

STUDY SKILLS AND STRATEGIES

ACTIVE LEARNING	PASSIVE LEARNING
Requires making decisions about the material	Reading text or going over notes
Is this important? How is this part organized? Where does this fit in the big picture? Where have I seen this in an earlier lecture?	Using a highlighter when reading or going over notes
<p style="text-align: center;">IOMA</p> <u>IDENTIFY</u> the important information <u>ORGANIZE</u> the information: Start with the big picture to create a framework <u>MEMORIZE</u> the information using frequent review <u>APPLY</u> the information to more complex situations. <i><u>MOST IMPORTANT PART</u></i>	It is not possible to comprehend and retain a deeper understanding of material like you did in undergrad

Self-Reflection

Adapted from Study Skills by Lisa Medoff, Education Specialist at Stanford School of Medicine. Retrieved from <https://med.stanford.edu/content/dam/sm/md/documents/Study-Skills.pdf>

Ask yourself three questions and answer honestly:

1. How do I best study?
2. When is the best time for me to study?
3. Where is the best place for me to study?

Be realistic about how long you can *efficiently* study.

- Most people can go 50-60 minutes. Then actively walk away from your study area to have a 10-minute mental and physical break.
- If you can go 90 minutes, give yourself a 20-minute break.

Think about your own personal learning style—do you get more out of a lecture if you read beforehand, or do you get more out of reading if you hear the lecture first?

Know where you learn best.

- Do you need absolute silence?
- Do you need to go somewhere or is studying in your room best? Should you go to the same place every day or does variety help?
- Do you focus best sitting at a desk? On the couch? Walking around a room? Writing on a large white/blackboard?
 - Try not to use your bed for studying so you can connect it only with relaxation.

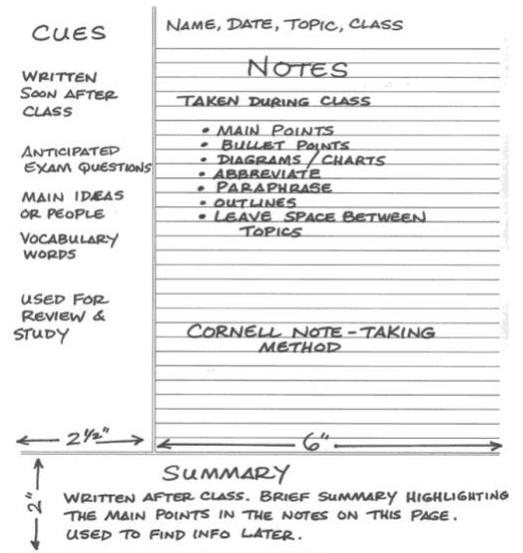
Before Class

- Pre-read the material to be covered (either the night before or the morning of)
 - Tips for Pre-Reading
 - Rapid skimming: 10-15 minutes for each lecture hour
 - Looking at the “Big Picture”
 - Get a sense of the type of vocabulary and terms that will be covered
 - Spotting the patterns: see the relationships between main topics and subtopics
 - Note any obvious cause and effects, comparisons and contrasts
 - Obvious Benefits of Pre-Reading
 - Better comprehension
 - Increased retention rate
 - More useful study material
- Have an idea of what your notes will look like ahead of time
 - How will notes be organized?
 - Will you try to write down everything or try to pull out only the most important information
- Think about what might be most difficult to understand in lecture and where you will really need to pay attention.

During Class

- Sit where distractions will be minimized
- If you are not feeling focused or find a section difficult to understand, make sure to note where you stopped paying attention so you can go back to it later
- Note-Taking
 - Include the dates on each set of notes
 - Be aware of anything on the board on projector
 - Write down or highlight any information that wasn't clear or you don't understand
 - Listen beyond the words. Notice when your lecturer changes tone, repeats information, or pauses
 - Use a note pad that has a middle divider or draw a line down the middle. One side use for notes, the other use for questions
 - Make your notes work for YOU. They have to make sense to you
 - Organize notes later in relation to the learning objectives'

- Give yourself enough time to review them
- Be brief, but thorough
- Try the Cornell System: **Record, Reduce, Recite, Reflect, and Review**
 - RECORD the information as normal
 - REDUCE ideas and facts on the left side of the page
 - RECITE your “recall” column
 - REFLECT on the notes
 - REVIEW all notes for 10 minutes every week



After Class

General Tips and Tricks

- Review the material and readings on the same day
 - Reorganize, restate, reformat—this will help you process at a deeper level
 - Integrate/cross reference notes with previous lectures, books, and other study aids
- Summarize the information in your own words
- Write down any questions or things that are still unclear. Reference it in the text, with a peer, or utilizing a recorded lecture

Memorizing

Tips and Strategies

- Relate the new information to something you already know
- Write concepts on a blackboard/whiteboard
- Walk around and recite notes and quiz yourself
- No marathons. Review frequently in small time periods with time for breaks
- Use mnemonic devices for large lists or facts that are difficult to recall
- Mix it up. Read, then apply some of the concepts, then work on memorizing

Active Memorization

- Don't put it off until the end
 - Build memory through repetition
 - Save details for the night before. Concepts have to be learned over time
- Memorize headings first

- Memorize the number of items first (number of headings)
- Memorize the headings themselves (using logic, visualization, or mnemonics)
- Memorize the information under each heading starting with the key word or phrase
- Test yourself
 - Cover notes and write it out without help
 - Recite the information out loud. Repetition is key!
 - Check yourself. Revisit material you didn't remember that was unclear.

Reading

- Take care with highlighting. Rather than highlighting as you read, which can easily become mindless, highlight after you have finished a paragraph or section. *Take a minute to think about the most important information and go back and highlight it.*
- After finishing a section, think about some possible exam questions that might be asked about that section. Try to predict how the question might be worded, what the correct answer would be, and what misleading answers would be.

Social Studying

- Be thoughtful about whether you are the kind of person who studies better with others, and if so, whom those people might be. Your best friend is not necessarily your best study partner. In fact, studying with someone who is quite different from you may yield better results because you will be getting a new perspective.
- Agree on the goals and norms of the partnership or group
 - How much preparation is necessary? Are you learning together or are you testing each other?
 - How will time be spent? Will you actually be going over material together or do you just need an accountability partner to check in with, but you do not actually want to talk?
- Check in periodically to make sure the partnership/group is still working for everyone.

The following information was adapted from *Learning Strategies for Success in Medical School* by Pamela Houghton DeVoe. Retrieved from https://samuelmerritt.instructure.com/files/39415725/download?download_frd=1

Learning Strategy	Explanation
Become acquainted with <i>your</i> learning style.	<p>Learning Modality Field Dependent vs. Independent Personality Type</p>
Identify your learning habits—monitor and adjust as needed.	<ul style="list-style-type: none"> • Understand yourself as a learner. • Recognize that your style of learning may not fit every learning situation appropriately. • Learn to monitor your study strategies for every course and adjust when necessary. • Communicate your environmental study needs, such as quiet, background music/noise, group or individual study space.
If it works, keep doing it.	<ul style="list-style-type: none"> • Learning strategies that worked in undergraduate course work may not work at med school and the same strategies may not work for every course. • Be alert to problems, such as too much to learn, not enough time, unexpectedly low grades on tests. <ul style="list-style-type: none"> ○ These signal that your old methods may not be working. • If it isn't working, don't just do more of the same thing!
Approach each course individually.	<p>Strategies for learning course material should be geared toward each particular course content and expected mode of assessment (multiple choice, short answer, essay, factual content, case study, clinical performances)</p>
Use study groups for review.	<p>Reviewing material in a group can be very useful because it builds on the approaches and understanding developed by different students.</p> <ul style="list-style-type: none"> • THE INITIAL APPROACH TO UNDERSTANDING NEW MATERIAL IS BEST UNDERTAKEN INDIVIDUALLY.
Use test grades to build learning skill.	<p>Tests and the grades they generate can be considered tools for adjusting your study strategies. You can review incorrect answers to discover where understanding lapsed.</p>

Practice, practice, practice.	Active and purposeful study geared toward particular test type, along with adequate practice, can reduce performance anxiety.
-------------------------------	---

STRATEGIC LEARNING AND STUDY STRATEGIES

Study Strategies	Explanation
Be strategic in developing learning skills	
Reading textbooks—preview, review. Highlight text with markers—using different colors and scents	<p>Be selective, take note of text headings, subheadings, bold and italic print, this shows what the author considered important.</p> <p>Question while reading: What is this related to? Why do I need to know this?</p> <p>Write notes and questions when reading.</p> <p>Read for understanding.</p> <p>Highlight for outlining later.</p>
Class notes	<p>Use notebook with a line down the center: on the right put class notes, on the left write your own questions and clarifications.</p> <p>Take time to relate notes to text.</p> <p>Rewrite and Review.</p> <p>Compare your “important points” with those of other students.</p> <p>Try writing notes, formulas, concepts, memorization material on paper taped to walls and study it by walking around.</p> <p>Highlight portions that become committed to memory.</p> <p>Review, review, review!</p>
Create concept maps. Use diagrams, charts and graphs	<p>To illustrate important concepts in material, good for showing relationships between concepts.</p> <p>Good visual connections.</p>

Note cards	Review often Good for memorization Make sure information is accurate!
Outline: text and class notes	Good for visual learners Use Roman numerals in an outline format, then review the outline Use highlighted text from text review
Study as if you were teaching the lecture	This focuses your study time and allows you to internalize information sooner
Prepare a list of test questions	Can be used as a study group review or self-review The learning process involved in preparing questions promotes thoughtful long-term learning

Steps to strategic learning

1. Set realistic learning goals. These goals serve as the driving force to generate and maintain the motivation, thoughts and behaviors necessary to succeed. Set and use long-term occupational goals and short-term learning goals.
2. Types of knowledge needed to be a strategic learner:
 - Know yourself as a learner (learning preferences, talents, best times of day to study, ability to match study skills to learning task)
 - Know the nature and requirements of different types of educational tasks
 - Know a variety of study skills and learning strategies and how to use them
 - Know the contexts in which what is being learning can be used now or in the future
3. Use a variety of learning strategies:
 - Manage your study environment
 - Coordinate study and learning activities
 - Keep your motivation for learning clear
 - Generate positive behaviors toward learning
 - Make new information meaningful to you
 - Organize and integrate new information with existing knowledge or reorganize existing knowledge to fit the new understanding and information
 - Place new information in a present or future context