## Test Taking

Here comes another exam. You have allocated plenty of time and energy to preparing for it. You feel you know the material really well. All quarter, you have been attending classes faithfully and doing the assignments. Not only that, you are sure you understand the substance of the course.

But when you start to take the exam, you have a hard time answering the questions. You don't recognize the relationship between the questions you are being asked and the material you have been learning all quarter. You give it your best shot, but when the instructor announces. "Time's up," you are only two-third of the way through the exam.

What's going on here? You understand the substance of the course, so that's not the problem. What's probably happening is that the strategies you have for taking tests needs to be improved. A "test" is not an infallible judge of your knowledge. Studies have shown that people with equivalent level of knowledge can perform differently on the same test, depending on how well honed their "test smarts" are. There are many methods "test smart" students use to help themselves while taking exams.

These methods are referred to as "study skills"; that is, they are methods that experience and research have shown help many students in many different kinds of classes perform up to their capabilities. Not knowing a particular study skill should not be a cause for embarrassment; after all, no single individual knows every method for studying in college! The important thing to remember about study skills is that anyone can learn them. So if you find yourself having trouble taking exams, maybe it's just a matter of learning a few new skills.

## Strategies for Exam Preparation

## Scheduling time effectively

If you are a student who feels you are spending a lot of time preparing for your exam but still aren't doing as well as you expect, maybe you aren't squeezing in all the time you could. Often, study time in preparation for an exam is slighted because the Augusta Tech student has so many other responsibilities. Studying for an exam is not an "assignment" in the same way that writing a paper is an assignment because you don't hand in your test preparation. But it is just as important to allocate time to preparing for an exam!

The first thing to do is to sit down and estimates how much total time you can and should devote to preparing for this exam. Then try to break that time into increments. If you have 10 hours, you will remember more studying in 10 one-hour sessions rather than in 1 ten-hour session.

The nice thing about studying for an exam is that one can use those bits of time that more concentrated tasks might rule out. For instance, if you are waiting in a line somewhere for 15 minutes, you can usefully spend that time studying for an exam. Memory works best when you have had time to digest material, so grabbing snatches of time throughout the day can be a very effective way to review.

## Decide what will be on the test

The next thing to do, after you have allocated time to preparing for your exam is to decide what the exam is going to be about, as specifically as possible. You might start by going back to your syllabus and reading the course goals. Remind yourself how the themes laid out in the course affect the information presented in the course. Or ask yourself how you would explain this exam to someone who is not in the course as a way of testing how well you really understand what you are going to be tested on. Often, how well you can explain what a test is going to be about and what its purposes are is a measure of how well you are currently prepared for the test.

## Identify what you do know and what you do not know

Preparing for an exam involves making decisions, including on deciding what you do and do not know. Don't spend the same amount of time preparing for every topic. Studying everything with equal emphasis can be tempting, because you may feel like you are doing a thorough job, but concentrating on what you do not know is a better use of your time. Review all the materials together when you have more or less equalized your knowledge of all the topics that the test covers, not before.

## Relate your textbook and lecture notes

What is the relationship between lectures and textbook readings? Almost always, the textbook serves as a backdrop to the more focused material. Even if your instructor wrote the textbook you are using, a lecture is designed to highlight and trace the themes of the course in a way a textbook cannot. In general, therefore, you should use your lecture notes as a way to orient your review of the textbook. The textbook may, in one sense, contain "everything you need to know on the test"; but in another sense, your textbook is simply a collection of information given its full meaning by the design and implementation of the course you are taking. Review your lecture notes and write down the major themes the course is tracing. Then go to your textbook and flesh out these themes as necessary, as well as looking for any major themes you may have missed in your lecture notes but that you suspect will be present on the test.

## Reorganize materials

One of the best methods for retaining information and for testing the extent of your knowledge is to reorganize study materials. Too often, you can deceive yourself into thinking that you understand and remember more than you actually do, if you study for an exam by only reviewing materials from textbooks and from your notes as they were originally presented. You will retain more if you restructure material in a way that makes sense to you. Here are two methods:

Use note cards - Note cards are great because they are so versatile. Here are some suggestions:

- Put sample questions or problems on one side of your note cards and the answers on the other. This is an especially good way to create the experience of seeing material outside the context of a specific chapter or section of your notes. Do you know the material well enough to know it outside its familiar context? Remember, exams are always "unfamiliar" in the sense, too.
- Make a note card for every concept or idea you are studying and then match these to problems or questions you might expect on the test.
- If you tend to have trouble working under the time constraints of a test, set per question time limits for yourself when using one of the above note card methods.

Mind mapping - Mind mapping is a simple yet effective technique of test preparation. A "mind map" is a diagram of important concepts and their relationships as they appear in your mind (thus the name). You can do a mind map focusing on any particular topic a class has covered and/or on all the material the class has covered.

Begin mind mapping by taking a sheet of paper and jotting down a key concept. Then think of another concept that relates to the first one. Write that one down and connect them. Draw a line between the two concepts. Then think of a third concept and see how it relates to the first two. And so on. At the end of this process, you will have a "map" that describes not only material from the class, but also the way this material fits together. Also, mind mapping can expose any gaps in your knowledge. Is a section of your map blank?

## Use long-term test preparation strategies

If you find yourself re-learning large amounts of material right before the exam, this usually means you never really knew it to begin with. You may have partly comprehended the material when it was first presented, but you never transferred this material from short-term to long-term memory. If you have this problem, the following two strategies may help you transfer material to your long-term memory:

Prepare for your future review the first time you read your textbook. If you have read actively, you can prepare more effectively. When you first sit down to do an assigned reading, make sure you underline or otherwise mark the most important sections. Then, when you review, you can return to these sections, perhaps making notes in the margins as you review.

Take active lecture notes. Listen for the themes and goals of your course while you are in lecture. Write down not only what is on the board, but what it means in terms of the course's themes and goals. The problem with simply copying what is on the board is that copying does not help your memory the way organizing the material you are hearing in your own words will. This method is most effective if you are caught up on your reading for the course because you will have a better idea about the themes of
the lecture and will be able to concentrate more on remembering - as opposed to simply understanding - the material.

## Test yourself

Challenge yourself to activate your memory. When you review, do more than read your textbook and notes over. "Self-test" by asking yourself questions, as if you were administering the test. If you review your course materials passively, it's easy to fool yourself into thinking you have material better fixed in your memory than you actually do. Try to make sure you really understand the implications and applications of the materials you are reviewing. Simply looking at something over and over doesn't mean you really understand it nor will it necessarily put it in your memory for the test. Try looking away from the book or your lecture notes and asking an original question about the material you are reviewing. Can you answer? And can you do so without looking back at the written material? If you can, the chances are very good that you will understand and remember this material for the test.

## Strategies for Taking Exams

## Understand what the test wants from you

Often, we think of tests only from our own point of view as students. That is, when you are a student, you tend to think of a test in term of the demands it makes on you and whether you can answer these questions. But it's also important to look at tests from the point-of-view of your instructors. For them, the test is not a stressful exercise, but an opportunity for students to demonstrate what they know.

This knowledge is almost always, at the college-level, a test not only of your memory college courses tend to assume you can memorize things - but a test of whether or not you can use the knowledge you have gained. The "test" in a college course is not so much "How much do you remember?" but "Can you apply your new knowledge in the way I have shown in this course?" Under the pressure of trying to remember all the material a course has presented, it's easy to forget that tests try to measure not just our memory, but application. Understanding what tests in college really want from you is part of taking them well.

## Manage your test-taking time

If you find that you consistently don't have enough time to finish exams, the problem may partly be how you are taking the test. Many students - especially those who are anxious based upon past experience not finishing exams - start writing as soon as they have received the test, and try to go though the test sequentially. Ironically, this can be one of the reasons students have trouble finishing an exam in time.

## This strategy may help you manage your test-time:

When you receive the test, take 5 or 10 minutes to look the whole thing over. Make sure you've read the directions and the questions thoroughly.

Once you have an overview of the test, you need to decide how to juggle two priorities. First, you need to decide which questions you can answer easily, which questions you are feeling shaky about and which questions you can only guess at. Second, you need to divide the amount of time you have by the number of questions in proportion to how much each question is worth. You don't want to spend half your test-time answering a question worth only $10 \%$ of the total grade.

We suggest beginning by answering all the questions that you feel fairly certain about first. One of the advantages to this system is that sometimes you can remember the answers to the questions you felt shaky about by answering questions you feel more certain about. Also, starting this way allows you to gain confidence.

Once you have answered the questions you feel confident about, clock management become more of an issue. See how much time remains and begin answering the questions you feel shaky about next. You don't want to spend too much time on any one question, though. If you are having trouble answering, move on to the next question.

Finally, try to answer the questions you felt most unsure of. Again, monitor your time according to how much the question is worth.

If you have any time remaining after you have finished, check over your answers. Not only might you catch a mistake, but telling yourself you are going to stay even after you have finished cuts down on the temptation to hurry through the exam to get it over with.

One practical tip: If you find the pressure of the test makes it hard for you to remember to look at the clock or your watch, put your watch in front of you on your desk.

## Understand the nature of an objective exam

An objective exam is an exam formatted around "multiple-choice" or "true/false" answers. "Objective" in this sense means an exam that tries to test your ability to recall, relate and apply specific information and your ability to reason logically from evidence.

Studies have shown that some students are very aware of how they can use the form of an objective exam to their benefit while others are not. Understanding how such tests are constructed - how they "work" - can help you get the credit you deserve for the knowledge you have.

There are two general rules to remember about objective exams: (1) always check previous questions for help in answering questions you are unsure of and (2) always answer all of the questions unless there is a penalty for giving the wrong answer.

## True/False questions

There are three things you can do to help your performance on true/false questions. Here is a sample true/false question:

## Abraham Lincoln, a past president of the United States, was not only America's first president, but president during the Civil War.

First, check all parts of the question for validity. One of the most common mistakes in answering true/false questions is missing a word or two that are critical to understanding what the question is really asking. This question asks you to know not one, not two, but three things: Was Lincoln ever president? Was Lincoln the first president? Was Lincoln president during the Civil War? If the answer to any of these questions is no, the whole statement is false. Since, as any student of U.S. history knows, Lincoln was not America's first president, the answer is false.

Second, remember that specific determiners are usually false. A "specific determiner" is an item that moves the statement from the general to the specific. In the above example, "first" is a specific determiner. If you don't know the answer to a true/false question for sure, ask yourself whether all the details fit. Why include the determiner "first" here? You would be right to suspect it is an attempt to trip you up.

Third, be careful to account for negative within the question. The above question can ask you to know the same information but be "True" if it reads "Abraham Lincoln, a past president of the United States, was not America's first president, but president during the Civil War." The inclusion or exclusion of negatives can change the whole meaning of a question.

## Multiple-choice questions

Here is a sample multiple-choice question:

## Most historians agree the Civil War was caused by:

A. John Brown
B. Slavery
C. Different economic systems in the South and North
D. American Society
E. $b$ and $c$

Remember, even though this is an "objective" exam, you are being asked for the best available answer, which is clearly "e." Some historians have other answers to this question, but you are being asked to pick from the answers you are given. Don't be deceived by the multiple-choice format into believing you just need to know facts. You are being asked to make a judgment here.

Beware of partially correct answers. Read all answers before circling your choice. If you were in a hurry, you could easily trip yourself up by circling "b. Slavery" before reading the next answer, which is also correct.

Remember that highly restrictive choices are usually not correct. In some sense, you could certainly argue that "a. John Brown" is a correct answer, since many people have identified his attempt to start a slave revolt by seizing the federal arsenal at Harper's Ferry as the war's spark. But it is unlikely that a history course will be satisfied with the idea that one person started such a massive conflict. Avoid answers that are too specific.

Remember that it is also possible for an answer to be "correct" but too general. Answer "d. American society" is certainly correct, but since this answer could be the "answer" to any question asked about a cause in American history, it is too general to be correct.

As a general rule, if you have to guess, pick longer and more detailed answers over short answers. The longest answer here is "Slavery and the different economic systems in the South and North," which happens to correct.

## Understand the nature of an essay exam

Essay exams ask you to demonstrate that you can organize ideas, present them coherently and (often) apply them to a particular situation.

It is especially important in an essay exam to read the question carefully. Often, the questions are lengthy. You may wish to underline key terms as you read. Here are some verbs that often appear in essay exam questions:

Compare: Present similarities and differences
Contrast: Present differences
Demonstrate: Show the truth of an assertion
Discuss: Present all sides of an argument in detail
Illustrate: Use an example to present an idea
Summarize: Use your judgment to organize and present the main points of a topic
Support: Prove an assertion with evidence
It is important to pay attention to these and other verbs that describe the precise intellectual activity you are to perform in answering a particular essay question.

After you are sure you understand what you are being asked to demonstrate that you know, jot down a short outline of what you plan to say. If you launch right into an answer you will sometimes find yourself heading up dead-end paths that could have been avoided with a little planning.

Be sure to read your answers over, if you have time. Especially check the connections between ideas, making sure you have explained transitions in your thought.

If you run out of time, note key words and ideas you would have included in outline form at the end of your answer - instructors will often give partial credit if you give them a clear idea of where you were headed with your answer, even if you couldn't get there.
(adapted from the Academic Development, Carnegie Mellon University website)

