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## Before-the-Test Study Strategies

Smart test-takers begin thinking about a test long before they enter the test room. In their heads or on paper, they compile a detailed profile of the test format and the testgiver. When they prepare for the test, they don't necessarily read and memorize every detail in their notes. They study specific kinds of information, in a specific way, for each individual kind of test. Finally, they get their minds, bodies, and emotions ready to give their all for high marks.

We'll show how to master all three of these important before-the-test strategies.

## STRATEGY 1: FIND OUT WHAT KIND OF TEST YOU'RE GOING TO TAKE

Few students, except the ones who are instinctively testwise, try to find out in advance what kind of test they're preparing for. But if you know the kind of test, you know how to study for it.

For short-answer, fill-in-the-blank, matching, and some
true-false tests, emphasis should be placed on cramming into your brain as many specific facts and details as possible. For essay or oral tests, you should prepare to argue persuasively about several general topics and to back up each argument with enough specific details to show that you probably know what you're talking about. For multiple-choice tests, you don't actually have to recall anything: you just have to recognize related information when you see it. In studying, you should look for those relationships.

As early in every course as possible, start compiling clues to what the exams will be like. Figure out the format.

- How much will be true-false statements?
- How much of the test will be multiple choice?
- How much will be essay?

And so forth.
Decide on the areas of knowledge.

- Will it include everything since the course began or only the last six weeks' worth?
- Will you have to remember formulas or will they be given?
- Will the textbook, outside reading, or lectures be given the most weight?

There are several ways to get this information.

## Tactic 1: Ask the instructor

Many teachers are willing to tell you whether you'll be responsible for just plugging formulas into mathematical equations or for applying them to concrete situations. They'll state whether they expect details or just major con-
cepts. They'll say whether they want just the facts and conclusions you've learned in class and from required reading, or expect your deductions and opinions. They'll also indicate whether or not they expect you to show that you've done outside reading.

Often, instructors will even tell you the format of their tests or the blocks of information and general subjects each test will cover. But many only tell the students who bother to ask. If you don't ask, you'll never know whether a testwise student is getting an informational edge on you.

## Tactic 2: Look at past exams

If you've taken some tests in the course, you may already have a lot of clues about this coming test. Think about them.

- Was the teacher after straight memorization or did you just have to recognize the correct answers?
- Did earlier tests focus on trivia or on major principles?
- Did they include abstract questions or concrete ones?
- Did the teacher favor facts or ideas?
- Were the tests hand-scored or machine-scored-and by whom?
- Were there any catch questions? (If so, you'll have to watch for them this time around.)

Some teachers make available copies of past exams they've given. Study them for the types of questions you can expect. But don't fall into the trap of expecting identical questions or of anticipating the same format and then not reading the directions carefully once you're in the exam room. Instructors have been known to change a format or a particular question just slightly-with a word or two-as a trap for careless readers.

## Tactic 3: Predict on past experience

If your teacher won't say a word about an upcoming exam and this is your first test given by the teacher, don't give up. Be testwise. Try to guess possible questions and format from the type of information emphasized in class, the focus of assignments, and the way the teacher presents the subject matter.

- Is the teacher a stickler for details?
- Does the teacher give greater value to facts or ideas?
- Which topics have been singled out for greater emphasis or more detailed explanation?
- Is the teacher the type who'll insert trick questions?
- Would the teacher care about weeding out the thinkers from the memorizers?
- What's the teacher's goal in teaching?
- What's the teacher's attitude toward testing?
- Will the teacher have the time-or make the time-to read essays?
- Are aides or teaching assistants available whom the teacher would trust to read essays?
- Is the teacher likely to choose a quick-scoring format?

Know your instructor. It'll tell you a lot about the exams.

## STRATEGY 2: PICK A CRAMMING METHOD

There are two kinds of cramming for teacher-prepared tests: intense cramming and prepared cramming.

In intense cramming you begin-maybe only three days before the big exam-to start making some sense of the coursework. You do all the reading, make a pile of notes, and try to memorize like crazy until you have most of it shoehorned into your head. If you're a good crammer,
almost everything you need to know will stay right at the top of your brain where, if you don't get so anxious that you forget it all, it'll last until the test is turned in. The morning after the test, you're practically guaranteed to wake up remembering very little of what you learned.

If you like standing on the edge of precipices, you can cram like this for almost any course in which you're convinced you'll never need any of the knowledge again. Most people can't do this with a foreign language, and it's not effective for a math course. But let's face it, once in awhile you just have to use this method; and at other times you may decide in advance that it's the best way. One of the authors once took an American Short Story course, read two 1,000page books of stories in the week before finals, memorized forty or fifty titles, memorized authors' and main characters' names, memorized three-word plot summaries-and got an A. Two weeks later, of course, those American short stories were almost a complete blank.

You should keep in mind at least two other major shortcomings before choosing this intense cramming method.

1. If you're anxiety prone, this cramming program probably won't work even for short-term memory. Intense anxiety can cause large memory gaps during tests. The best remedy is self-confidence, and the surest way to achieve that is to practice prepared cramming.
2. Unless you're really desperate, don't use intense cramming for any course that contains information you'll need in a later course or that may have some value in helping you deal with life after college. Prepared cramming is a better, more lasting, and less ulcerating way to prepare for tests. In fact, if you've studied wisely all semester long, cramming should require no more than half a day-assuming that, about a week before the test, you start to seek help in those few areas that still give you trouble.

## STRATEGY 2A: INTENSE CRAMMING-THREE-DAY CRAMMING FOR ONE-DAY REMEMBERING

Fortunately for people who put off studying until the last minute, there are only four steps in short-term, shortmemory cramming.

## Tactic 1: Single out the course's purpose

Guided by the course description or outline, write down the main topic as well as your instructor's purpose for teaching it. Examples: "American Business History-to show relationship between history of U.S. business sector and general U.S. history"; "Cellular Biology-cells as the building blocks of all life."

## Tactic 2: Focus on the course's major topics

Using the course description, course outline, and any other aids you have such as textbook, class notes, outline series cram book, and anybody else's notes, list the topics of the course's major units. Under each main topic, list as many subtopics as the textbook or notes show.

## Tactic 3: Make memory joggers

Now do your required reading, making the following notes as you go along.

1. For each subtopic, write a clear definition, explain how it ties into the overall purpose of the course, and jot down three specific examples.
2. Separately, but keyed to where they fit into your subtopic notes described above, list all names, dates, formulas, and other facts that seem significant and that you think you may be held responsible for on the test.
3. In a third place, list only those words you can't yet define but will have to recognize and define before exam time.

## Example of notes for intense cramming

| (1) | (2) | (3) |
| :---: | :---: | :---: |
| TEDDY | MUST KNOW | LEARN!!! |
| ROOSEVELT |  |  |
| STARTS SERIOUS | Teddy Roosevelt $=$ | HEPBURN ACT |
| GOV'T. REG. OF | "trustbuster" | 1. House = radical |
| BIZ |  | 2. Senate = |
|  | 1887, Interstate | innocuous law |
| Laws, regulations, licenses, lawsuits to watch over conduct of businesses. | Commerce Act | 3. U.S. rate |
|  | 1890, Sherman Act | regulation of railroads (i-state) <br> 4. 1906 |
|  | 1903, U.S. Dept. of | 5. No free passes! |
| Req'd. by overgreedy biz owners ("robber barons") who believed in "caveat emptor." | Commerce \& | 6. Sen. |
|  | Labor | LaFollette-"not far enough" |
|  | 1906, Hepburn Act |  |
|  |  | THE JUNGLE |
|  | 1906, The Jungle | 1. by Upton |
| Examples: |  | Sinclair |
|  | 1906, U.S. Meat | 2. Socialist(?) |
| 1. Interstate Commerce Act (not effective) | Inspection Act | 3. anti-caveat emptor |
|  | 1920, "Rule of Reason" court | 4. Chicago packing yards |
| 2. Pure Food \& | decision | 5. "best-seller" |
| Drug Act (quite |  | 6. March 1906 |
| effective) |  | 7. Hero = Jurgis |
|  |  | Rudkus |
| 3. Dela |  | (immigrant) |
|  |  |  |
|  |  |  |

## Tactic 4: Memorize the memory joggers

Use as many memorization techniques as you know in order to impress these facts and ideas on your memory. (Our book, Study Smarts, can help you with this.) If the exam is a fill-in-the-blanks or essay type, make sure you can spell unfamiliar words and can actively recall them, not just recognize them when you see them written out.

## STRATEGY 2B: PREPARED CRAMMING-LONGTERM CRAMMING FOR LONG-TERM REMEMBERING

This better, more relaxed way to cram assumes that you've been studying wisely all semester. By now you have condensed all your notes to a couple of pages-at mostthat contain all the main ideas and facts you need to know for the exam. From those clue words, lists, charts, and diagrams, you'll be able to remember everything you've learned in the course. You're already familiar with the required new words, and you've learned their definitions. For foreign languages, you have word and phrase cards that you've made during the term as you've isolated the stumpers, as well as a list of regular verbs and a chart of irregular verbs organized according to patterns of ending. For technical courses, you may have cards with formulas on one side and their derivations on the rear and cards with equivalents that you're expected to know.

Your primary goal in this prepared cramming session is threefold:
(1) to get an overview of the coursework;
(2) to fit the facts and ideas into perspective; and
(3) to refresh your memory of the facts and associations, since everyone forgets part of what they've learned unless they review it at reasonable intervals.

There are three separate types of memory: recall, recognition, and association. For quick-scoring tests you'll need access to recognition and association. For essay and fill-in-the-answer tests you'll need all three.

There's a second goal in prepared cramming: to convince yourself that you're completely prepared for the exam. This will build your self-confidence, and self-confidence alone is often enough to erase most test anxiety.

Begin your prepared cramming session by taking an hour or so to organize your condensed notes, cards, and such. Then pull out the course outline you acquired or made at the beginning of the semester.

- Reread it for a total picture.
- Look for divisions into logical units, for trends, for relationships between ideas and between units.
- Summarize major findings and conclusions.
- Find the clues that show the relative importance of all the information you've learned. For instance, anything to which the instructor devoted extra time is probably important.

Now take an hour to rewrite your notes, actively trying to reorganize and condense them further so that they make the most possible sense. Check your memory as you go and leave out every fact and subordinate idea that you already know cold. Keep in writing only what you're not sure of and what you didn't understand the first time around. (If you're still having trouble understanding any of it, quickly make an appointment to consult the instructor or to get help from a qualified tutor.)
At this point you should have a page or two of main topics, along with memory prods such as significant names and dates. The night before the exam, go back over them. Overstudy: when you think you're 100 -percent ready, study
for another 25 percent of the time you've already devoted. Concentrate on the facts and ideas that you're having trouble with or that you tend to forget.
To get the most benefit from your prepared cramming, sleep at least six hours the night before the test. Researchers have shown not only that sleep of more than six hours' duration is the best solidifier of memorized material known to man, but also that if you get less than six hours of sleep, it has just the opposite effect, actually interfering with your memory.

## STRATEGY 3: PRETEST

If past tests with their answer keys are available, use those questions as a pretest some time during the week before the exam. Otherwise, practice test-taking by making up an exam from past homework assignments.

Try to mimic the actual test situation as closely as possible. The best preparation of all is to take your pretest in the actual exam room, in the expected format, and during the same allotted time period. Researchers tell us that students raise their test scores just by being familiar beforehand with the test conditions.

It's especially important to set time limits for yourself so that you can learn to move along quickly. Every test is partly a test of how well you use your time.

## STRATEGY 4: PREPARE EXTRA FOR PROBLEMSOLVING

To prepare for exams in which you'll have to solve problems, copy one advanced problem from the textbook (if it supplies answers) or from past homework assignments for each important principle or law that you're responsible for
knowing. (Usually, authors arrange problem sets in order of difficulty, so choose one toward the end of the group.) Then mix up the problems so that you can test whether or not you recognize them out of context and out of order.

Solve each problem and then check them all against the correct answers. You'll know very quickly just where your weak spots are. Correct your misconceptions-with help if you need it-and then do several more similar problems to reinforce your understanding.

## STRATEGY 5: PREPARE EXTRA FOR UNFAMILIAR, QUICK-SCORING EXAMS

If you know that the test will have a type of question with which you're not familiar, or if you ordinarily stumble over that kind of format, try to find sample tests or past exams that use that particular format. (See Appendix A for suggestions for where to look.) Practice until you're convinced that you understand how to answer that type of question. Then, when you get into the exam room, you won't be thrown.

## STRATEGY 6: PREPARE EXTRA FOR ESSAY EXAMS

After you've crammed for an essay exam, select eight or ten main topics based on the units in the course. For each topic or combination of several topics, make up one or two essay questions. One easy way is to tack on a word or two from the list in Appendix B; for example, "Compare and contrast the $X$ main topic to the $Y$ main topic."
Once you have the questions, jot down the outline you'd follow in writing each essay. (We'll discuss content and organization later.) But don't write the actual essay unless you need practice in writing.

## STRATEGY 7: FORM A STUDY GROUP FOR ESSAYS AND ORALS

Unlike a tutor, who can be relied on to know what he's talking about if he's been recommended by a good sourceinstructor, department chair, or study skills center coordinator, for instance-the study group is just a collection of students who all want to get good test scores. Its main advantage is to help you think through your approach to the coursework out loud. You may also uncover some misunderstood facts and ideas when studying with a group, but it's important to consider that the wisest student may have incorrect information or zany ideas. So for best results, keep the following in mind.

When: Join a study group after you've learned the facts and ideas you need to know. That way, you won't learn incorrect information.

Why: The purpose of the group should be conversation that'll help you sharpen your long-term memory. You'll hone that memory more if you tell others what you know than if you sit back and listen to them. You'll also learn better by having to explain your ideas coherently.

How: Any method that will get you thinking and talking about your facts and ideas is a good method. To help you focus on ideas, ask one another questions that could be on the essay exam. Here's one very effective technique. Each member of the group prepares five essay questions in advance and then each person prepares answers and discusses them.

Where: Choose a place where there are no distractions so that the group can give its entire attention to the subject. And choose someplace where the group's enthusiasm won't be dampened by someone saying, "Tone it down," in the background.

How long: An advantage of study groups is that they
often make even a dull subject interesting. That will help your memory. On the other hand, there's a tendency to sidetrack into talk about dates or football scores. One hour spent with everyone's mind on the subject is worth four hours of work with time-outs every few minutes for fun and games.

Who: Anyone, as long as he or she understands the point of the study group, can participate. The point is not to teach but to discuss facts and ideas that are already learned, not to socialize but to study. Study groups help slow students put together relationships between facts. They make bright students aware of how most students think, and show them why test preparers like straightforward, obvious answers. They help inarticulate or shy students become more articulate. They help everyone prepare for both essays and oral exams.

