

# How to Study Less and Remember More

## Effective Learning Techniques from Cognitive Psychology Research

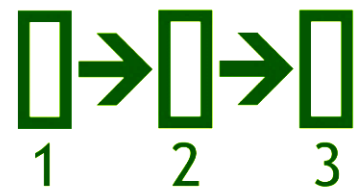
### What to Do: Use Retrieval Practice

- Test yourself! In other words, give yourself practice tests.
  - Put away your course materials and try to recall as much as you remember.
  - You can practice recall mentally, by writing, by speaking, by sketching, etc.
  - You can use or make practice tests, flashcards, or just cover-recall-and-check.
  - Practice tests can often be found in textbooks, online, and from instructors.
  - After recalling, find out how well you did by checking your answers with the course materials.
  - Be sure to accurately check. Breaking down concepts into chunks or “idea units” can help.
  - Depending on the course, you may want to practice recalling definitions, details, examples, etc.
- **Overall, you should perform retrieval practice on your course materials several times, with accuracy improving over each attempt, in order to be prepared for a future midterm or final exam.**



### When to Study: Use Spaced Practice

- Prepare for each course repeatedly and across multiple days.
  - Start early by using the syllabus to plan out a study schedule.
  - You should plan to focus on part of each course at regular intervals.
  - Your learning sessions can occur every other day, every two days, etc.
  - Each learning session does not need to be very long; it can be an hour or two at a time.
  - During each session, try to cover old *and* new materials. For instance, 75% old materials, 25% new.
  - During each session, use evidence-based learning techniques such as retrieval practice.
  - Stick to your “spaced” learning schedule. This will require serious commitment and discipline!
- **Overall, distribute your learning out over time and at regular intervals. By using spaced practice, you will avoid the often ineffective method of waiting until the last minute to “cram” for an exam.**



### Maximize Learning: Successive Relearning

- Try successive relearning, which is the combination of retrieval practice and spaced practice (that is, getting the “best of both worlds” by using both techniques together).
  - With successive relearning, you should practice test until you can recall each answer correctly at least once (or twice, for simple items such as terms, names, or dates). Then, check that your answers are correct. Repeat the process 3 or 4 more times on separate days after that.
  - With this method, performing retrieval practice becomes faster on each successive session. You are also spacing your learning out over time.
- **With successive relearning, you will get faster at recalling information over each learning session. In other words, you can spend less time studying and be able to remember more information.**

