Strategies for Successfully Studying and Taking Examinations

Studying is a skill and, like any skill, it has certain steps or procedures that lead to success. In the academic arena, there are four distinct time frames that require study skills: before class, during class, after class, and while taking examinations. The most successful students have developed study skills in each of these areas. Each of us is an individual; therefore we each have a unique learning style that works best for us. We learn in different ways, and many effective study techniques can be used, based on our learning styles. However, some study techniques are essential and common across all learning styles and will therefore be useful to most students.

STUDYING BEFORE CLASS

Some of the essential and common study techniques that should be used before class are:

- Plan on attending class regularly and being actively involved in classroom activities.
- Although some subjects may seem boring, simply reading the assignments and taking tests does not promote the best learning. One of the best ways to improve learning is developing knowledge and understanding through classroom discussion and interaction with your instructor. Both listening and participating in class discussions are critical to understanding the subject matter.
- Set a regular time for studying each day.
- Schedule study time for the time of day you are most alert. For example, if your attention is more focused in the morning, try to schedule your study time for that period.
- Study in a consistent and quiet place.
- Study produces the best results when distractions are kept to a minimum and the surroundings are familiar. Avoid distractions such as noise, music, television, and radio. Ensure that there is adequate lighting to avoid unnecessary eyestrain. Studying on a bed should be avoided to reduce the possibility of overrelaxation, inattentiveness, and sleepiness.
- Study in half-hour intervals with 10-minute breaks.
- This format will provide reasonable study time and allow relaxation breaks. The mind will only process so much information without a break. A tired mind is not a good study tool.
- Have everything you need available before you start.
- This includes textbooks, notebooks, pencils, pens, highlighters, calculators, and anything else that will be required for completion of the assignment.
- Know how to use your textbook.
- Learn to use reference materials.
- Read and pay careful attention to assigned materials.
- This requires reading class assignments and preparing homework assignments before the start of class. Trying to read the assignment while the instructor is presenting the lesson or during classroom discussions causes your hearing and sight to compete for attention, resulting in memory confusion. Plan to read the assignment at least twice. The first reading should be approached as though reading a novel or newspaper (conversational reading). This will allow you to capture the main points in your short-term memory. The second reading should be accomplished while outlining the assignment to allow the prominent points to be recorded into long-term memory.
- Read the assignment again and use outlines to emphasize critical points.
- Outlining allows you to organize information into useful patterns, which improves recall, application, and problem-solving skills. Use the chapter and section headings as the major points in the outline and then use the following questions to add subpoints.
  - What is the main point of the section?
  - What are the major anatomic, physiologic, and pathophysiologic concepts?
  - Who is most affected by this information or these concepts?
  - When is this important to me, my EMS partner, and/or my patient?
  - Why is this important to me, my EMS partner, and/or my patient?
  - Where will this information be most useful to me?
- Develop your own examples or case studies of information in the assignment.
- As you develop your own examples and case studies, ask yourself why the author put this information in the reading and what it teaches you about similar situations that you might see in the day-to-day operations as a paramedic. By putting key concepts or illustrations into your own words instead of simply memorizing the words of the author of the assignment, it is easier to understand and remember your own examples and case studies.
because they are a product of your learning style and method of processing new information.

**STUDYING DURING CLASS**

There is no substitute for attending class. Using notes taken by a classmate with a different learning style may not prove beneficial to you. Some of the essential and common study techniques that should be used during class are:

- Get involved by asking questions on topics that are confusing to you.
- Remember, your classmates bring a wide variety of perspective and experience to the class discussion and may use a phrase or example that will help your understanding of a concept or principle. In addition, providing your thoughts and insights on topics that you have mastered and actively participating in discussion groups will allow you to hear your own words and explanations of concepts and principles. This may help you to find flaws in your logic or reinforce your understanding of a topic.
- Ask the “stupid” question.
- Every student at some time has failed to ask a question because he or she thought it might sound stupid or that everybody else already understood the concept being taught. The old adage “the only stupid question is the one that isn’t asked” has a lot of validity. You are attending class to learn a topic. If you don’t ask, you won’t learn.
- Take effective notes.
  - Notes should be focused on critical concepts and principles. Use the outline you developed before class to identify the important points. Write down “additional information” gained during the lecture or classroom discussion that enhances your outline. Take notes in your own words rather than trying to write verbatim what the instructor or classmate said. It is easier to understand and remember your own words, because they are a product of your learning style and method of processing new information.

**STUDYING AFTER CLASS**

Some of the essential and common study techniques that should be used after class are:

- Study in half-hour intervals with 10-minute breaks.
  - This format will provide reasonable study time and allow relaxation breaks. The mind will only process so much information without a break. A tired mind is not a good study tool.
- Have everything you need available before you start.
  - This includes textbooks, notebooks, pencils, pens, highlighters, calculators, and anything else that will be required for completion of the assignment.
- Study produces the best results when distractions are kept to a minimum and the surroundings are familiar. Avoid distractions such as noise, music, television and radio. Ensure there is adequate lighting to avoid unnecessary eyestrain. Studying on a bed should be avoided to reduce the possibility of overrelaxation, inattentiveness, and sleepiness.
- Study each day for upcoming tests.
  - Consistent study, spread out over a period of time, has been proven to be far more effective in retention of knowledge than “cramming” or massing study the day before class or hours before an examination. Start your study far enough in advance of a class or a test so that you can read and practice the critical information several times over a period of days, not hours.
**TAKING EXAMINATIONS**

Like studying, there are specific strategies that enhance student success when preparing to take a high-stakes certification examination.

- Course examinations help you determine how well you have managed the topics presented and help you identify whether your study materials and habits are effective.
- There is no substitute for good study habits when preparing for an examination.
- It is important to remember that using any examination preparation strategy is ineffective if you have not spent time studying effectively. Effective study habits, as outlined earlier, are the single most effective method of improving examination scores. Remember to study consistently over a period of days, not hours. “Cramming” for a test is usually not effective. Focus your study on the critical items most likely to be included on the test. There is too much information in any lecture or textbook to be added to your memory.
- Eat a nutritious meal the night before an examination.
- Avoid stimulants and depressants.
- Get plenty of rest the night before the examination.
- Arriving at the examination site well rested will help to reduce anxiety and improve focus and mental acuity necessary for the critical thinking associated with high-stakes certification examinations.
- Take steps to avoid hunger and other physical distraction during the examination.
- Be sure to eat before arriving at the examination to avoid hunger pains during the examination. Ensure that you empty your bladder before entering the examination room to avoid the distraction of a full bladder during the examination.
- Find out as much information about the test as possible.
- If you are taking the National Registry of Emergency Medical Technicians test, visit their website at http://www.nremt.org/about/CBT_Home.asp to learn about the examination and take a visual tour of the testing facility. If you are taking a state certification examination, ask your instructor to describe what you should expect when you take the examination. Ensure that you know where and when the examination will be administered and what materials you will need to bring to the examination site.
- Arrive early at the examination site.
- To reduce any last minute pressure and to allow for unavoidable delays in travel, plan on arriving at the examination site 15 to 20 minutes earlier than the scheduled time.

- Layer clothing to accommodate for variable room temperatures. It is better to be a bit cooler than too warm while taking an examination.
- Expect to experience some stress and anxiety.
  - It is natural to feel stress and anxiety. Do not become focused on the stress or anxiety and do not become overly concerned. A small amount of stress and anxiousness will help you do your best on the examination.
- Stay away from other individuals who are extremely nervous or worried.
- You have enough stress of your own and do not need to multiply your level of stress by “buying” into others’ emotions. Remember, stress is contagious and increasing stress will not help improve test performance.
- Take steps to reduce unproductive stress.
  - Keep a positive and upbeat attitude by deciding to do your best on things you know and understand, and refusing to dwell on those things that you do not know. It is too late to learn new material; simply make sure that you do well on the things that you know and understand.
  - Focus on the task of taking the examination. Answer one question at a time to the best of your ability. Avoid thinking about the remaining questions and do not worry about what others are doing.
  - Try to slow down and focus by taking several deep breaths before reading the first question. If you feel anxiety returning, repeat the deep breathing sequence.

**PREPARING FOR EXAMINATIONS**

Depending on the developer of the examination, you may be presented with a traditional pen and paper multiple-choice examination or a computer-adaptive multiple-choice examination. Although some of the strategies are similar, it is important to be aware of the type of examination you will be taking and apply the appropriate test-taking strategies to meet the examination format.

**Pen and Paper Multiple-Choice Examination**

The following are general test-taking strategies for pen and paper examinations that contain multiple-choice questions. Many of these strategies are appropriate for computer-adaptive testing as well.

- Read the examination instructions carefully or listen carefully to the examination proctor if he or she is required to read the instructions to you. If you do not understand any of the instructions or require clarification, ask the proctor for more detailed explanation before you begin reading the examination questions.
• Be sure that you know how much time you have to complete the examination and then plan your time for each part of the test. Allow a few minutes to review your answers before turning in your examination material.
• Read the stem of each question carefully and completely before considering an appropriate response.
• Answer examination items in the order presented and avoid the urge to skip questions. Identify any answer of which you are not completely certain by making a mark in the margin of the answer sheet next to the suspect answer. Once you have completed the test, review the examination question and answers that you marked in the margin. Correct any absolute errors that you identify, but do not change any answers unless you are extremely confident that you have made a mistake.
• Do not stay too long on any single question. If you find a question that appears to be difficult, rule out any answer that does not make sense and then make your best guess among the remaining answer choices. Mark the question for review at the end of the examination and continue with the rest of the examination.
• When confronted with a question that appears to have more than one correct answer, be alert for two or more concepts in the answer phrase. Some test developers will make the first concept of an answer choice correct and the second incorrect. Remember, all parts of the answer must be correct or the entire answer choice is incorrect.
• Reread all questions that contain the words not, least, except in the stem. These words have a negative connotation and can be confusing. If they appear on the examination, rereading the stem two or three times will help ensure a better understanding of the question and related answers.
• Be aware of qualifying words in the stem or the answer choices, such as always, never, all, most, largest, smallest, best, and worst. These words help to identify the correct answer choice, but are easily missed when reading a question. Sometimes test developers use a bold font to make the words more apparent. If you see this on a test, it is a clue that the word has serious implications for understanding the questions and related answers.
• Look for grammar and syntax agreement between the stem of the question and the related answers. Any answer that has a grammatical or syntactical mismatch with the stem of the question must be considered incorrect.

**Computer-Adaptive Examination**

In addition to the test-taking strategies listed in the previous section, the following are strategies that are unique to computer-adaptive testing:

• If a difficult question is presented to you, use the strategies listed in the section outlining multiple-choice pen and paper examination strategies to select the correct answer.
• In computer-adaptive testing, you are not permitted to skip questions or review answers as the end of the examination. You are presented only one question at a time and must answer the question before another question is presented to you.
• Avoid random guessing at the correct answer. Random guessing can significantly reduce your overall examination scores. If you are unsure of an answer to a question, ignore any answer choice that is absolutely incorrect, and then use the strategies outlined in the pen and paper multiple-choice examination section to help choose the best answer.
• Expect to get tougher questions. Don’t panic, computer-adaptive tests are designed to present you with questions that you will have about a 50/50 probability of answering correctly. This type of test is designed to test you at your maximum ability level; therefore you should not be surprised when you get difficult questions. Once again, don’t panic. Take a deep breath and use your test-taking strategies to make the best guess about the correct answer.
• Regardless of the question, always make your best guess at the correct answer.
• Every examination will contain pilot questions. You will not be able to identify these questions and they may appear anywhere during the examination. You should simply answer every question to the best of your ability even though pilot questions do not count toward your official examination score.