an exam question.

**Attend Supplemental Instruction.** The fact that your SI Leader has already been through all lectures and exams and is now attending those same lectures again, your leader has the insight into what concepts are more difficult and will focus on making sure you understand those concepts by reiterating them in SI sessions. Everyone should be able to learn the material and pass these classes but repeating difficult concepts leads to better understanding and transfer of that knowledge to long term memory.
Pictures are worth a thousand words, but thousands words of text may just lead to confusion and frustration. Not every text book works for everyone but your instructor has chosen the best possible text for the subject matter. Identifying items in pictures is part of the learning process as required homework and is included in each exam. Take your instructor’s cues about how deeply you should dive into the text and do not hesitate to visit and discuss concepts that seem difficult for you with your instructor. Sometimes the text comes with a DVD. These can be great aids to helping you understand concepts through fun activities and quizzes you can take multiple times. Again, talk with your instructor about the best way to utilize these study aides.

Pre-read and re-read lecture notes. The more time you spend reviewing your lecture notes the more prepared you will be for the exams. Fill out the study guide for exams after each lecture. This way you are immediately reinforcing material just presented and re-read the study guide and lecture notes as the unit proceeds. Listening to podcasts of lectures is an easy way to reiterate missed concepts. Just note the time of day next to the items in your lecture notes and once the podcast is made available just go to the time on the podcast and make notes of what you missed or did not understand.

Make associations of concepts. Look at letters in words within a system and make associations so you can recall and not be confused when these concepts are presented in exam questions. Write these learning tools down before starting an exam on the paper provided within the testing center. This will help alleviate confusion as you get into the exam.

Finally, read the exam questions completely. Along with each answer and then go back and read the questions again. You have 3 or more hours to complete an exam. Do not rush through it or go into the testing center with self-imposed time limits. Relax, breath, and since this is human anatomy and physiology use your own body to enforce the correct answer, do this while studying and you will be amazed at the ease of recall during an exam.