

How to Study

This resource may be used by the Scholarship Chair to plan chapter-wide programming, support individual members, and/or share directly with all chapter members.

Many people come to college without really knowing how to study through no fault of their own. It is very common to complete K-12 education without being explicitly taught how to study or learning how to study in one specific way, that may or may not meet the needs of the learner. Additionally, some people can move through K-12 education without needing to study, and then they get to college and are faced with more rigorous content – they need to study, but do not know where to start. Conversely, some people may know how to study but are looking for new tips and tools.

Regardless of where someone is on their studying journey, this resource is designed to provide ideas, resources, and tips to ensure members and Associate Members are studying more effectively. These ideas are rooted in psychology and brain science. If a member needs a more personalized plan, please contact the Officer Success Manager for Scholarship Chairs. e a separate Scholarship Program.

CREATE A STUDY SCHEDULE

The research is clear: if you want to ensure you complete something, put it on your calendar. Making a study schedule has many benefits beyond reminding you to get it done. Scheduling time to study allows you to use your limited time in a productive manner, reduces stress, and gives you the opportunity to strategically prioritize your studying.

HOW TO DO IT:

1. **Use a planner.** Writing out a schedule makes it far more likely that you will follow through on it. It can be a paper planner or an electronic version. The most important thing is that it must be something you will actually use. Color-coding by course will also be helpful but is not required.
2. **Study at a consistent time and in a consistent place.** Our brain relies on routine and cues to be most effective. If you always study biology from 10am-11:30am in the library on Tuesdays, your brain will start to anticipate the activity and will move into study mode more quickly. It will take time, but building habits makes a huge difference in terms of effectiveness.
3. **Review information from lectures as soon as possible.** Review information while it is fresh. Review lecture notes, slides, the textbook, et cetera as soon as you can after a class. Write down questions that come up, make notes of any vocabulary you need to look up, and highlight key concepts. An immediate review will save you several hours of review down the road.
4. **Use small blocks of time to study throughout the day.** If you have 30 minutes between classes, review the information for the course you just left, practice solving problems, or begin the next reading. Small 30-minute blocks throughout the day will add up quickly and allow you to have larger chunks of free time in your schedule

5. **Limit studying to no more than 2 hours at a time.** Our brains are not designed for endless studying. After 2 hours, the brain stops retaining information, we lose the ability to concentrate, and we become exhausted. For every 25 minutes of studying, take a 5-minute break. A break should include standing up, moving around, and getting outside if possible. This pattern will keep your brain focused and refreshed.

RETRIEVAL PRACTICE

According to [cognitive psychologists](#), retrieval practice is the most effective way to study. We learn concepts better when we focus on pulling information out of our brains, which is what retrieval practice requires.

HOW TO DO IT:

1. **Flashcards.** Flashcards are one of the most powerful retrieval tools. It is important to handwrite your flashcards whenever possible. [Writing by hands helps us learn information better.](#)
 - a. Make sure you actually retrieve the information. If you feel confident in content, you are likely to flip the card quickly to confirm your answer before actually coming up with the answer. It is important to complete the retrieval process before checking the answer, or you will not get the full benefit. Ideally, you will look at a card, say your answer out loud, and then turn it over to check the answer.
 - b. Once a card has been mastered, keep working with it. Research tells us that we tend to remove a mastered concept from retrieval practice too quickly. You need to complete the retrieval process correctly three times (spaced over several study sessions) before you should consider moving on from the concept.
 - c. Shuffle the deck of flashcards each time. Your brain is designed to find patterns, so keeping the deck in order allows your brain to just memorize the order (aka pattern), and you will be less likely to retrieve information correctly when concepts are presented in a different order.
2. **Brain Dumps.** Take out a blank sheet of paper, set a timer for 3-5 minutes, and write down everything you can recall about the section of the course you are currently in (chapter, unit, etc.). Review your textbook and notes to determine what is missing and what needs to be corrected.
 - a. You can also do this with someone else in your class and then switch sheets to do the review.
 - b. Structure your brain dump in any way that works for you - writing, flow charts, concept maps, diagrams, graphs, etc.
 - c. This is a challenging retrieval practice, but the challenge of recalling and connecting information is your brain learns.
3. **Practice Quizzes/Tests.** Quizzes and tests given in class require retrieval of information. Taking a practice quiz and test forces your brain to engage in retrieval and gives you an understanding of what you know and what you need to spend more time studying. It is best to use a practice assessment from your professor when possible; however, you can also create your own and/or find practice options online.

INTERLEAVING

Interleaving is an approach to studying that involves alternating between subjects and problem types. It is used as an alternative to blocking, which is when you focus on one subject for a long period of time. Studying several subjects and/or including different problem types in the same study session enhances your memory and problem-solving skills. You are forcing your brain to retrieve and apply information in diverse ways – it is challenging but leads to higher retention of concepts and helps your brain build connections between subjects. This approach forces your brain to adapt and respond versus just relying on repetition.

HOW TO DO IT:

1. **Mix similar subjects or topics.** This is a great way to start interleaving because the concepts are already connected in some ways. This will allow you to train your brain before tackling more difficult shifts in subjects. Start off with reviewing math and science in the same study session and get comfortable with that before reviewing math and social studies in the same session.
2. **Set a timer for each subject.** In a 2-hour study session, you might spend 1 hour on history, 30 minutes on psychology, and 30 minutes on Spanish. Switching after short intervals keeps your brain fresh and makes your study session more effective.
3. **Alternate problem types within a subject.** If mixing subjects in a study session feels overwhelming, you can start with interleaving within a single course to help you build comfort. In math, this might include solving problems from three different chapters. For history, this might mean pulling the review questions from five different reading sections. In a foreign language, this might include practicing grammar and vocabulary together. Focusing on different types of problems challenges your brain and allows you to build connections within a single course.

SPACED RETRIEVAL

Spaced retrieval, also called distributed practice, is essentially the opposite of cramming. Retrieval is spaced out into shorter study sessions over several days and/or weeks. Retrieving information over time helps your brain learn the information better.

HOW TO DO IT:

1. **Use the syllabus to create a study plan for the course.** Use the syllabus to create a studying schedule that begins several weeks before an exam and continues on a regular basis until the exam takes place.
 - a. Devote one or two regular study sessions a week for each course.
 - b. Review all material multiple times; for example, week 1 material should be reviewed consistently starting in week three.
2. **Plan for regular short intervals.** One primary benefit of spaced retrieval is avoiding the long and intense period of cramming before an exam. Spaced retrieval sessions can – and should – be short; ideally, no more than 30 minutes at a time. The goal is NOT to cover all content but instead divide up content over a series of study intervals.
3. **Study new and old course content.** As you learn new material, it is important to go back and review prior material. This practice will pay off on the final exam. By consistently retrieving information for a course, you reduce the likelihood of forgetting information because it stays fresh in your mind. Allocate time using the 75/25 rule – 75% of a study session should be focused on newer material and 25% of a study session should be spent on old material.