

Executive Function Coaching

Study Strategies

Evidence-based methods to space practice, actively retrieve knowledge, and build consistent study routines for academic success.



Learn to Study Using...

Spaced Practice

Space your studying over time to build stronger neural connections and long-term retention.

1 Plan Ahead

Plan early for quizzes and exams. Studying a little over multiple days is more effective than cramming.

2 Review After Class

Review your notes after class after a short break to actively strengthen and reinforce your learning.

3 Revisit Important Material

Return to key concepts over days, weeks, and months to deliberately build reliable long-term memory.

4 Active Study Strategies

Use active retrieval strategies like flashcards, self-quizzing, and concept mapping instead of re-reading.

5 Retrieval Strengthens Learning

Recalling information—even when it feels challenging—directly helps to construct and reinforce memory.

6 Build a Routine

Study a little every few days. Consistent practice leads to significantly stronger learning than cramming.

Concrete Examples

Use specific examples to understand abstract ideas and make your learning stick.

1 Collect Examples

Gather examples from lectures, textbook chapters, and class materials. Find as many distinct sources as possible.

2 Make the Connection

Link the concepts you study directly to each example to deeply grasp how the theoretical idea applies to real-world scenarios.

3 Share and Explain

Exchange examples with peers. Explaining your examples and analyzing theirs builds powerful cognitive reinforcement.

Hold On! Verify Your Examples

Not all internet examples are accurate or contextually appropriate. Always cross-check with your instructor. Creating your own relevant, vetted examples is ultimately the most effective path to conceptual mastery.

Research Insight

"Illustrative examples enhance conceptual learning of declarative concepts." — Rawson, Thomas, & Jacoby (2014). Building an active folder of personalized examples significantly drives long-term academic success.

Learn to Study Using...

Dual Coding

Combine words and visuals to build deeper understanding and memory paths.

1 Look and Compare

Look at your class materials and find visuals. Look over the visuals and compare them to the words.

2 Explain in Your Words

Look at visuals, and explain in your own words what they represent and mean conceptually.

3 Draw It Out

Take the information that you are trying to learn and draw visuals (timelines, charts, or maps) to go along with it.

4 Practice from Memory

Challenge yourself by actively sketching and filling out these visuals from pure memory after studying.

Hold On! Focus on Meaning

Dual coding is most effective when you combine words and visuals in ways that make sense to you. Focus on understanding the connections and the core concepts, not just making your notes look good.

Research Insight

"Helping students build connections between words and pictures in multimedia learning." — Mayer & Anderson (1992). Integrating structured visualizations heavily reinforces verbal instruction for superior academic performance.

Learn to Study Using...

Elaboration

Explain and describe ideas with many details to build deeper understanding.

1 Ask & Answer Questions

Ask yourself questions while studying about how things work and why, then find the answers in class materials.

2 Connect to Experiences

Describe how the ideas you are studying apply to your own experiences, memories, and daily routine.

3 Compare & Link Ideas

Make connections between different ideas. Think of ways they are similar, different, and work together.

Hold On! Focus on Accuracy

Make sure the way you are explaining and describing an idea is accurate. Don't overextend the elaborations, and always check your class materials or ask your teacher to verify.

Research Insight

"Learning with analogy and elaborative interrogation enhances understanding." — McDaniel & Donnelly (1996); Wong (1985). Active self-questioning builds structured memory paths for superior academic performance.

Learn to Study Using...

Interleaving

Switch between ideas while you study to build deeper understanding and memory paths.

1 Switch During Sessions

Switch between ideas during a study session. Don't study one idea for too long to keep your mind active.

2 Review in Different Orders

Go back over the ideas again in different orders. This strengthens your understanding and flexible recall.

3 Make Connections

Make links between different ideas as you switch between them to see the bigger conceptual picture.

Hold On! Don't Switch Too Fast

While it's good to switch, don't switch too often or spend too little time on one idea. Interleaving feels harder, but this challenge actually helps your learning!

Research Insight

"Interleaving helps students distinguish among similar concepts." — Rohrer, D. (2012). Spacing and mixing topics builds stronger, more versatile long-term memory pathways.

Retrieval Practice

Practice bringing information to mind to build active, long-term memory paths.

1 Write and Sketch

Put away your class materials and write or sketch everything you know. Be as thorough as possible, then check against your materials for accuracy.

2 Use Flashcards

Practice recalling the information on flashcards. Go beyond simple definitions by thinking of links, relationships, and new examples between ideas.

3 Trade & Take Tests

Take as many practice tests as possible. Try making your own and trading them with a friend, focusing on main ideas and conceptual relations.

Hold On! Focus on Accuracy

Retrieval practice works best when you go back to check your class materials for accuracy afterward. If you are struggling, identify what you missed and work your way up to recalling it with the materials closed.

Research Insight

"Ten benefits of testing and their applications to educational practice." — Roediger, Putnam, & Smith (2011). Practicing retrieval builds strong, durable memory pathways and highlights critical conceptual gaps.

References

- <https://www.learningscientists.org/downloadable-materials>