

Strategic Test Prep

Do you ever feel like you don't know where to start when it comes time to study? Do you feel like your current study habits just aren't producing the results you want? Do you ever find yourself cramming at the last minute and struggling to cover everything? This handout offers four easy-to-use steps for planning an effective and organized test study routine. Remember, the earlier you start planning and begin studying, the better the chance your test study routine will be effective.

Step 1. Find out what you already know

The first step to test prep is to determine what you know and don't know. Gather your course materials (readings, notes, etc.) and determine what you have already learned so you don't waste your time studying what you already know. If you do this before diving into studying, you will be able to focus your time and energy on the areas of most importance.

Use your textbook, notes, and quizzes to make a list of the topics likely to be tested. After you have this list, hide all notes and readings so you can test your understanding of each key concept.

For example:

- Make a list of key concepts and define as many as you can from memory.
- Make an outline starting with higher order concepts and filling in details of sub-concepts and examples in as much detail as much as you can. This method will help you use recall (a powerful tool for studying) to determine the big ideas you need to know and help you create an organized way of remembering the details that fall under these big ideas. This method helps you situate the things you don't know within what you do already know.
- Answer practice problems in your textbook.
- Answer questions in your notes or make up your own questions from your notes/readings.
- Lecture to yourself, to someone else, or to an imaginary audience on the core concepts.

Remember, students tend to overestimate their understanding of topic until they are pressed into details, so the more specific you can be in your self-assessment, the better. As you test, ask yourself how well can you summarize main ideas, do sample problems, recall facts from memory, and apply concepts in a new way.

How did you do? Rate your skill and understanding on each bit of content from your list. Assign each topic a score 1-3 (1 = *Don't know*; 2 = *Sort of know*; 3) *Know*. Use this list to inform the next step of the process.

Step 2. Make a study plan and a study guide

Once you assess your knowledge, make a study guide that merges the main ideas from class notes and readings. In one study on test prep, researchers found that students who used study guides scored higher. Another study found that students who used study guides experienced significantly

less stress than their peers. Focusing on the concepts you rated with a 1 or 2 before, find the best way to organize this information for yourself.

Here are some study methods you can try:

Map it out. Mind maps, concept maps, and timelines are a great way to visualize and organize your exam information (see also Mindmeister and InkFlow).

Try flash cards. The process of making the flash cards can be a great review of the material, but be sure to include time for testing yourself with them. You can use apps like Quizlet if digital flash cards work for you. Either way, cover the answers or explanations while you are testing yourself. Only flip the flashcards after you have answered and are ready to check for accuracy. This will force your brain to do the work and will enable you to understand and retain information better.

You don't have to go it alone. Try studying with a study partner using your class and reading notes.

Ask and answer questions. Generate higher-level thinking questions to test yourself. Creating questions can help you understand the ideas and then practice applying them.

Step 3. Schedule your studying

A recent study concluded that the scheduling of study time plays an important role in student achievement. Students who crammed study sessions into a large chunk—as opposed to those who studied in multiple smaller periods of time (e.g., 30-45 minutes)—used fewer study strategies overall and generally performed worse than their peers.

Account for your study time

After seeing which concepts you need to focus on more from self-testing (those rated 1 and 2) and organizing your materials, estimate how much time you will need to study for each section. For example, if you have three days, ask yourself which topics you need to cover per day. Allot time for the topics you know the least.

Break it down

It is important to make a study plan that will give you plenty of time to study the material and to review before the exam. Smaller chunks can make it easier to tackle lots of material.

Take breaks.

We learn better when we include time for our brains to rest. This is because the brain has two modes of thinking: focused and diffused. In diffused mode, your brain is still working. Try the Pomodoro technique to help you follow a study schedule with breaks.

Spacing it out is good

Distribute your studying over several days or weeks. The most effective practice is to work a short time on each class every day. For more information see our handout on studying smarter.

For example, you may do a few problems per day in math rather than all of them the hour before class. In history, you can spend 15-20 minutes each day actively studying your class notes. This will help you stay focused, help you stay on top of your work, and help you retain the information.

To plan for this, look over your calendar and identify available blocks of time for studying. Then add your plan to your calendar, noting exactly what you will be doing, where you will be doing it, and for how long. When planning study time, be specific about your study goals for each study block.

Step 4. Test yourself

When you've completed your study plan, it's time to test yourself again. Hide all materials and test your understanding on concepts you rated as "Don't know" or "Sort of know" the same way you did in Step 1. Ask yourself:

1. Can you do a problem from memory?
2. Can you restate or rewrite what you learned?
3. Can you teach these concepts to a friend?
4. Can you answer "what?" questions you generated? What about "how" or "why" questions?

Still stuck on a particular concept? Keep practicing! Research studies have proven that students who reported higher instances of self-testing had higher GPAs. These students also avoided late-night study sessions more often than their lower-performing peers. Remember, don't forget to continue studying for the material you knew well!

Works consulted

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