

# HOW TO SUCCEED IN AP BIOLOGY

## ♥Improving your study habits:

- I. Studying is more than just spending time!
  - A. Make a commitment to **understanding** the material, not just memorizing it.
    1. Knowing the details at the expense of the "big picture" is **not** the goal.
    2. First build a foundation for understanding **concepts**, then add the details.
    3. This is analogous to learning a language -- you don't do it by memorizing the dictionary!
    4. No amount of memorization can help you understand such things as
      - a. **Concepts** (the ideas [=foundation] that connect the details).
      - b. **New situations** (applying what you've learned to novel situations).
  - B. Ask yourself **QUESTIONS** (especially **WHY** and **HOW**)
    1. Never be satisfied with just knowing the specific example given in class. Look for other examples. Ask yourself "How does this apply to other examples?"
    2. Look for the underlying principles. Ask yourself "Why does this phenomenon work like this?"
    3. Make connections with previous material. (Example: If this is true about "X", then is this also true of "Y".)
    4. Be responsible for your own success.
      - a. Attend class every day.
      - b. Pay attention.
      - c. Be prepared to spend time every night studying biology.
    5. **Prepare** for class ahead of time.
      - a. Read the day's assignment before coming to class.
      - b. This will familiarize you with the basic terminology, diagrams, figures, etc.
      - c. This will ready your brain for the day's topic.
    6. **Review** the previous day's notes or activities
      - a. This will remind you of the topic.

- b. It will also help you to make connections to other topics.
- 7. Take notes during lectures and when reading at home.
  - a. Your notes only need to make sense to you.
  - b. Develop short-hand (example: b/c = because, w/n = within, → = leads to).
  - c. Do not attempt to write down every word Austin says during a lecture.
  - d. Use an outline format during lectures; this forces you to organize the material as you listen.
  - e. Leave lots of room in your notes for later additions; this will also make for it easier to locate specific items.
  - f. Don't attempt to copy complex diagrams during a lecture.
    - 1) Make a note in the margin of your notes to look up that diagram in the textbook.
    - 2) Leave space in your notes to copy the figure after class.
    - 3) Listen to what is said about the diagram and take only simple notes.
  - g. After class (no later than the next day),
    - 1) Re-copy you notes (if necessary) or add clarifications and important details to the notes from the textbook.
    - 2) Stop reading periodically, close the book and ask yourself how does that work, why does it work that way, and how does this relate to previous lecture material.
    - 3) Read summary statements and attempt to answer questions at the each of the chapter.
    - 4) If necessary, solicit additional help from classmates and Austin.

**♥Remember: 4-5 hours of serious studying per week during the weeks between exams is a much more effective learning strategy than spending 10-12 hours cramming (i.e. memorizing) a day or two before the exam!**

## ♥Preparing for and taking a AP Biology exam:

- I. Plan ahead.
  - A. Take the exam seriously.
  - B. Begin preparing 5 - 7 days in advance of the exam
    - 1. Smaller bouts of more-intense work are possible and produce better results.
    - 2. This allows time to have your questions answered.
  - C. Study with friends (but do it seriously!)
    - 1. Attempt to come up with your own exam questions
    - 2. Try to make connections among related topics.
    - 3. Look for the "big picture".
    - 4. Try to draw pathways, relationships, etc. on paper.
  - D. Attend the Review Session offered by Austin prior to exam.
    - 1. Important points are emphasized.
    - 2. Opportunity is available to have your questions answered.
- II. Exam-taking strategies
  - A. Read the questions carefully
    - 1. What exactly is being asked?
    - 2. What do I know about the topic (write this in the margin)
  - B. Read all the answers before selecting the best one.
    - 1. Systematically eliminate incorrect responses.
    - 2. Use logic to choose between the remaining possible answers.
  - C. Get a good night's rest before the exam.
  - D. Relax (this is easy if you have prepared properly!)