Studying for Exams

Exams are a turning point in the year, signalling the end of a term's hard work. Although this time of year is usually busy and often stressful for students, our strategies will help you do your best.

Looking for the exam study schedule? You can download it here (fillable PDF, December 2021).

Planning strategies

The exam study schedule

Download the exam study schedule

(Fillable PDF, December 2021)

Studying efficiently over five days is a great goal for many undergraduate exams.

A study plan reduces your stress because it helps you stay on track and prioritize healthy habits. The SASS study plan allows you to consider how much time you may need for different courses and helps you distribute your review time among all of them. It includes:

- how to create an exam study schedule using three-hour study blocks
- how to use three-hour study blocks effectively.

This study schedule works best when you have a period of time with no classes, such as the study week before finals in December and April. Ideally, try to finish the term work of readings, assignments, quizzes, presentations, etc. by the last day of classes in Week 12, so you can then shift to "study mode." For classes with unfinished term work, you will need to both finish the course requirements and study during the exam period.

Key planning tips

- Aim for a sustainable study schedule. It's like training for a marathon; every day makes a
 difference
- The two-hour breaks are essential. They allow your brain to consolidate the information you've been rehearsing, and allow you to relax, eat, and exercise.
- Try to schedule study blocks at the same time of day that the course's exam is scheduled.
- Study for two or three courses in a day.
- Maximize your memory by distributing, for example, 15 hours of study over five or six days, rather than over two or three days.
- Study the hardest material during your peak learning times.
- Build in down time.

Try not to study nine hours each day. It's OK not to study every available minute!



How to use 3-hour study blocks

After you've made an exam study schedule, your next challenge is to balance the *time* you have available with the volume of *material* you have to study, to make a great study plan.

See here for a sample plan (5 days, 15 hours).

Five study days, producing 15 efficient study hours, is just an example—your courses may need more or a bit less.

Your plan will reflect your own needs. Many students study between 10-20 hours for each exam. Remember to take short breaks during a three-hour block.

Balance time and material

For each course:

- Count the number of blocks of study time that you estimated for the schedule (not including any catch-up blocks you needed).
- Divide your course material into chunks, so that the number of chunks equals one less than the number of blocks (e.g., 5 blocks and 4 chunks, 7 blocks and 6 chunks). Chunks can be divided into topics or units, or number of pages, or importance of the material within the whole course, or chapters, or in any other meaningful way.

If each chunk cannot realistically be covered in 2 or 2.5 hours, you may need to rethink your exam study schedule to re-allocate the study time you have available, or alter your expectations of your preparedness for the exam.

In each three-hour block...

- In each three-hour block of time, spend about 10-20 minutes reviewing recently studied material, about 2.5 hours studying fresh material, and about 15 minutes testing yourself on the fresh material.
- Take breaks over the three-hour block of time, to allow information to be consolidated in your memory (e.g., 50 minutes on and 10 minute break, every hour for three hours).
- Enjoy non-intellectual activities for two hours between study blocks to further support your memory. Stretch, go for a walk, eat, relax, and check your phone. Set a timer if you need to end your break on time.

What does it mean to study?

Summarize using an organized structure (e.g., mind map, table, concept summary, Cornell
notes) to see relationships and connections between ideas, and review this structure as often as
you need.



What does it mean to self-test?

• Answer practice questions from your text, assignments, or Exam Bank, or ones you have created based on the course learning objectives or tips from your prof about what is most important.

What does it mean to review?

 A more general refreshing of your memory, focusing on what you did not know during your selftest of that content.

What is a comprehensive mini-exam?

• A practice exam, written under "real exam" conditions (e.g., times, formula sheet, open book).

Study strategies

Getting ready

Complete your course work

- Go to all your classes and <u>take good notes</u>.
- Complete assigned readings, preferably week by week instead of all at once.
- Do homework questions; finish labs or assignments.
- Get help for topics you don't understand well.
- See our end-of-term planner to identify and prioritize your end of term tasks.
- Use our <u>assignment planner</u> to break a big project into smaller steps.

Get information about the exam

- For clues about what to study, look at the course learning objectives, course description, and weekly topics listed on your course syllabus.
- If there's an exam review class, go to it.
- Ask your prof or TA if the exam will focus on specific weeks of the course.
- Ask your prof or TA about the exam's format: the types of questions, length of exam, breakdown of questions (e.g., 50 multiple choice, 5 short answer), weighting.
- Look at old exams, assignments, and tests for question types, topics, and key concepts.

Spread out your studying: do small amounts over time

- See our exam study schedule template and instructions.
- Check out how to use three-hour study blocks.
- Break down the content of each course into meaningful chunks. "Meaningful" might involve
 - o what you can reasonably study in a three-hour block of time,
 - what content is connected thematically or conceptually, and/or
 - what you want to spend the most time on, like challenging or unfamiliar material.



Improve your memory of course content

- Pay attention to what you're trying to learn (see <u>focus and concentration</u>).
- Learn the content first, to understand it; study it afterwards, to remember it.
- Be efficient: review what you've learned frequently, in brief sessions spread out over time.
- Get 7-9 hours of sleep at night; eat healthy foods at regular intervals; exercise for at least 150 minutes per week.
- Learn more about how to improve your memory.

Effective strategies

Organize material meaningfully

- <u>Identify the main concepts</u> of a course; look at the course syllabus and description, and textbook chapter titles or lecture topics.
- Make summary sheets for the main topics in a course; select content for these from your lecture / reading notes.
- Try using **charts** to organize information that includes repeat types of information.
- Fill in **concept summary sheets for math** or problem-solving courses, to identify key underlying concepts.
- Create **mind maps** to identify relationships among main concepts and to distinguish big ideas from sub-points.
- Look over the material to identify less familiar content; spend more time studying this material.

Elaborate

Elaboration helps to make meaning from the material being studied. It's a way to go beyond memorizing to applying and analyzing.

- Go beyond questions that ask "what" to questions that ask "how" and "why."
- Explain the relationships between two or more concepts.
- Apply the concept to a new situation or create an analogy.
- Connect unfamiliar material with information you already know.
- Make connections between key concepts and the broader themes or applications of the course material.
- Clarify the meaning of ideas.
- Make inferences.
- Analyze the idea/concept for its component parts.

Solve problems

Work through problems and then review related concepts or theories. Spend about 20% of your time reviewing concepts and 80% of your time doing math.

Each problem is part of a family of problems where each procedure is a variation on the underlying concept. Use the course syllabus, lecture topics, and/or chapter headings to <u>identify the main</u> concepts of the course.



Self-test

One of the most effective ways to study, self-testing helps you identify what you don't know. It improves memory by requiring you to recall specific information. Include some self-testing every time you sit down to study rather than saving it for last.

- Answer the questions on old exams and practice problems.
- Make up your own questions.
- Use flashcards or quizlets.
- Study as a group: quiz each other and explain your answers.
- If you can't find a study group, try quizzing yourself out loud.

Exam writing strategies

During the exams

Having a plan for how you'll tackle an exam can make a big difference. Here are some things to try.

- Aim to stay calm and relaxed so you can think. Here are some strategies to try.
- Jot down **how much time** you think you'll need for each set of questions. Stick to your planned time budget as much as possible.
- Read instructions and questions carefully.
 - Read each question at least twice before you answer it. Many students lose marks because they rush to answer questions and misread them.
 - Watch for qualifying words such as "not," "some," or "most of the time."
- **Do a memory dump.** Jot down any information you're worried you'll forget before answering any questions.
- **Do the questions you know first** to build confidence.
- **Review your answers** before handing in your exam to catch mistakes, and ensure you've answered questions thoroughly and clearly.

Exam formats

Different types of exam questions call for different strategies. When you know what type of questions you're likely to face, you can use this information to decide how best to study.

Multiple choice exams

- Read and answer the question before reading the choices. Then select the best option. Several options may have correct elements.
- Begin by answering all the questions you know in the exam booklet. Transfer your answers to the scantron sheet in groups of ten questions.
- Code the answers you don't know: ? for the ones you need more time for and **X** for the ones you have no idea about.
- Return to ? questions first, then X questions if the time permits.



Take-home exams

- Know the professor's expectations. Check the course syllabus.
- Demonstrate your understanding of the course content by applying, analyzing, or evaluating
 not just repeating facts.
- Flag important content in your textbook and notes.
- Know where you can find resources (e.g., library, websites).
- Prepare exam aids, such as formula sheets, ahead of time.
- Reduce distractions while writing the exam.
- Take short breaks as time allows.

Lab exams (bell-ringers)

- Take a moment to orient yourself at each station. Look at the visual. Understand what you need to do.
- Some questions ask more than one thing; answer these fully.
- Don't leave the answer sheet blank; you might get part marks for an incomplete answer.
- Check your answers if you get a rest station.
- Breathe and stretch while rotating.

Essay exams

- Your argument should be organized, clear, concise, accurate, and relevant to the question.
- Brainstorm. Jot down key concepts, theories, facts, or themes.
- Outline your essay before you start writing.
- Include one main idea per paragraph. Offer evidence and interpretation.
- Start and finish with strong opening and closing statements. Write these last.
- This is not the time to fuss over choosing the right word. Answer the question as well as you can, then move on.

Problem-solving exams

- Take time to think about the problem. Exactly what do you need to solve?
- Ask yourself: what concept(s) or theory does this problem cover?
- Write down all the givens in bullet form.
- Draw a clear diagram with all conventions: label axes, directions, etc.
- Keep expressions algebraic, not numeric.
- Show every step as you solve the problem.
- Check your answer for common sense (e.g., magnitude, dimensions).
- Verify your answer using another method, if possible.

Short answer exams

- Start with a strong, focused topic sentence.
- Use a simple organizational structure: point, evidence or example, and interpretation.
- Add a summary sentence to recap if applicable.



After the exam

- Take a break; get some exercise and food, take a nap, etc.
- If you have more exams to write, follow your study schedule.
- If you don't have more exams to write, enjoy some time off from school.
- Once your prof has marked your exam, go look at it. Figure out what you did well, and where you went wrong, so you can do better next time.