



Top Ten List of Things to do to Succeed in Biology

Name _____ Date _____ Section _____

10. _____: Recent research has shown that people who study and work together learn more quickly and effectively than people who study and work alone. Find a few friends who are working on the same material (the optimal study group is three people), and then help each other to understand the concepts. If you can teach something to someone else, you will really understand it yourself!

9. _____: If you find yourself struggling with biology (or any other academic subject), get help right away. Instructors at the AAE hold regular office hours: *use them!* If a large number of students are having a difficult time with a subject, special “*group review sessions*” can be with the instructor. You might also try to get into a “science study hall”.

8. _____: Always read the textbook with a specific goal in mind, such as answering specific questions or understanding particular concepts. *Don't* read it like a novel. If you do, you will retain almost none of it — this is why we can reread novels!

7. _____:
As you read your text book, take note in the margins of your class notes, adding information to your notes to improve your study and review time before assessments What do you write in the margins? Questions about the material, summaries of the main points, supplementary material you have learned or read elsewhere...whatever helps you learn! (P.S. Simply highlighting you're your notes with a colored marker is almost *never* an effective learning strategy.)

6. _____: Every biology textbook uses **boldface type** to emphasize the key terms in the text. These are usually also defined in a glossary at the end of the textbook. Learn the meaning of these terms, and be able to apply them correctly.

5. _____: Biology textbooks are very lavishly illustrated; in fact, more money is usually spent on the art program than on the authors. Therefore, the illustrations are usually outstanding, and can clarify concepts as well as, if not better than, the text.

4. _____: If you're not attending class, you're missing the most important part of the course. **Note:** Copying someone else's class notes, or simply reading them is *not* enough!

3. _____: Exams are based primarily on material presented in class. Use these rules of thumb: If it's mentioned in class *and* in the textbook, there's a 100% chance it'll be on an exam. If it's *only* mentioned in class, there's still a 75% chance it'll be on an exam. If it's *only* mentioned in the text, there's only a 25% chance it'll be on an exam.

2. _____: In biology, as with any science, memorization is important. But, at the AAE, memorization alone is *not* enough — you must be able to apply the concepts that you have learned to new situations. One way to learn how to relate concepts to each other is by **concept mapping**: make a diagram of the various concepts relating to an overall idea, and then connect them with lines that indicate the relationships between the concepts.

Contact the your instructor if you are interested in learning how to use concept mapping as a study tool in any of your academic classes or visit any of the following links for more information on the subject of constructing a “concept map”:

http://users.edte.utwente.nl/lanzing/cm_home.htm

http://hednet.polyu.edu.hk/CMWkshp_folder/CM.ResFolder.html

<http://www.graphic.org/concept.html>

And the number one thing to do to succeed in biology is...

1. _____: To do well in science courses at the AAE, you must be able to understand the concepts presented, and to be able to apply them under new circumstances. So, when you read your text or go a class, constantly ask yourself what the material *means*. If the answer is no, pursue your instructor for a better, more useful explanation.



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10. Work together: Recent research has shown that people who study and work together learn more quickly and effectively than people who study and work alone. Find a few friends who are working on the same material (the optimal study group is three people), and then help each other to understand the concepts. If you can teach something to someone else, you will really understand it yourself!

9. Get help early: If you find yourself struggling with biology (or any other academic subject), get help right away. Instructors at the AAE hold regular office hours: *use them!* If a large number of students are having a difficult time with a subject, special “*group review sessions*” can be with the instructor. You might also try to get into a “science study hall”.

8. Read the textbook: Always read the textbook with a specific goal in mind, such as answering specific questions or understanding particular concepts. *Don't* read it like a novel. If you do, you will retain almost none of it — this is why we can reread novels!

7. Write in the margins of your class notes while reading your text: As you read your text book, take note in the margins of your class notes, adding information to your notes to improve your study and review time before assessments. What do you write in the margins? Questions about the material, summaries of the main points, supplementary material you have learned or read elsewhere...whatever helps you learn! (P.S. Simply highlighting you're your notes with a colored marker is almost *never* an effective learning strategy.)

6. Learn the key terms: Every biology textbook uses **boldface type** to emphasize the key terms in the text. These are usually also defined in a glossary at the end of the textbook. Learn the meaning of these terms, and be able to apply them correctly.

5. Study the illustrations: Biology textbooks are very lavishly illustrated; in fact, more money is usually spent on the art program than on the authors. Therefore, the illustrations are usually outstanding, and can clarify concepts as well as, if not better than, the text.

4. Attend Class: If you're not attending class, you're missing the most important part of the course. **Note:** Copying someone else's class notes, or simply reading them is *not* enough!

3. Know your class notes cold: Exams are based primarily on material presented in class. Use these rules of thumb: If it's mentioned in class *and* in the textbook, there's a 100% chance it'll be on an exam. If it's *only* mentioned in class, there's still a 75% chance it'll be on an exam. If it's *only* mentioned in the text, there's only a 25% chance it'll be on an exam.

2. Understand the concepts: In biology, as with any science, memorization is important. But, at the AAE, memorization alone is *not* enough — you must be able to apply the concepts that you have learned to new situations. One way to learn how to relate concepts to each other is by **concept mapping**: make a diagram of the various concepts relating to an overall idea, and then connect them with lines that indicate the relationships between the concepts.

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And the number one thing to do to succeed in biology is...

1. Be an active learner: To do well in science courses at the AAE, you must be able to understand the concepts presented, and to be able to apply them under new circumstances. So, when you read your text or go a class, constantly ask yourself what the material *means*. If the answer is no, pursue your instructor for a better, more useful explanation.