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*Created by*

*Office of Academic Advising  
Center for Academic Excellence  
(325) 942-2711*

# STUDY TIPS

1. **Make and keep a study schedule.** Set aside certain hours each day for class assignments. Keep the same schedule regularly day to day. The amount of time needed for study will vary with the individual student and the courses on his or her schedule.
2. **Study in a suitable place -- the same place every day.** Is concentration one of your study problems? Experts state that the right surroundings improve concentration ability. Also, study desks/tables should be located in a quiet place -- free from distractions.
3. **Organize all material before starting.** Your study area should have certain standard equipment -- paper, pen, resource books, calculator, etc. This will eliminate unnecessary interruptions.
4. **Don't wait for inspiration to strike -- it probably won't.** We can learn a lesson about studying from observing an athlete. Can you imagine seeing an athlete who is training for a mile run sitting on the field waiting for *inspiration to strike* before beginning to practice? Like an athlete, it is necessary to get in training for exams by doing things on a regular basis.
5. **Keep an organized notebook.** Research shows that there's a definite relationship between the organization of a student's notebook and the grades he/she makes. Set aside a special section for each course.
6. **Keep a careful record of assignments.** Why lose time phoning all over town or campus to find someone who knows the assignment? Write it down -- in detail -- in a designated place in your notebook. Knowing what is expected and when you are expected to do it is the first step toward completing the assignment.
7. **Use "trade secrets" for successful study.** For example:
  - **Flash Cards.** Use a 3" x 5" card to learn specialized vocabulary. On the front write the term; on the back, write the definition or an important fact about that term. Carry your flash cards with you. Periodically take them out and quiz yourself.
  - **Divided Page.** Draw a dividing line down the center of a sheet of notebook paper. Write important questions on the left side and the answers on the right. Use the "self-restriction" method of study. Cover the right-hand side and try to give the answer. Then check and recheck until you're sure you know the material.
  - **Cover Card.** As you are studying, look over your notebook or textbook and read what you are trying to memorize. Use the cover card to conceal what you've just read -- try reciting or writing the facts from memory. Check until you are sure you have mastered the facts.

8. **Ensure against forgetting – take good lecture and text notes.** Learn to take lecture and text notes efficiently as your instructors stress important points in class and as you study your assignments. Good notes are imperative for just-before-test reviewing. Without notes, you will often need to reread the whole assignment before a test.
9. **How can you remember what you've studied? One secret of remembering is over learning.** Psychologists tell us that the secret of learning for the future is over learning. Over learning is continuing your study after you have learned the material well enough to barely recall it.
10. **Frequent reviews pay off – in knowledge, grades and credits.** Without review, the average student can forget 80% of what was read – in just two weeks! Your first review should come very shortly after you study material for the first time.

# BASIC COLLEGE VOCABULARY

**ACADEMIC DEAN:** chief administrator of a college or school within a university.

**ACADEMIC PROBATION:** students with low grades (under 2.0 G.P.A.) will be placed on academic probation, a written stipulation to improve grades within that semester to avoid dismissal.

**ADVISOR:** one assigned to help you discuss your educational plans including your course scheduling.

**BULLETIN:** book about the college, courses, curriculums, etc.

**BURSAR:** the treasurer to whom you pay college fees and tuition.

**CLEP:** (College-Level-Examination Program) comprehensive tests given in subjects to earn credit in familiar subjects without needing to take the course. Not free.

**COMPREHENSIVE TEST:** a test that covers all material taught in a course.

**CUMULATIVE:** accumulated, ex: cumulative G.P.A. is average grade points for all courses taken.

**CURRICULUM:** program of study; degree requirements.

**DROP DATE:** the last day a class can be dropped and no grade registered.

**GPA:** (Grade point average) A high GPA (maximum= 4.0) indicates you are a good student. A low GPA (under 2.0) will prevent you from graduating. GPA is figured on class letter grades (A=4, B=3, C=2, D=1) multiplied by credits for that class, divided by total credit hours taken.

**INSTRUCTOR, ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, AND PROFESSOR:** rank levels of college teachers.

**MAJOR:** concentration of studies in a chosen field.

**OBJECTIVE TEST:** tests that are mostly multiple choice and true-false.

**ORIENTATION:** events planned to help students adjust to college life.

**PLAGIARISM:** copying work from other's writing without documentation.

**PREREQUISITE:** the beginning course in a series. It must be taken first.

**REGISTRAR:** the person responsible for registering students in courses and for keeping grade records.

**REGISTRATION:** signing up for courses at specific times. Register through RAMS or at Registrar's office.

**SASTISFACTORY ACADEMIC PROGRESS:** a policy that defines the qualitative and quantitative requirements of academic progress a student must meet and maintain to be eligible for financial aid.

**SCHEDULE:** list of your classes and when and where they meet.

**SUBJECTIVE TEST/ESSAY TEST:** answers will need to be paragraphs you write about information specific to questions asked.

**SYLLABUS:** an outline of course work distributed by an instructor. Some are very general, some exceedingly specific.

**TRANSCRIPT:** an official record of student's courses and grades received.

**TUTOR:** persons who give extra instructional help to students. Peer tutors are student tutors.

**UNIVERSITY FEE:** a fee in addition to tuition that pays for assorted student services: health, tutoring, etc.

**WITHDRAW:** (VV) grade listed when students officially drop a class within the time limit. Failure to complete proper forms when dropping a class will result in an "F" grade.

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# INCREASING YOUR MOTIVATION LEVEL

**RECOGNIZE LOCUS OF CONTROL** -- In understanding the relationship of behaviors and outcomes, most people fall within two categories: **INTERNAL** locus of control or **EXTERNAL** locus of control.

**INTERNAL** -- Responsibility for outcomes is based on personal actions

**EXTERNAL** -- Responsibility for outcomes is based on luck, chance, fate, or others

People who have high levels of motivation have an internal locus of control and therefore recognize that they must take responsibility for determining obstacles, attempting to overcome obstacles, and taking credit for both success and failure.

**LEARNING MOTIVES** -- People engage in activities in an order that they most prefer, usually starting with the most enjoyable activity and ending with the least enjoyable activity. That is why a student will often prefer to go rollerblading, order a pizza, and watch TV before sitting down to study. One aspect of increasing motivation is to recognize patterns and change them so as to achieve desired goals.

**CLASSICAL CONDITIONING** -- Association of positive emotions connected to teachers, books, classes, campus. etc.

**REINFORCEMENT CONDITIONING** -- Providing a reward for a desired behavior.

**EXAMPLES** If I read my text book for one hour then I can have one cupcake. If I read for an hour and study my notes for an hour then I can have my cupcake while I watch 1/2 hour of television.

If I study every night this week, I will get another A on my next test. (Or, I will make the Dean's list, or, Dad will buy me a new car when I get my degree, or, I will have a high GPA and get a good job.)

When a behavior produces a positive outcome there is a strong likelihood that the behavior will be repeated.

**IMITATION** Learn a positive behavior from an expert.

Copy the behavior of someone who gets good grades. Pay attention to their study methods. Ask to see how they organize their notes. Ask them if you can study together.

**DEVELOP A CURIOUS MIND** -- Perplexity, doubt, and contradiction should arouse curiosity. Use curiosity as a tool to recognize that you are progressing and attempting to learn new things. The desire to know or learn is the motivation factor.

**CURIOUS PEOPLE** Tend to ask more questions.  
Select adventurous activities.  
Know more general information about the world.  
Can recall more facts.  
Relate more to the unfamiliar.  
Persist longer at problem solving.

# HOW TO BEAT PROCRASTINATION

Recognize when you are procrastinating. Learn to catch yourself when you start putting off tasks you don't like to do.

Do some small things to get yourself started (i.e., write the first sentence of a term paper). You will probably find it is easier to keep going once you start.

Break a large assignment or project into smaller units of work that you can complete in one sitting.

Plan rewards for yourself for completing each part of the assignment.

Make a schedule for completing a long assignment. Set a goal of spending at least some time each day working on the assignment.

Get organized so that you are ready to begin work as soon as you sit down.

If you put off assignments because you do not know where to start or are not sure how to do the work — then find out what you need to know. Make an appointment with your instructor or talk to someone who is in your class.

Assume an attitude of confidence. Think positively.

# STUDY SCHEDULE

	MON	TUE	WED	THUR	FRI	SAT	SUN
7-8							
8-9							
9-10							
10-11							
11-12							
12-1							
1-2							
2-3							
3-4							
4-5							
5-6							
6-7							
7-8							
8-9							
9-10							
10-11							
11-12							

# TIME ANALYSIS WORKSHEET

What am I spending too much time on?	What am I doing that does not need to be done at all?
What am I spending too little time on?	What am I doing that could be done just as well or better by others?
Items in which I can make my most important time savings?	Ways in which I can consolidate my available time?
Other ways in which I can make effective time savings?	Other suggestions?

# TWELVE TIPS FOR STUDYING AND MANAGING YOUR TIME

1. Plan a definite time for studying each day. This will discourage procrastination and prevent that pile-up of work.
2. Shorten your study time by knowing the purpose of each assignment, what to do, and how to do it before you leave class. Keep a record of all assignments in a special section of your notebook.
3. Predicting the amount of time needed for each assignment causes you to work harder so that you save time. By timing your assignments, you are more likely to concentrate and less likely to become bored.
4. Time yourself to see how long it takes you to read five pages of your textbook or a paperback. This will help you estimate the time needed to complete a reading assignment. Because a textbook is loaded with information, you may have to read some sections more than once. Allow time for reflecting on what you read.
5. Pay attention to charts and diagrams. They can be shortcuts to understanding.
6. When a reading assignment is made, you can expect to have a discussion of the material or a quiz in class. Take a little time to review just before class so that you are ready to participate.
7. Every time you study, spend ten minutes in review of previous assignments. These "refresher shots" are the secret for long-term memory. This habit of frequent review also results in less time needed for study for a major test.
8. Use daytime for study if possible. At night you are likely to be less efficient.
9. After studying about forty minutes, take a five minute break. This refreshes your mind so that you can concentrate better and finish faster.
10. Setting a "stopping time" at night will encourage hard work in anticipation of being through by ten o'clock or whatever time you set. Sometimes you may even beat the clock. The increased impetus helps you concentrate.
11. Don't cram for hours the night before a test. Instead, distribute your study in half-hour segments over a period of days.
12. Since learning is cumulative, new ideas must be incorporated with previous learning from lectures, readings, and lab experiments. You have to continuously make the connections and associations in your own mind. Putting it all together is easier if you schedule time daily to read, to think, to reflect, to review. Improved learning is the natural result of this approach to using your time.

# TEN WAYS TO COPE WITH STRESS

1. Recognize that stress is inevitable, an essential part of life, and also potentially harmful; you automatically prepare yourself to cope with it.
2. Learn to identify signs of stress and their sources. Try to become acquainted with your own stress moods and have a sense of the amount of stress you can manage without energy breakdown.
3. Develop the ability to interpret stress events in a positive way. The energy from stress can be channeled into a constructive form and can be a helpful tool to initiate changes in your lifestyle.
4. Be aware of your own power. Marcus Aurelius noted, "If you are distressed by anything external, the pain is not due to the thing itself, but due to your estimate of it." You do have the power to control your own stress response.
5. Plan your response to stress. Certain events in your life are repeated, and you can learn to anticipate a crisis. Determine that you will manage the next one with greater calmness. Example: You may be able to postpone a decision about moving, changing jobs, etc., until you can handle it better.
6. Treat yourself positively. Worry is neither profitable nor constructive. Do what you can about a situation, and then move on to other things. Affirm to yourself that you do your best, that you do all you can, and that things will work out well. Think positively, such as: Today, I will accomplish... This is much better than negative, hand-wringing indecisiveness.
7. Work on being open and politely assertive. Suppressed feelings, anxieties, self-doubts, and low-esteem are among major stresses that lead to illness and disease. Expressing feelings in a clear and direct way, nondefensive yet nonthreatening, can be a great tension reliever.
8. Develop a repertoire of assertive skills. Example: Act on your own best interest. Express emotion. Respect rights and needs of others. Stand up for your rights without fear or anxiety.
9. Make your personal guidelines. Don't set self-expectations too high or create a state of frustration and time pressure. Re-evaluate your goals periodically. Other examples:
  - Do one thing at a time.
  - Keep some humor.
  - Treat people with respect.
  - Take steps to improve important relationships.
  - Accept the reality of the world.
  - Be in touch with your needs.
  - Remember there are always options.
  - Cultivate your strengths and capitalize on them.
  - Don't look back.
  - Choose to be well.
10. Consider changing the part of your life that brings about chronic stress. When all other attempts fail to relieve stress, there may be a need to eliminate the source.

# HOW TO CRAM (EVEN THOUGH YOU SHOULDN'T)

First, know the limitations of cramming and be aware of the costs. Cramming won't work if you neglected all the reading assignments or if you skipped all the lectures except the ones you daydreamed through.

The more courses you have to cram for, the less effective cramming will be. Cramming is not the same as learning. When you rely on cramming, you cheat yourself of true education. You won't remember what you cram.

This point is especially important to recognize if you cram for mid-term exams. Some students think they are actually learning the material they cram into their heads studying for mid-term tests. They will be unpleasantly surprised during finals. Without substantial review and practice, material learned in cramming sessions is generally unavailable to recall after one or two days.

Cramming is also more work. It takes longer to learn materials when you do it under pressure. You can't save time by cramming.

The purpose of cramming, therefore, is only to make the best of the situation. Cram to get by in a course so that you can do better next time. It might help raise a grade, if you have been reasonably attentive in class, have taken fair notes, and have read or skimmed most of the material for the course.

Those are the limitations and costs of cramming. Here is a five-step cramming process:

- 1) **Make choices.** Don't try to learn it all when you cram. You can't. Instead pick out a few of the most important elements of the course and learn those backward, forward, and upside down. Sometimes these choices will be difficult. You might be tempted to go over everything lightly. Resist this temptation. If you cover a lot of material lightly, chances are, you will recall none of it during the exam. Be courageous and choose a few important items. For example, you can devote most of your attention to the topic sentences, tables, and charts in a long reading assignment instead of reading the whole assignment. A useful guide is to spend 25 percent of cramming time learning new material and 75 percent of cramming time drilling yourself on that material.
- 2) **Make a plan.** Cramming is always done when time is short. That is all the more reason to take a few minutes to create a plan. Choose what you want to study (suggestion #1), determine how much time you have, and set deadlines for yourself. It's easy to panic and jump right in. Making a plan can save you time and allow you to work faster.
- 3) **Use mind map review sheets and flash cards.** Condense the material you have chosen to learn into mind maps. Choose several elements of the mind maps to put on 3x5 flash cards. Practice recreating the mind maps, complete with illustrations. Drill yourself with the flash cards.
- 4) **Recite ad nauseam.** The key to cramming is repetitive recitation. Recitation can burn facts into your brain like no other study method. Go over your material again and again and again. One option is to tape-record yourself while you recite. Then play the tape as you fall asleep and as you wake up in the morning. Repeat out loud what you have chosen to study until you are confident that you will be able to recall it.

- 5) **Relax.** Because you do not learn material well when you cram, you are more likely to freeze and forget it under the pressure of an exam. Relaxation techniques can be used to reduce test anxiety, both before and during the test.

# GENERAL TEST STRATEGY

## AVOIDING EXAM PANIC:

1. Relax — some tension is natural, use it to keep yourself mentally and physically alert. Avoid excess tension by allowing plenty of time. Gather the materials you will need. Once at the test, concentrate on important points, record these on the back of the exam.
2. Be prepared for a fight — avoid negative or neutral feelings. Go into the test with the thought of doing the best job you can do.
3. Be physically ready — get a good night's sleep. Eat normal meals. Don't take stimulants as they often give a false sense of doing well.
4. Be mentally ready — don't psyche yourself up to fail. If you have two exams the same day, don't worry about the first when you take the second one. Have all your supplies ready before the exam.
5. Other tips to help reduce test anxiety — commit yourself to a review schedule. Use a reward system if you accomplish what you set out to do. Develop a tension-releaser. Practice taking tests.

## STEPS TO TAKE WHEN YOU RECEIVE THE TEST:

1. Read the entire exam briefly.
2. Ask the instructor for help if you are unsure of the directions.
3. Work out an exam schedule — allow 2-3 minutes to overview and 2-3 minutes to check your work. Spend the most time on the questions that get you the most points. Pace yourself — check the clock.
4. Guessing — when in doubt, make an educated guess.
5. Changing answers — it depends on you, but if you do make a change, know the reason why.

## DIRECTIONS TO LOOK FOR:

1. Read the entire exam briefly.
2. How many questions should be answered and in what order.
3. How many points each question is worth.
4. How to answer the question — underline, circle, draw a line, etc., length of answer expected.
5. Should you show calculations or just the answer.

# COMMON EXAM ERRORS

## **Error 1      Answering with the wrong list or the wrong concept.**

**Cause:** Memorizing material as separate lists and ideas rather than getting an overall view of the material by organizing it on study sheets and learning it as an organized mass of material.

## **Error 2      Writing a sketchy answer.**

**Cause:** Skimpy lecture notes and skimpy study sheets  
Avoid by taking complete lecture notes and making complete study sheets.

## **Error 3      Answering a question in the wrong way.**

**Cause:** Careless, hasty reading of the question and the desire to write about what you have studied, whether or not the professor asks about it.  
Avoid by reading the question well, marking and numbering its parts, referring back to it from time to time as you write. Ask the professor to clarify a difficult question, if this can be done without giving away the answer.

## **Error 4      Not knowing the key terms either as they appear in the question or as they are needed in the answer.**

**Cause:** Neglecting to isolate and learn key terms throughout the semester.  
Avoid by writing key terminology on lists or cards and learning what these terms mean before the exam.

## **Error 5      Not knowing how to apply the material from the course to new situations (occurs in math and science as well as in liberal arts classes).**

**Cause:** Not thinking enough about the material being learned during the semester.  
Avoid by inventing original examples, applying what you have learned to new situations, looking for fresh relationships, and writing your insights and ideas in brackets in lecture notes, textbooks, and on study sheets.

## **Error 6      Leaving out important material such as parts of the question, supporting details, or ramifications and implications.**

**Cause:** Not reading the question well enough and not knowing how much information to include in the answer.  
Avoid by writing all you can that is relevant to the question. Use plenty of detail and examples. Reread questions when you have finished writing your answer to check whether you have answered all parts.

# FINAL EXAM PREPARATION TIPS

Start with a positive attitude. Psyche yourself up to succeed.

## **FIND OUT WHAT YOU CAN ABOUT THE TEST:**

- from the professor.
- from former students.
- from old tests.

## **SET UP A STUDY SCHEDULE:**

- Analyze study needs per class.
- Set up several study sessions instead of one cram session.
- Do a quick review just before bed to let your subconscious aid in long term memory.
- Maximize your learning style: audio people recite, hands on people write, visual people draw. Or use all of the learning modes.
- Schedule more time for the first final but review for other exams as well.

## **CONTROL YOUR CONCENTRATION:**

- Choose a place to study where you will not be interrupted.
- Eliminate distractions: turn off radio, TV, etc. Clear other materials off desk or table.
- Study in groups only if it is helpful to you and not a distraction.

## **USE ALL AVAILABLE MINUTES:**

- Review when waiting in line or between classes, etc.

## **AT EXAM SITE:**

- Arrive at examination room a little ahead of time.
- Listen carefully to any oral instructions for taking the exam and read instructions carefully.
- When you receive your test, plan your time for the exam.
- Read every word in the test question.
- Attempt to answer all of the questions even if you are not sure of the answers.
- Double check your work for errors before turning in the exam.

# TAKING OBJECTIVE TESTS

Of course, the best way to be able to answer any test questions is to have studied and reviewed so well that you know the material thoroughly, but some techniques are presented here which can help you when you are unsure of the answer.

## TIPS FOR ANSWERING MULTIPLE-CHOICE QUESTIONS:

1. Anticipate the answer. Try answering the question before you look at the choices. This gets your mind working in the right direction, and there should be a feeling of recognition when you see the correct alternative.
2. Consider all the answers. Don't just mark the first answer that "looks good."
3. Try rephrasing the question if you are not sure of the answer. Sometimes rewording a question jogs your memory and supplies the answer.
4. If you have to guess, first eliminate the wrong or unlikely choices. This increases the odds that your guess will be correct.

## TIPS FOR ANSWERING MATCHING QUESTIONS:

1. Find out whether each answer is used only once. If you are allowed to write on the test, cross out the letter after you've used it so that you can see what's left.
2. Read all the items in both columns before answering any questions.
3. Answer those you know first.

## TIPS FOR ANSWERING SENTENCE COMPLETION (FILL IN THE BLANK) QUESTIONS:

1. If you don't know the exact answer, come as close as you can. You might at least get partial credit.
2. Check the number of blanks (occasionally an instructor will leave the same number of blanks as the number of words in the answer).
3. Look for **a** or **an**. A word that starts with a vowel should follow **an**, a word that starts with a consonant should follow **a**.

## TIPS FOR ANSWERING TRUE/FALSE QUESTIONS:

1. Watch out for absolute words like **always**, **never**, and **entirely**. Since few things in life are always true, questions using those words are often false.
2. If any part of the statement is wrong, the whole thing is false: Example, "The Volkswagen is a small foreign car made in France," is **false**.

# ESSAY TESTS

## **FOUR THINGS TO CONSIDER WHEN TAKING AN ESSAY TEST:**

1. How much time is there for taking the test?
2. How many questions must be answered? If you answer more questions than you are asked to answer:
  - a. you will probably not receive credit for all your answers.
  - b. you will waste time answering questions that will not be graded.
  - c. your answers might not represent your best effort because you wasted time.
3. What are the point values of questions?
4. Which question(s) can be answered most quickly?

## **OTHER CONSIDERATIONS:**

1. Organize your answer before you write.
2. Make your introductory statement a summary of your answer.
3. Always include details and examples in your answers.
4. Proofread your answers.
5. Outline answers you do not have time to write completely.

# CLUE WORDS IN ESSAY QUESTIONS

Every essay question contains certain words called **clue words** that tell you exactly what to do. Clue words are extremely important in essay questions. Your instructor will not usually ask you to "write a short essay on Socrates." Instead, she might ask you to "contrast the philosophy of Socrates with that of the Ionians." Contrast is the clue word here. She has chosen this word because she wants a certain kind of answer. If she asks you to "list the parts of ..." she wants a list, not a story or an argument. List is the clue word here.

CLUE WORDS	ACTION REQUIRED
<b>ANALYZE</b>	Find the main ideas and show how they are related and why they are important.
<b>COMMENT ON</b>	Discuss, criticize, or explain its meaning as completely as possible.
<b>COMPARE</b>	Show both the similarities and differences.
<b>CONTRAST</b>	Show the differences.
<b>CRITICIZE</b>	Give your judgment or reasoned opinion of something, showing its good and bad points. It is not necessary to attack it.
<b>DEFINE</b>	Give the formal meaning by distinguishing it from related terms. This is often a matter of giving a memorized definition.
<b>DESCRIBE</b>	Write a detailed account or verbal picture in a logical sequence or story form.
<b>DIAGRAM</b>	Make a graph, chart, drawing. Be sure you label it and add a brief explanation if it is needed.
<b>DISCUSS</b>	Describe giving the details and explaining the pros and cons of it.
<b>ENUMERATE</b>	Name and list the main ideas one by one. Number them.
<b>EVALUATE</b>	Give your opinion or some expert's opinion of the truth or importance of the concept. Tell the advantages and disadvantages.
<b>ILLUSTRATE</b>	Explain or make it clear by concrete examples, comparison, or analogies.
<b>INTERPRET</b>	Give the meaning using examples and personal comments to make it clear.
<b>JUSTIFY</b>	Give a statement of why you think it is so. Give reasons for your statement or conclusion.

<b>LIST</b>	Produce a numbered list of words, sentences, or comments. Same as enumerate.
<b>OUTLINE</b>	Give a general summary. It should contain a series of main ideas supported by secondary ideas. Omit minor details. Show the organization of the ideas.
<b>PROVE</b>	Show by argument or logic that it is true. The word "prove" has a very special meaning in mathematics and physics.
<b>RELATE</b>	Show the connections between things, telling how one causes or is like another.
<b>REVIEW</b>	Give a survey or summary in which you look at the important parts and criticize where needed.
<b>STATE</b>	Describe the main points in precise terms. Be formal. Use brief, clear sentences. Omit details or examples.
<b>SUMMARIZE</b>	Give a brief, condensed account of the main ideas. Omit details and examples.
<b>TRACE</b>	Follow the progress or history of the subject.

This list is too long for most students to memorize, but try to remember the six most often used clue words:

contrast      compare      criticize      define      describe      list

# ESSAY SUCCESS

1. **UNDERLINE KEY TERMS** — As you read and underline the key terms that tell you what to do (criticize, trace, discuss), also underline key terms in the content of the question itself. Here is a sample essay question: "In our educational system, we need to return to the basics of reading, writing, and arithmetic. Defend or refute this statement."

The topic is **returning to basics**; this is underlined to be certain that you don't wander from the subject. **Defend** and **refute** specify how to approach that subject.

2. **JOT DOWN IDEAS** — As soon as you have read each essay question, immediately jot down relevant thoughts that occur to you. This safeguards you from forgetting as you quickly read other essay questions to find the easiest one, which you'll want to tackle first. If the question is one of your predicted ones, you're ready to write.

3. **TAKE THE PLUNGE** — Commit yourself immediately — there's no time to waste! "I firmly defend the need to return to the basics of reading, writing, and arithmetic, based on school and college entrance results and my experience," is a lucid thesis statement that promptly informs the teacher where you stand. This direct approach also helps you keep sharply focused on the question.

If the essay is to be brief, this thesis may stand alone as the introduction; however, if the essay is to be extended, this sentence can be included in a longer introductory paragraph.

4. **FATTEN UP THE THESIS** — Organization should flow logically from the thesis. Clearly state a **central thought** within each paragraph in the body. **Use transitional** words and phrases to keep your argument starkly clear, e.g., "In the first place, the results from reading tests administered to fourth and twelfth graders this year indicate the need for more basic reading instruction." This sets clear direction for the facts that will make that topic sentence live and breathe.

Beginning the next paragraph with a phrase such as "In the second place" or "In addition" helps the reader see you steadily accumulating evidence for your case.

5. **CONCLUDE** — No cliffhangers, please. After stating your case, **wrap it up** in a sentence or two with a statement of conviction: "Because of the declining scores from grade school to college entrance exams and because of the personal experiences I've cited, I staunchly affirm the need to return to the basics of reading, writing, and arithmetic."

6. **PERSEVERE** — Despite every effort, if you still run short of time, never give up. Resort to **mapping** or **outlining** to confirm your knowledge of the subject.

7. Teachers may give partial credit for such attempts.

# ESSAY ESSENTIALS

1. **UNDERLINE KEY TERMS** -- As you read and underline the key terms that tell you what to do, also underline key terms in the content of the question itself.
2. **JOT DOWN IDEAS** -- Immediately jot down relevant thoughts that occur to you.
3. **TAKE THE PLUNGE** -- Commit yourself immediately -- the direct approach helps you keep sharply focused on the question.
4. **FATTEN UP THE THESIS** -- Organization should flow logically from the thesis. Clearly state a central thought and use transitional words and phrases to keep your answer clear.
5. **CONCLUDE** -- After stating your case, wrap it up in a sentence or two with a statement of conviction.
6. **PERSEVERE** -- If you still run short of time, resort to outlining to confirm your knowledge of the subject.

YES	NO	SHARPEN YOUR ESSAY WRITING SKILLS
<input type="checkbox"/>	<input type="checkbox"/>	1. Does your essay speak to the question?
<input type="checkbox"/>	<input type="checkbox"/>	2. Is a clear thesis statement present (with an introductory paragraph, if the essay is to be an extended one)?
<input type="checkbox"/>	<input type="checkbox"/>	3. Are specific facts and examples developed in the body to substantiate the thesis?
<input type="checkbox"/>	<input type="checkbox"/>	4. Are transitions used to show thought relationships?
<input type="checkbox"/>	<input type="checkbox"/>	5. Is a clear, concluding statement (or paragraph for an extended essay) present and consistent with the thesis?
<input type="checkbox"/>	<input type="checkbox"/>	6. Is your handwriting legible?
		7. Other comments:

# GENERAL NOTE TAKING GUIDELINES

1. Number, title, and date each page in the upper right hand corner.
2. Leave a margin at the top of the page and write assignments and other important information here.
3. Use standard paper, write on one side.
4. Use a pen, never a pencil.
5. Write clearly — legibly.
6. Leave blanks for information you missed — talk with the instructor after class and clarify. Fill in the blanks.
7. Use correct spelling — if unsure, find out.
8. Use white space effectively — separate topics, leave margins. Use only the right 3/4 of the page.
9. Listen for clues. If the instructor stresses specific pieces of information — write it down.
10. Use asterisks, underline, etc. to emphasize.
11. Define difficult vocabulary.
12. Listen actively instead of passively. Put down main ideas, but also include supporting details.

# NOTETAKING

Class notes (lecture and discussions) will usually be your best source of help for understanding course material and for deciding what you should study when you prepare for tests and examinations. During classes, teachers may give you the following information.

1. Hints about what you should learn when you study for tests.
2. Explanations that will help you understand complicated materials.
3. Important information to learn that is not printed in course reading materials.

You must have good class notes to prepare efficiently for tests. Studies of successful students' class notes show the following characteristics.

1. Use paper that measures 8<sup>1</sup>/<sub>2</sub> by 11 inches; use a loose-leaf notebook.
2. Begin each day's notes with a heading that includes the name or number of a course, the instructor's name, date and topic of the day.
3. Organize notes so major thoughts stand out clearly.
4. List details under major thoughts — orderly.
5. Copy what is written on board or overhead.
6. Include examples in your notes.
7. Summarize what teachers say rather than try to write everything they say word for word.
8. Take notes consistently and throughout the entire class period.

# ABBREVIATIONS IN NOTETAKING

Use only the abbreviations that fit your needs and that you will remember easily. A good idea is to introduce only a few abbreviations into your notetaking at a time.

1. Symbols helpful in math -- these are commonly used in texts and references.  
 $\Sigma$  = sum      f = frequency       $\neq$  = not equal
2. Leave out periods in standard abbreviations.  
**cf** = compare      **eg** = example      **dept** = department
3. Use only the first syllable of a word.  
**pol** = politics      **dem** = democracy      **lib** = liberal      **cap** = capitalism
4. Use entire first syllable and only 1st letter of 2nd syllable.  
**pres** = presentation      **subj** = subject      **ind** = individual      **cons** = conservative
5. Eliminate final letters. Use just enough of the word to form a recognizable abbreviation.  
**assoc** = associate      **biol** = biology      **info** = information      **ach** = achievement  
**chem** = chemistry      **max** = maximum      **intro** = introduction      **conc** = concentration  
**min** = minimum      **rep** = repetition
6. Omit vowels, retain only enough consonants to give a recognizable skeleton of the word.  
**ppd** = prepared      **prblm** = problem      **estmt** = estimate      **bkgd** = background  
**gvt** = government
7. Use an apostrophe in place of letters.  
**am't** = amount      **cont'd** = continued      **gov't** = government      **educat'l** = educational
8. Form the plural of a symbol or abbreviated word by adding "s."  
**chpts** = chapters      **egs** = examples      **fs** = frequencies      **intros** = introductions
9. Use "g" to represent *ing* endings.  
**ckg** = checking      **estg** = establishing      **decrg** = decreasing      **exptg** = experimenting
10. Spell out short words such as "in," "at," "to," "but," "for," and "key."  
Abbreviations or symbols for short words will make the notes too dense with shorthand.
11. Leave out unimportant words.
12. Leave out the words **a** and **the**.
13. If a term, phrase, or name is written out in full during the lecture, substitute initials whenever the term, phrase, or name is used again. For example, "Center for Aerospace Sciences" becomes CAS thereafter.
14. Use symbols for commonly recurring connective or transitional words.  
**&** = and      **w/** = with      **w/o** = without      **vs** = against  
**∴** = therefore      **=** = is or equal
15. Use technical symbols where applicable.  
**zb** = German, "for example"      **H<sub>2</sub>O** = water  
**ibid** = Latin, "the same work"      ° = degrees

# COMMON ERRORS IN TAKING NOTES

## GENERAL FORMAT

- Handwriting illegible.
- Notebook too small.
- Too detailed.

## ORGANIZATION OR FORM

- Poor labeling on top.
- Just a listing, inadequate indentation, equivalent points not equal distance from page edge.
- No numbering or emphasis marks.
- Subtopics not related to head.

## PHRASING

- Wordiness.
- Meaning not conveyed.
- Some main ideas missed.
- Cue word buried in phrase.
- Not in own words.
- Writing before finishing section.

# MAKING NOTES INSTEAD OF TAKING NOTES

1. Use a large 8½" x 11" notebook with plenty of paper. Divide the notebook into sections, one section for each course. If your notes for each course are together, this **ties up** your knowledge. Tie-ups help you learn.
2. Date your notes for each lecture.
3. When your instructor enters the room practice getting set. Get pen and paper ready, focus your attention on the speaker. Have your mind set and ready to receive the first idea that is presented. Try to keep your attention from wandering until the speaker finishes at the end of the hour.
4. For the notes you make during class, use only the right ¾ of the page. (Maybe it helps you to draw a vertical line a couple of inches from the left edge.) This format is important.
5. Make your notes in the large section of the page. **Do not copy verbatim every word that is spoken.** You are not a court reporter. Think, analyze, judge, compare, digest what the lecturer says; then, in your own words, summarize the main ideas and key facts in a few brief, logical phrases. Don't try to use the language of the subject as often as you can. Get charts, definitions, graphs, tables, formulas. Get everything which helps you to learn. You need not try for a literary pattern or style; all you want to do is: **MAKE SOME NOTES THAT WILL HELP YOU REMEMBER AND REVIEW WHAT THE PROFESSOR SAID.**
6. Right after the lecture, or as soon as possible, write the main points, questions, and cue words in the left-hand column. Try to develop some questions, use your own key words and ideas. Underline some of them. Use colored pencils or pens. Draw arrows from the ideas in the summary to your notes. Star important points – make them stand out. Make each page look different.
7. **Review your notes right after you make them.** Review by covering the right-hand section of your notes. Then, using your summary, see if you can recite the notes in your own words when they are covered up. If you can – you know them. If you can't, this is the best time to learn them. Review as often as you need to, of course, but **make this first review within 24 hours.** Even this may be too long to wait.
8. During the week before an exam, go through the same process for each page of notes, tying them all together by your reviews.
9. Right before the exam, review all the material in all your left-hand columns as a final preparation – it gives you a lift right when you need it most, and it takes only a few minutes.

# TEXTBOOK UNDERLINING AND MARKING

- Read first, then underline and mark.
- Use heading to identify main ideas to underline.
- As you identify and underline main ideas, look for important facts that support the main idea and underline them too.
- Do not underline complete sentences. Only underline enough key words and phrases so that it still makes sense when you review.
- Mark the right amount -- not too much, not too little.
- Develop a consistent system -- circling, asterisks, colors.
- Underline accurately.
- Make your underlining and marking understandable for review.

**TEST YOUR UNDERLINING FOR THE QUALITIES LISTED ABOVE.**

## **OTHER TEXT BOOK REVIEW METHODS**

Outlining  
Summarizing  
Skimming  
Scanning

Adapted from ***College Reading and Study Skills*** by Kathleen McWhorter, 1992, Harper Collins Publisher.

# GENERAL LISTENING GUIDELINES

The following are clues and cues used by lecturers and teachers to enable you to successfully listen for **MAIN IDEAS** and **SUPPORTING DETAILS** in lectures:

## CLUE:

1. **VOICE CHANGE** — becomes louder.
2. **RATE CHANGE** — becomes slower.
3. **POINTING WITH FINGER FOR EMPHASIS**
4. **HITTING A FLAT SURFACE FOR EMPHASIS** — using hand, book, pencil, etc.
5. **WRITING ON BOARD FOR EMPHASIS** — anything written on board should be copied
6. **REPETITION OF FACTS**— if it bears repeating, it bears copying down.

## WORD CUES:

### MAIN IDEAS:

The main point is...  
Note this...  
Remember this...  
Here is a major point...  
The uses are...

### SUPPORTING DETAILS:

Besides...  
Furthermore...  
Moreover...  
Likewise...  
In addition...  
Detail is...

### SUMMARY:

Finally...  
In conclusion...

# FACTORS THAT INFLUENCE READING RATE

## TEXT CHARACTERISTICS:

- writing style
- sentence length
- vocabulary
- ideas and concepts

## READER'S CHARACTERISTICS:

- your vocabulary level
- your comprehension ability
- your physical state
- your state of mind
- your interest in the material
- your background knowledge

## READER'S PURPOSE:

- reading for pleasure -- 250-400 WPM  
moderate comprehension
- reading for a test -- 150-250 WPM  
high comprehension/high recall
- reading for a specific fact -- above 600 WPM

Generally a person must read slower when reading a textbook to maintain high comprehension and high recall.

Adapted from ***College Reading and Study Skills*** by Kathleen McWhorter, 1992, Harper Collins Publisher.

# IMPROVING CLASSROOM READING

## HOW SQ3R WORKS

### ***Survey***

Here is where you skim or survey the material. It means looking over the whole assignment before you actually start to read it.

1. Check the title first to get an idea of what the material is about.
2. Note the beginning and end to get a notion of how much material the author uses to get across the ideas.
3. Pay attention to heading and subheadings. They can help you get an overall picture of the author's plan.
4. Look at charts, pictures, graphs, and other illustrative material. Check the captions under each. These can also help give you clues to the overall plan.
5. Quickly read any head notes, introductory paragraphs, and summary sections. They can give you a better overview.

### ***Question***

This is the crucial stage in personalizing the assignment, making it really yours. On a separate sheet of paper, jot down the questions that you want answered. What might the author be able to tell you about the topic that you don't already know? What are you curious about here? Sometimes, turning the headings and subheadings into questions helps.

### ***Read***

Now you are ready to actually read the assignment.

1. Read the introductory paragraphs carefully.
2. Add to your personal list of questions if you need to.
3. Skim the less important points.
4. Add difficult words to your question sheet so that you can verify the meanings later.
5. Keep asking yourself: What is the author's main purpose in writing this material?

### ***Review***

After you have completed the reading, try to remember each section. What was the author's main purpose? What were the chief points? What was the overall plan? Try to keep the key points in mind.

### ***Recite***

One of the best ways of understanding anything is to tell it to someone else in your own words. At this final stage, "tell" your answers to the questions, either to yourself, in writing, or to another student in conversation. Making a synopsis or summary (which includes answers to your questions) is also a powerful learning method.

# MATH STUDY TIPS

1. First things first – make sure you have an adequate math background for the class level you are taking. Be prepared to spend some time on your own to review past material.
2. Attend class and keep up day-by-day to stay on top of the material presented in class. Math classes are "cumulative" in that new information is often built upon past material. If you fall behind you won't know what is going on in the class.
3. Recognize the time commitment that is necessary to do well in class. Two hours outside of class for every hour in class is usually adequate for just a passing grade! Take into account the time necessary to review past material, do homework problems, preview new material before each class, and prepare for exams.
4. Rather than taking a lot of notes, watch the instructor do the exercises and mark in your textbook which parts seem important. Note page and exercise numbers in your textbook and take notes on key steps in the solution of the problem. Also note which problems from homework assignments were done in class. Exams and quizzes often contain similar exercises to those done in the classroom.
5. Study immediately after class. Try to solve the problems your instructor just went over. If you let more than a few hours pass between your class and when you study, it will be hard to recall the things your instructor said and did in the classroom.
6. To get beyond a passing grade, don't just do the easiest exercises but do intermediate and advanced ones as well. This will increase your understanding of the material. Go outside of your textbook and find supplementary materials for practice problems.
7. When preparing for an exam, analyze as many of the assigned problems as you can. Read through the problem completely and answer such questions as : *What is given? What is unknown? Have I seen a problem like this before? How am I going to proceed?* You may analyze many problems but actually work out less than half of them.
8. Use practice exams to study and prepare for real tests. Ask the instructor for an old test, sample quiz, or even just one example test question. Also, study guides and computerized tutorials often contain practice tests. Practice exams can help reduce test anxiety as well.

Adapted from *Tips for Calculus Students* by MB Gregory, 1985.

# GUIDELINES FOR ESTABLISHING STUDY GROUPS

1. Select group members who have academic interests and are dedicated to being successful.
2. Seek group members with similar abilities and motivation.
3. Limit group size to five or fewer students.
4. Identify the purpose and lifetime of the group.
5. Schedule regular group meetings at the same place and time, if possible.

Adapted from ***College Learning and Study Skills*** by Longman & Atkinson, 1991, 2<sup>nd</sup> edition, West Publishing Company.