



# HOW TO STUDY FOR EXAMS



## How to Study for Exams

Exams provide an important assessment of what you have learnt over the semester. While exams might cause a lot of stress, they don't need to consume your entire life or create restless nights for the last few weeks of the semester. Not every studying technique for exams works for every student, so you need to experiment with a few of these important study tips to find out which ones work best for you. Here are some tips for studying your exams.

**Do exercise.** Contrary to popular belief, sitting and studying for hours is not an effective way for your health, body and brain.

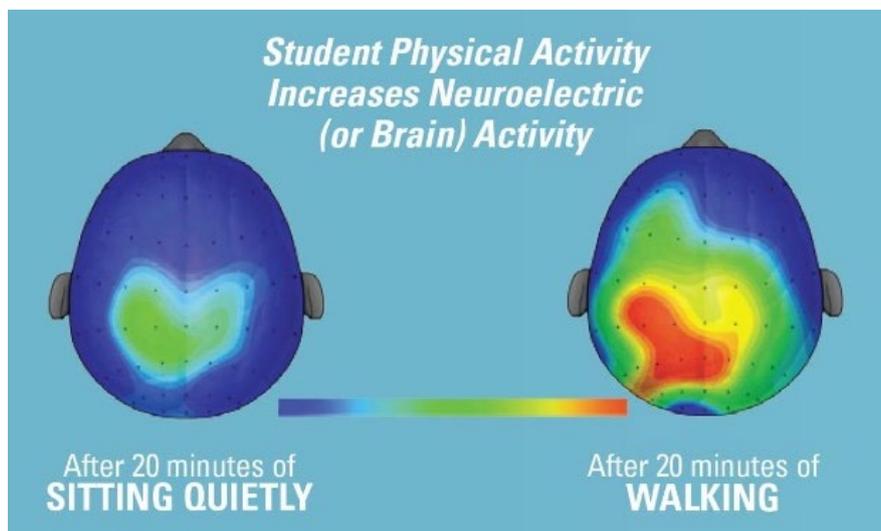


Figure 1. Students' Brain Activity

Hillman et al. (2009) found that students with only 20 minutes of walking showed improved brain activity and performance on academic achievement tests and response accuracy. Figure 1 shows that brain stimulation is caused by the enhanced oxygen flow to the brain which in turn recharges the brain to learn more efficiently. Blue indicates lower brain activity while the red indicates higher brain activity. Students who walked for 20 minutes before taking a test had far more activity in brain regions involved with improving students' alertness, attention,



and motivation while they were taking the test compared to non-walkers (Hillman et al., 2009).

**Using Office Hours.** When you have questions about course content, are confused about practice problems or readings, you might consider using office hours more effectively. During office hours, you can get study ideas from your instructor as well. Before attending office hours, be sure to review your instructors' syllabus because you can easily find information about location and time intervals. Moreover, you need to make an appointment when instructors' office hours may conflict with your schedule.

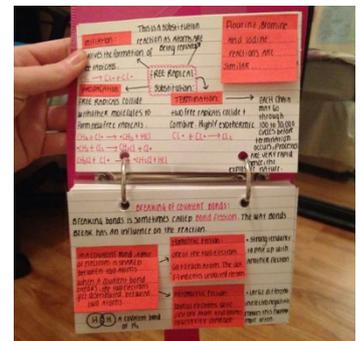


**Practice.** Taking a test enhances long-term retention more than spending an equivalent amount of time repeatedly studying (Roediger & Karpicke, 2006). Here are some examples of practicing for studying exams.

|                   |  |                         |                  |   |
|-------------------|--|-------------------------|------------------|---|
| Quizzing yourself | Creating concept maps to connect information | Creating test questions | Solving problems | Examining the previous year's question papers |
|-------------------|--|-------------------------|------------------|---|

**Summarise your notes.** After revising your notes, you can try to rewrite them even in more abbreviated form. You can include key phrases and things you are struggling to remember like cue cards.

Have a quick glance at them when you have a spare minute or just before bed.





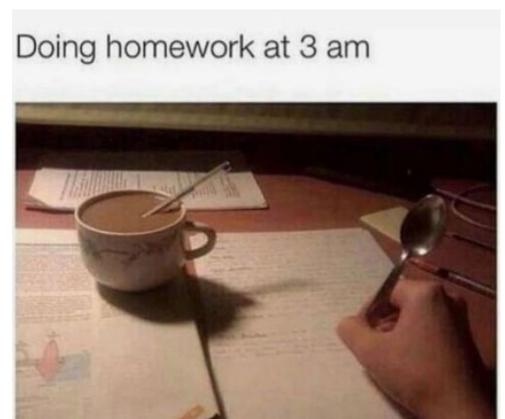
**Organize “Study Groups”.** Forming Study Groups can be great idea for students who have trouble motivating themselves to study. In group setting, you can solve practice tests, review course lectures and read materials together. Also, you can explain concepts to other classmates.

### **What ground rules should your Study Group establish?**

Dedicate some portion of your first meeting to making sure everyone in the group is on the same page. Make sure you are clear on:

- Where you will meet (Zoom, Library, etc.).
- How often and how long you will meet.
- Expectations around participation.
- Processes around admitting new members.
- Whether you will have "roles" during the sessions (leader, organizer, note-taker).

**Sleep or Cram.** During finals week, the average college student only sleeps 6.36 hours per night (Chang et al., 2015). Many students select to cram instead of sleep, they think that extra time studying will benefit them on their exams. However, research says the opposite. Studies show that getting a full night’s sleep before taking an exam is correlated with better grades and higher overall GPA (Zeek, 2015). Sleep deprivation has an influence on your memory, creativity, and logical reasoning. In other words, not getting enough sleep impairs your ability to do well on final examinations.





## The Exam Prep Check List

- I have made a summary sheet and memorized the necessary formulas, definitions, laws, and theorems.
- I formed a Study Group with at least one other person in the class.
- I re-did (circle:) ALL / MOST / SOME of the lecture examples.
- I re-did (circle:) ALL / MOST / SOME of the quiz problems.
- I re-did ALL / MOST / SOME of the graded HW problems.
- I corrected my errors on ALL / MOST / SOME of the non-graded homework problems.
- I did ALL / MOST / SOME of the Chapter Review Exercises.
- I took the Practice Exam as if I was under real testing conditions.
- I re-did additional problems in areas where I needed extra practice.
- I understand the problems that I did in this review to the point where I could teach the concepts to another student.
- I've analyzed my past pattern of typical errors so I can be alert to them on the exam.
- I've gotten 7-8 hours of sleep two days prior to the exam.
- I will remain positive with myself during the exam and replace any negative thoughts with positive affirmations.
- I will write out my formulas and key information at the top of the exam before beginning.
- I'll carefully read the directions to all problems and circle significant words to avoid misinterpretation.



## References

- Chang, A. M., Aeschbach, D., Duffy, J. F., & Czeisler, C. A. (2015). Evening use of light-emitting eReaders negatively affects sleep, circadian timing, and next-morning alertness. *Proceedings of the National Academy of Sciences*, *112*(4), 1232-1237.
- Hillman, C. H., Buck, S. M., Themanson, J. R., Pontifex, M. B., & Castelli, D. M. (2009). Aerobic fitness and cognitive development: Event-related brain potential and task performance indices of executive control in preadolescent children. *Developmental Psychology*, *45*(1), 114–129.
- Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: taking memory tests improves long-term retention. *Psychological science*, *17*(3), 249–255.
- Zeek, M. L., Savoie, M. J., Song, M., Kennemur, L. M., Qian, J., Jungnickel, P. W., & Westrick, S. C. (2015). Sleep duration and academic performance among student pharmacists. *American Journal of Pharmaceutical Education*, *79*(5), 63.

## Further Readings and Resources

[How to Study for Finals. The Princeton Review.](#)

[Preparing for Finals. McGraw Center for Teaching and Learning](#)

[Preparing for Finals. The University of North Carolina at Chapel Hill. Learning Center.](#)

[How to succeed on university tests and exams. University of Waterloo.](#)

[Wendy Suzuki: The brain-changing benefits of exercise | TED.](#)

[The benefits of a good night's sleep - Shai Marcu | TED.](#)