

Study Skills & Test Taking Strategies: Tools for student success

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+ Today's presentation

■ Focus on three areas for student success:

1. Organization

2. Study skills

3. Test-taking strategy





Introduction

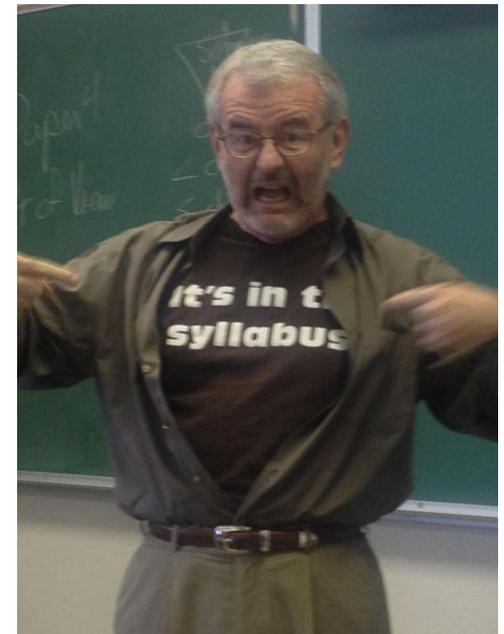


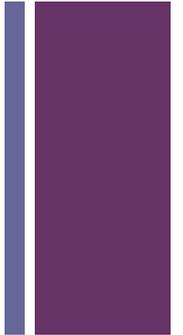
- **College requires different study skills:**
- *College requires you to*
 - Organize your time
 - Improve your study skills
 - Develop a support system
 - Talk to your professors
 - Get help early
 - Take care of yourself: sleep, eat, exercise, have fun



Step 1: Organize yourself

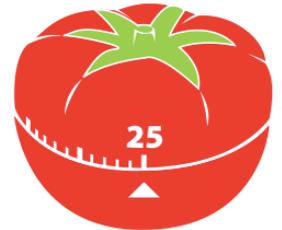
- Every professor should give you a syllabus, use it!
- Plan out your work so you are not overloaded
- Find out what your course is going to be like before the course begins
- Make sure you have time for school
 - Don't schedule more than 70 hours per week or you will likely be overwhelmed.



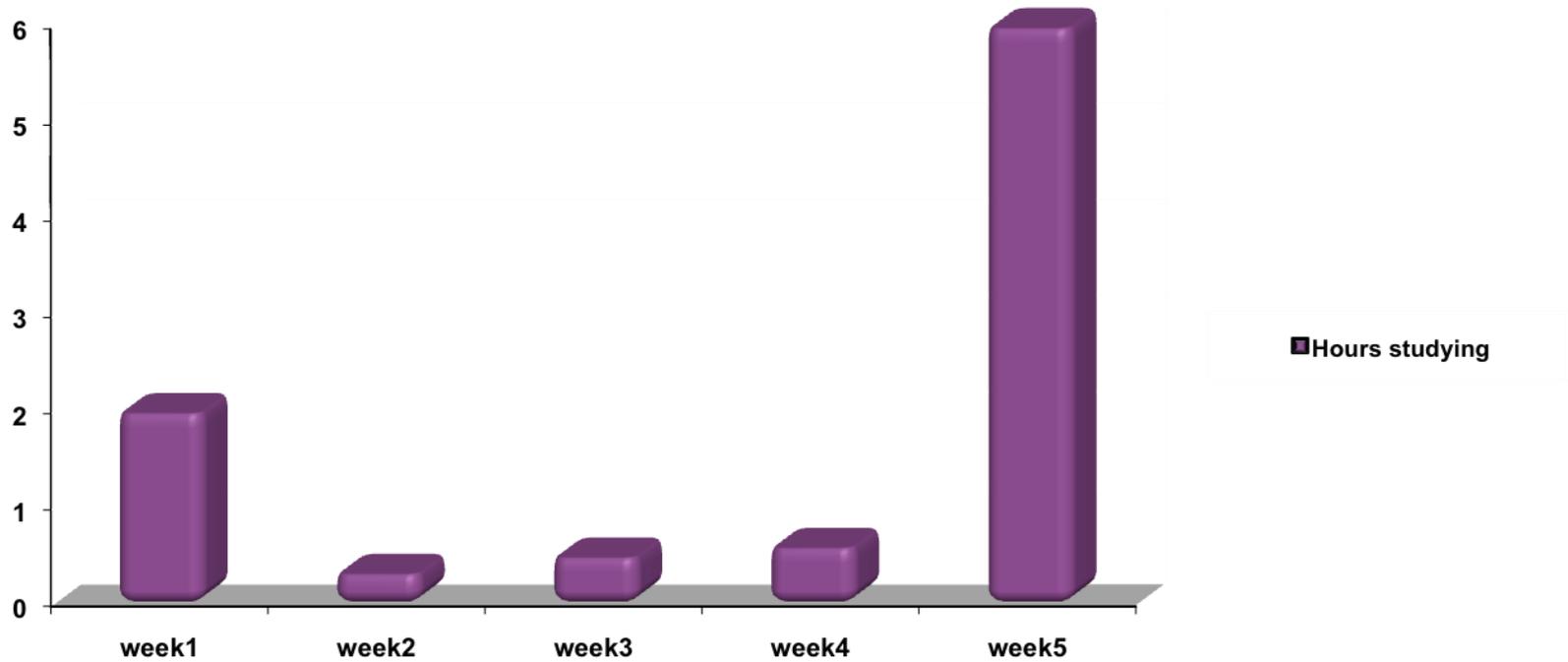
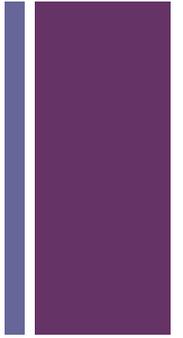


Organize: Study structure

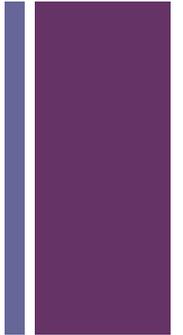
- Structure versus “feel like it approach”
- Make a schedule
- Make study blocks only as long as you can concentrate
 - Pomodoro Technique: <http://pomodorotechnique.com/>
 - <http://tomato-timer.com/>
- Study at the same place (stimulus control)
- Study in a quiet environment
- Try making yourself accountable by studying with a friend during scheduled times



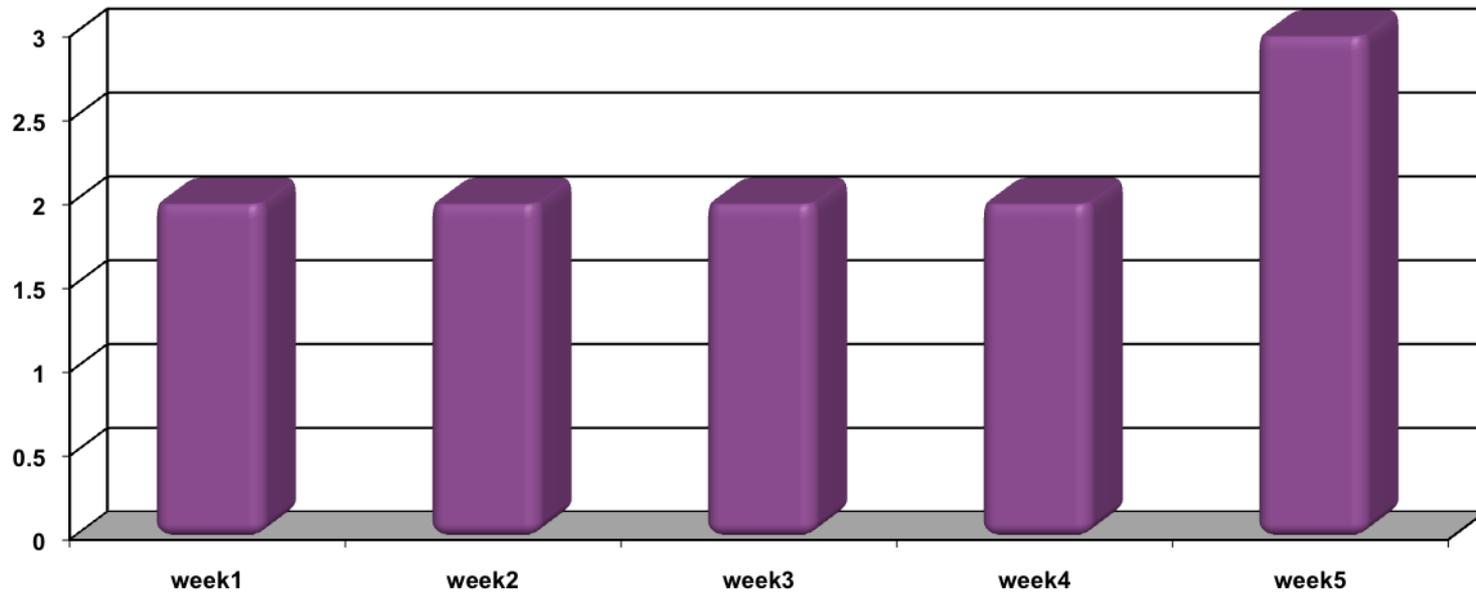
+ Typical study schedule



+ Ideal study schedule



■ Hours spent studying





Engagement in your education



- *Behavioral engagement*: completing assignments, following course guidelines, participating in class discussion
- *Emotional engagement*: taking interest in coursework, feeling connected with the university
- *Cognitive engagement*: managing and monitoring one's own learning
- Being engaged in all three levels predicts best outcomes for success!

- From a 2013 study in *Learning and Instruction*



Figure out what is important in a course early



- What will be required of you in this course?
- Kinds of tests?
- Where does test material come from?
- Quizzes?
- Professors office hours?
- Where else can you get help?
- Attend class





What to do in class

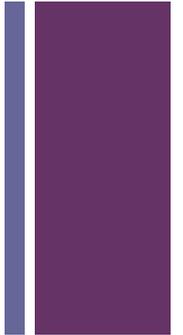


- Sit close to the professor
 - Start a relationship
 - Ask/answer questions
 - Up close narrows perceptual field so you are less likely to fall asleep
 - If bored review notes
 - Copy down all examples
 - Engage!



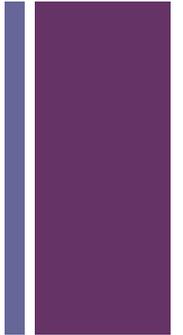


Taking Notes

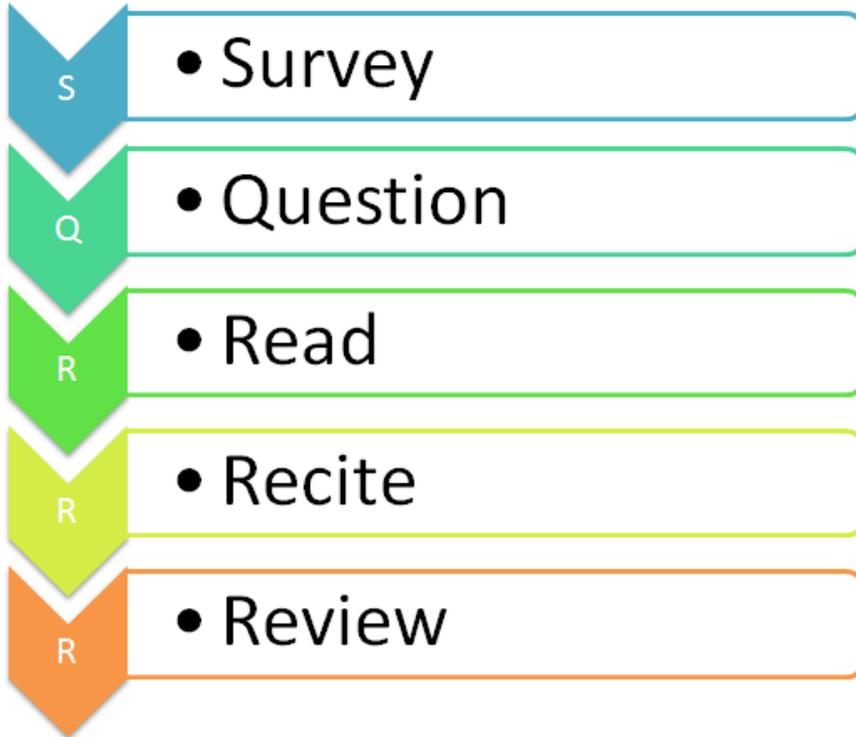


- Organize your note taking – rewrite after class
- Use your own words – this makes you think
- Go over your notes in 24 hours
 - 50% gone after 24 hours
 - Take notes on your notes
 - Adjust your note taking (usually means shorter)
 - If you don't understand, get the information elsewhere (professor, classmates)

+ Step 2: Study Skills: Reading & Reviewing



SQ3R



Scan the text and identify its structure.

Ask yourself about each section.

Read the whole text quickly. Even if there is something difficult you don't understand.

Identify the most important Questions.

Read the important sections slowly.
Take notes about helpful information.

+ What are your study strategies?

- Write down your TOP THREE study strategies.

- | | |
|--|---|
| <ul style="list-style-type: none">• Highlighting and underlining• Re-reading• Summarizing• Keyword mnemonics• Imagery use for text learning | <ul style="list-style-type: none">• Elaborative interrogation• Self-explanation• Interleaved practice• Practice testing• Distributed practice?
• Others? |
|--|---|



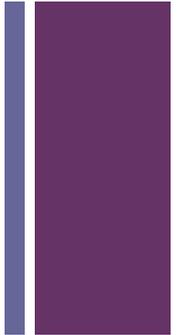
Study Strategies: What works best?



- A 2013 study called “Improving Students’ Learning With Effective Learning Techniques” and published in “Psychological Science in the Public Interest,” evaluated the 10 most commonly used learning techniques and concluded the following about effectiveness:
 - Least Effective Study Techniques:
 - Highlighting and underlining textbooks and other materials
 - Rereading
 - Summarization
 - Keyword mnemonics — the use of keywords and mnemonics to help remind yourself of course material
 - Imagery use for text learning — creating mental images to remind yourself of material



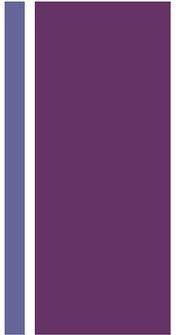
Study Strategies: What works best?



- Moderately Effective Study Techniques
 - Elaborative interrogation — uses “why” questions to make connections between new and old material.
 - Self-explanation — prompting yourself to provide your own explanations for problems while learning material
 - Interleaved practice — mixing different kinds of problems or material in one study session
- Highly Effective Study Techniques
 - Practice testing — any form that allows you to test yourself, including using actual or virtual flashcards, doing problems or questions at the end of textbook chapters, or taking practice tests.
 - Distributed practice — studying material over a number of relatively short sessions.



Math preparation



- Difference between content and process skills
 - Swimming or flying a plane VS historical dates or names of Senators
- Math is learning process that you apply in a novel situation
 - Reading about a skill doesn't help
 - Learning to swim requires that you get in the water
 - Flying a plane requires you to get in the plane
 - Learning math requires that you do more than observe
 - Use tutoring when needed, but make sure you can perform without the help of a tutor, professor, or friend

+ Do your math assignments actively

- The whole point of doing your math homework is to learn the concepts involved
- It is critical that you keep testing yourself
- Do your homework by yourself
 - As much as possible you want to gain confidence in yourself
 - Only seek help when you are really stuck

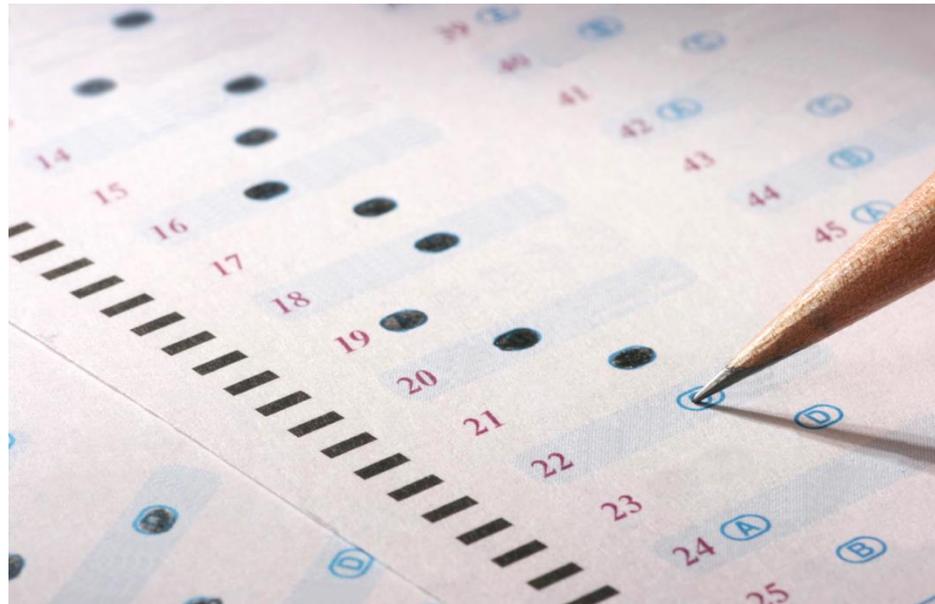
+ Several math homework strategies

- Use your notes as a guide
- Start with the simpler problems
- Make up problems for yourself that demonstrate the concepts
 - Addition/Subtraction – Multiplication/Division
- Go back through the book and your notes for examples
- A study group can also be helpful



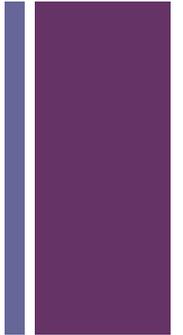
Before the test

- Make note cards and review them in mixed up order, just like the test
- See if there are any sample or old tests available, online practice tests for content (e.g. Khan Academy)





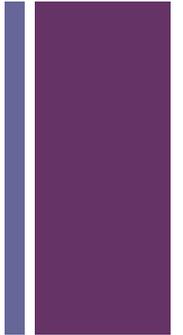
Step 3: Test taking strategy - Multiple Choice



- Sequential administration
 - Think of the test as a conveyer belt – carefully choose an answer and move on (if you don't know the answer now, you probably won't know it 15 minutes from now, but something in the test might trigger remembering)
- People who go back and change answers tend to lower scores
- The most dangerous items are the easy ones
- Read each question carefully, reword as needed
 - Circle important words like “not”, “always”, “never”
- Answer before looking at item choices, then find your correct. If uncertain, rule out the other answers as wrong



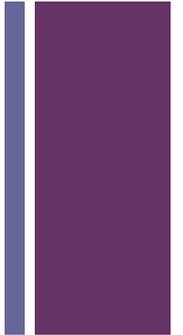
Preparation: Essay Tests



- Talk to other students and professor about kinds of questions
- Practice doing several essays (show to professor)
- Study for understanding
- Read the question carefully
- Understand what it is asking (or ask for clarification)
- Make a brief outline
 - Logical answers better
 - Neat answers better
- Always say something



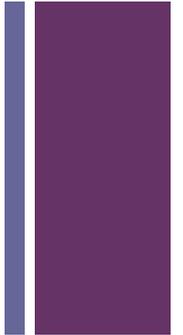
Test Taking Strategies



- Dump any formulas first thing so you remember them
- Show your work clearly – do as much as you can
- Show where the answer is on the page
- Don't run out of time on harder items – do as many items as you can quickly do before you try harder ones
- Check for careless errors
- After the test make sure you understand your errors
- Do not assume any patterns or tricks to correct answers
- Manage anxiety – anxiety inhibits skill performance over content performance



Psychological preparation



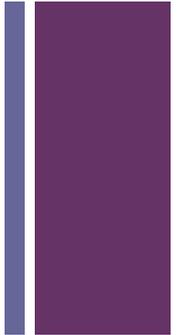
- Train yourself to think supportive thoughts under duress
 - Affirmation can benefit motivation, achievement, and openness to change
 - Increase well-being and self-efficacy to overcome challenges

- Train yourself to relax under duress
 - Brief Mindfulness Training
 - 3-minute mindful check-in

- Sherman, Hartson, et al. (2013) *Deflecting the Trajectory and Changing the Narrative: How Self-Affirmation Affects Academic Performance and Motivation Under Identity Threat*. *Journal of Personality and Social Psychology*, Vol. 104, No. 4, 591– 618



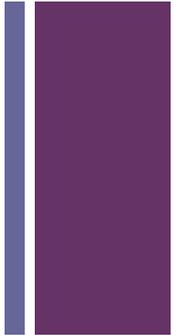
Psychological preparation



- Researchers at UC-Santa Barbara required students complete 10 minutes of daily meditation outside of class. During class, participated in 10 to 20 minutes of mindfulness exercises requiring focused attention to some aspect of sensory experience (e.g., sensations of breathing, tastes of a piece of fruit, or sounds of an audio recording)
- Classes focused on:
 - Sitting in an upright posture with legs crossed and gaze lowered, distinguishing between naturally arising thoughts and elaborated thinking
 - Minimizing the distracting quality of past and future concerns by reframing them as mental projections occurring in the present
 - Using the breath as an anchor for attention during meditation
 - Repeatedly counting up to 21 consecutive inhalation/exhalations cycles
 - Allowing the mind to rest naturally rather than trying to suppress the occurrence of thoughts.
- Participants who received mindfulness training showed improved accuracy on the GRE and higher working memory capacity. Analyses indicated that the improvement could be explained, at least in part, by reduced mind wandering during the task.



Psychological preparation

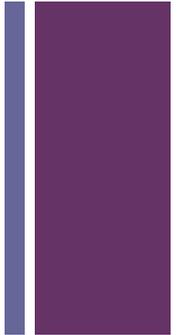


- Try at home
 - Google: Mindfulness audio + UCLA or UCSB
 - Find an audio exercise you like and practice it regularly to improve concentration and working memory capacity!

- Mindfulness Training Improves Working Memory Capacity and GRE Performance While Reducing Mind Wandering, Psychological Science May 2013 vol. 24 no. 5 776-781



Last advice



- Eat well
- Sleep is important for memory
- The last several days, study the structure of the test (e.g. engage in practice tests) instead of the content
- Minimal study the day before and day of the test
- Come to the Counseling & Testing Center for further help

+ The Counseling & Testing Center

306 Simmons Hall

330-972-7082

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- www.uakron.edu/counseling



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