Success in Biology
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.

**Embrace repetition and review.** Learning biology requires many individual contacts with the material. Regardless of your learning preferences, embrace the variety all opportunities to learn aurally, visually, orally, through reading and writing, and labs.

**Vocabulary is the key.** Learn to look for patterns and roots in words. Never underestimate the value of any vocabulary term. It’s best to presume each term is likely to reappear later in the semester and in future other courses.

**Create and review note cards.** Creating notecards for biology will help you summarize information in small, manageable amounts. Notecards are more valuable than reviewing your notes because you can test yourself on terms or definitions and mix up the order. A great way to get vocabulary down is to make note cards. By placing the vocabulary word on one side and the definition on the other can help learn many vocabulary words with one tool. Keep a stack of notecards handy for a quick 5-15 minute review.

**Attend class.** This is stating the obvious, but there is a lot of content in Biology classes that may be presented to you for the first (and possibly only) time in-class. If you skip class, you may never know what you missed until the exam.

**Attend Supplemental Instruction.** This offers a second chance to see the material presented in class. Supplemental Instruction creates a more interactive learning opportunity where questions are welcomed. Your SI leader attends your class and knows what is covered and emphasized and their goal is to help you master the material.

**Listen to your instructor’s cues for important concepts.** Your instructors will emphasize certain concepts in the syllabus, lectures, and exam study guides. Focus you study time on these concepts.

**Skim all book chapter headings before reading the text.** This step will help you make your reading time more effective. While skimming the headings, flag the sections describing the important concepts that were highlighted by your instructor. If you are uncertain which sections are most important, work with a study partner to determine these sections.

**Utilize book resources.** Every chapter has an Assess and Discuss section at the end. In this section you will find multiple choice questions that can help determine how much you know from that chapter (and the answers are in the appendix at the back of the book). This is a great way to see the types of questions you will find come exam time. There is also an online version of your textbook called McGraw Hill connect. You can get to this website through blackboard or instructions can be found in your book. Here you can read chapters, watch videos, and even get interactive questions. This is a great resource to further your learning of the material.

**Read selected book content.** After you have identified the important sections, read for details in the selected book chapters. Take notes, annotate your book, and review diagrams.

**Draw diagrams.** Practice drawing diagrams (when appropriate) to enhance your memory and boosts your visual learning. Make copies of blank diagrams to self-test yourself.

**Read test questions carefully.** Many students make mistakes by not following the test instructions. Read the instructions and each question carefully to ensure you are answering the actual questions. After completing your exam, go over the exam a second time. This can minimize any mistakes.

**Study in pairs or groups.** Discussion of biology enhances your knowledge in a way that individual review can never achieve. You will learn more about correct pronunciation and use of terms.