Efficient Note Taking

from the Augsburg College Academic Skills Center

One of the most important skills a college student needs to learn is how to take effective notes during classroom lectures and discussions; for those students who prefer to take notes based on their textbook chapter readings, note-taking skills are valuable. This packet has four purposes: (1) to instruct students in the **Cornell** system of note taking; (2) to demonstrate the three-stage process of note-taking; (3) to increase your

knowledge of the general principles of note-taking, and (4) to give sample lectures for students to practice on.

I. THE CORNELL SYSTEM OF NOTE TAKING

SO MANY STUDENTS TEND TO VIEW NOTE-TAKING OF CLASSROOM LECTURES AS A ONE-STEP PROCESS; THAT IS, IT ONLY INVOLVES TAKING LECTURE NOTES WHILE THE PROFESSOR IS SPEAKING! THIS IS A MISTAKE, FOR NOTE-TAKING IS ACTUALLY A THREE-STEP PROCESS, AND EACH STEP IS NECESSARY IN ORDER FOR YOU TO BE AN EFFICIENT NOTE-TAKER!

STEP ONE: Preparing the System

1. Use a large, loose-leaf notebook. The large size allows you to develop meaningful notes, record examples, and draw diagrams. The loose-leaf feature enables you to insert mimeographed handouts and assignment sheets in topical or chronological order. It also enables you to redo sheets and easily replace them.

2. Draw a vertical line about two and one-half inches from the left edge of each sheet. The narrower column is the recall column. Classroom notes will be written to the right of the line. Key words and phrases will be written to the left of the line. College bookstores also sell this type of loose-leaf paper.

STEP TWO: During the Lecture

1. Take notes on one side of the page only. Later, while studying, it is a great help to spread out the pages so as to see the pattern of the lecture and to make additional comments of your own on the reverse sides.
2. Record your notes in simple paragraph form. Your object should be to make your notes complete and clear enough so that they will have meaning for you weeks and months later.

3. Do not outline, as it adds additional frustration. (However, outline **if** the instructor places his outline on the board or on an overhead). Concentrate getting the main idea and major details together in one paragraph rather than trying to force the professor's lecture into outline format.

4. Skip lines to show the end of one main idea and the start of another. Indicate major details with numbers or letters following the main idea.

5. Use abbreviations to give yourself extra time to listen and to write (for example, write "E free = restrict what we spend, earn" instead of "Economic Freedom is defined as those restrictions upon what we spend, etc." Make up abbreviations for words and phrases frequently used. Make a key of abbreviations at the front of the appropriate section of your loose-leaf notebook.

6. Write legibly. Doing the notes right the first time saves time in rewriting or typing them. Copying notes is not a form of review; it is a mechanical process that wastes your time.

STEP THREE: After the Lecture

1. As soon after the lecture as possible, read through your notes, making any scribbling more legible, filling in spaces purposely left blank. Underline or box key words and phrases.

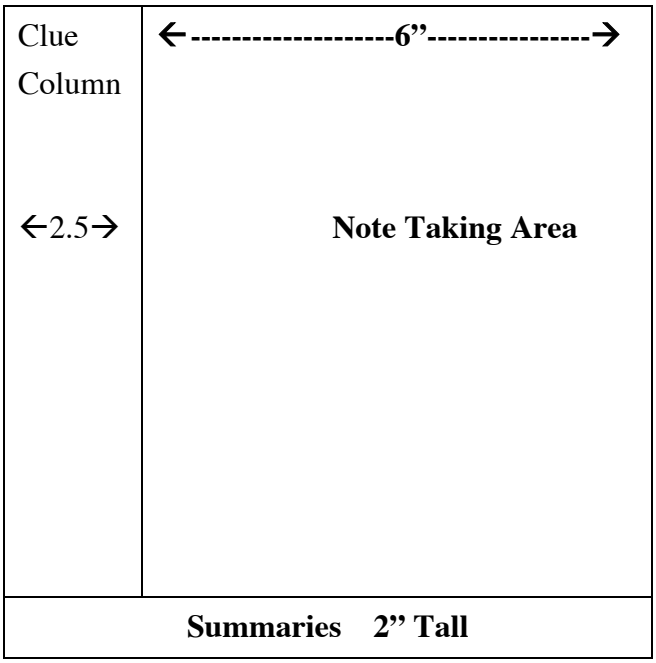
2. In the recall column, write questions (your notes are the answers) or key words and phrases that will stand as cues for the ideas and facts on the right. In making these jottings, you will have reread all the lecturer's facts on the right, reflecting upon each, rethinking each in your own words. Try to think of a brief summarizing phrase.

3. Now cover up the right side of the sheet, exposing only the jottings in the recall column. Using the jottings as cues to help you recall, RECITE aloud the facts and ideas of the lecture as fully as you can. Then uncover the notes and verify what you have said. If you cannot remember the

material, simply lift up the cover and read; then cover and repeat the process.

4. When you <u>can</u> recite the material in your notes, the information in your long-term memory, where it will stay 5-8 days. You will need to <u>review</u> your notes once or twice a week. Review by again reading the questions or cue words in the left-hand column of your notes, then recite the answers.

At the bottom of the page is an illustration of Cornell note taking as well as an example of Cornell notes taken in an economics class:



Cornell

This format provides the perfect opportunity for following through with the **5 R’s** of note taking:

Record

During the lecture, record in the main column as many meaningful facts and ideas as you can.

Reduce

As soon after as possible, summarize these facts and ideas concisely in the Cue Column. Summarizing clarifies meanings and relationships, reinforces continuity, and strengthens memory.

Recite

Cover the Note Taking Area, using only your jottings in the Cue Column, say over the facts and ideas of the lecture as fully as you can, not mechanically, but in your own words. Then, verify what you have said.

Reflect

Draw out opinions from your notes and use them as a starting point for your own reflections on the course and how it relates to your other courses. Reflection will help prevent ideas from being inert and soon forgotten.

Review

Spend 10 minutes every week in quick review of your notes, and you will retain most of what you have learned.

II. GENERAL HINTS ABOUT TAKING LECTURE NOTES

Note taking has four purposes:

(1) to provide you with a written record of what the instructor said so you can review the material soon thereafter;

(2) to force you to pay attention;

(3) to provide material to be organized in some effective way, which involves active effort on your part; and

(4) to provide students the opportunity to condense and rephrase what the instructor is saying, which aids in the understanding of the material.

Keep these hints in mind as you develop your skills as an effective note-taker:

1. Decide on how much you are going to do. Determine whether or not notes are necessary for that class. Try to find out what the instructor focuses on when testing (lectures, textbook, or both?).

2. Practice the TLQR Technique.

    * Tune-in

- Listening takes energy

* Look at the speaker
    - Mannerisms will give extra clues
    - Looking helps focus attention
* Question
    - Nothing will generate interest so much as an appropriate question
* Listen
    - Be selective. Some things are more important than others
    - Be alert for speaker emphasis through:
        ~ Tone or gesture
        ~ Repetition
        ~ Use of cue words such as: remember, most important, etc.
        ~ Illustration on board
        ~ Reference to text
        ~ Note especially new words and ideas

* Note especially those ideas that conflict with your own picture of the world
    - "Odd" ideas are difficult to understand initially and require extra effort
    - You remember things that support your existing concepts, and forget those things that you disagree
* Review
    - Glance back over material from time to time to see if a pattern is emerging, if consistency is being maintained, etc.
    - If possible, clarify points during or after the lecture
        ~ Give the speaker a reasonable chance to make the point clear

~ Avoid sidetracking the speaker. You are the loser when this occurs

3. An active note-taker listens to the lecture carefully, controlling as much as possible the tendency to lose concentration. The note-taker listens for a main idea and the details supporting it. If the main idea and details are already in the textbook chapter or in the handouts, the note-taker does NOT write them down. They should already be underlined or highlighted in your textbook. However, if the instructor repeats a concept that you did not think important when you read the textbook chapter, quickly write down in your lecture notes the topic and go back to your textbook later and underline or highlight it. An ACTIVE note-taker asks questions, if permitted, or jots questions in the margins of his notepaper, or jots down implications beyond what is being said. Relate the material to your own life outside the college.

4. Remain open minded when you hear the instructor's ideas so that you will not be distracted while writing down the concept in your notes. Withhold judgment until you have the ideas written down. Do not allow arguing with the instructor or your anger to interfere with clear, effective note taking.

5. If the instructor is lecturing too quickly, raise your hand and ask him to repeat or, better yet, especially if you believe the idea to be very important, to write it on the board. Instructors generally do not mind slowing down so that you can grasp the concepts they are teaching.

6. If you do not understand an idea in the lecture, raise your hand and ask a question. If you are a slow note-taker, get down what you can and ask the instructor after class or in her office during office hours. Use dashes when the professor is lecturing too fast, or leave spaces so that you can come back later to fill in the details you missed.

7. Leave blank spaces throughout your notes so that you can fill in later something you missed or you can add information she may present later in the lecture; however, do not waste time searching for the right place; just get it down and go back sometime after the lecture.

8. Keep in mind that if you are desperately trying to write down everything you hear, you will never learn to be a discriminating listener. Take risks and write down only those main ideas and details you consider MOST important. You should be spending most of your time listening rather than writing! Those who have read the textbook chapter BEFORE the lecture are usually better at separating the important concepts from the not-so-important concepts.

9. Listen for instructor clues as she lectures: she may slow down for important points, or she may raise her volume, or she may write it on the board. Also listen for such verbal clues as "This is important," "This might be on the test," or "The main point is this." Also listen for key words in her lecture, such as "in conclusion," "therefore," "consequently," or "in summary."

10. Many instructors tend to put about 3 to 5 main ideas in a one-hour lecture and about 2 to 3 details to develop each main idea. The rest of the lecture is explanatory material and more examples. Try to see the MAIN IDEAS and a few details to support them; DO NOT get lost in a barrage of minor details which do not seem related to the main ideas and the details that develop those main ideas.

11. Make your notes legible enough for you to be able to read them afterwards. Abbreviate and make up your own symbols, but have an abbreviation key at the front of your notes to remind yourself what your abbreviations or symbols mean. For example, I use the capital letter to represent any word form of the class title or academic area (in my notes, E = economics, economical; R = religion, religious; H = history, historical; S = sociology, sociological, etc.). Typical symbols might be = for "is the same as" or $ to mean "money" or an arrow pointing up to mean "increases," or an arrow pointing down

to mean “decreases.” In writing your main ideas and details, skip unimportant words and focus on the nouns, verbs, and adjectives(6 E gls = “The United States government operates under the guidance of 6 economic goals”). Notice I did not write in “US” because I know I will remember that in this class we are focusing on US economics. Some students prefer to rewrite their notes; however, that is time-consuming, and the effort spent in rewriting your notes would be BETTER spent in rereading and reciting them from memory.

Abbreviation Symbols. Here is a list of commonly used symbols that students use when taking notes; commit them to memory.

=	equals
=ly	equally
“ “	repeat the same information
---->	causes
<----	is caused by
>	greater than
<	less than
//	parallel
+	more
-	less
#	number
%	percent
&	and

Words Commonly Abbreviated. The following is a list of abbreviations for words and phrases that you will commonly see in textbooks and hear in lectures:

c = century
re = regarding
nec = necessary
pt = point
syn = synonym
i.e. = that is, that is to say
fem = feminine
masc = masculine
incr = increase
decr = decrease
cont’d = continued
usu = usually
def = definition
intro = introduction
cst = contrast

w/o = without
imp’t = important
sp = spelling
incl = including
e.g. = for example
amt = amount
p = page
pp = pages
cm = compare
mn = main
nec = necessary
chp = chapter
vs = versus, or against
neg = negative (or -)
pos = positive (or +)

12. Copy down whatever the professor writes on the board, regardless of whether or not you see it as relevant. Material written on the blackboard frequently becomes part of the test.

13. Sit as close to the front of the class as possible; if you are uncomfortable doing so, work your way up gradually. By sitting close to the lecturer, you will be less distracted and more likely to catch everything he says. It is also easier to see and to hear at or near the front of the classroom. Above all, AVOID sitting near doorways and windows; they are distracting, and windows can produce window glare, which tires the eyes.

14. Write down as precisely as possible ALL ASSIGNMENTS that she explains in class. If you are not certain, raise your hand and ASK. Write these assignments into your appointment book when you return to your room.

15. When writing your notes, if you make a mistake, DO NOT erase it; instead draw a line through it. This saves time, and you may discover later that you want the mistake.

16. Always bring two pens to class in case one fails you. Other students generally do not like to be interrupted and asked if they have an extra pen. Always write your notes in pen, not pencil, because pencil writing can quickly fade on the page.

17. Study your lecture notes for a particular lecture **within 24 hours** of hearing the lecture. Ideally, you should study and learn your notes the day you take them; this way if you have to flesh out any sentences or reorganize your notes on the back of the page, the lecture will still be fresh in your memory. In fact, you can even begin your study in class; for example, if the instructor takes time to set up a video, you can review your notes, dotting the I's and writing in a study question in the left-hand margin of the page.

18. During your first review of your day's notes, edit whatever needs editing; for example, spell out words you abbreviated IF you fear you might forget what the abbreviation means (or keep an abbreviation key at the beginning of your notes, writing down one column your abbreviations and in another column what they mean. But don't write out the obvious ones (for example, =). Fill in any words that will help you to remember what the sentence is saying.

19. Conduct a weekly review session for ALL of your notes that might appear on the next test. Set aside about 1 hour, say on a Sunday evening, and review your notes for each of your classes. In classes where there is a great deal of detail and the lecture notes are the main source for her tests, students may choose to review two or three times per week.

20. Finally, it is always wise to reread and review your notes from the last lecture before you attend the next lecture. This way, you will better keep with the flow of the course material.

Note-taking Exercises

A. Assume that the following abbreviated sentences on Pablo Picasso are from your art history lecture notes. Your job is to rewrite each sentence, changing the abbreviations to words.

1. Picasso is an imp't fig w maj of critics.

2. Helped develop the sig theory of Cubism.

3. C makes objs look diff.

4. Viewers see an ovjk from sev prspctvs.

5. C can be cf to Impressionism.

6. Pic influ by prim African art as well.

7. Viewers need to view P w a diff set of rules.

8. P's art work = P's interp of the wrld.

B. Now write your own abbreviated sentences from the sentences on Cubism that follow. Be sure to condense and to make up your own abbreviations where necessary.

1. Georges Braque began to work with Picasso in the first half of the twentieth century.

2. It is often difficult to tell the work of these significant artists apart.

3. Both began to make old scraps of materials part of their paintings.

4. Their artistic creations implied a significant change in how the viewer saw their works.

5. These old materials were both part of the work of art and separate objects as well.

C. The following are sentences and paragraphs taken from lectures on different subjects. Your job is to have a friend read it out loud, and then you condense the material into your own notes. Use Cornell paper and abbreviations where appropriate.

1. Today I plan to discuss some of the background material on Charles Darwin- the creator, some of you may know, of the theory of evolution.

2. Much of his research for the theory of evolution came from his many travels to South America in a ship named the *Beagle*.

3. Much of Darwin's research was conducted in a very interesting geographical area known as the Galapagos Islands.

4. From his data in the Galapagos Islands, Darwin began to develop his ideas regarding the theory of evolution.

5. I want to spend a part of this lecture discussing what the computer is capable of doing. Let me first emphasize that it can only do what the human being can do. The computer's edge over us is that it can perform an amazing number of calculations in a much shorter period of time. It is also infinitely patient. The computer can perform the same operation over and over again without getting bored or anxious. No human being is as patient as this. And finally, the computer frees us from repetitive work and allows us to be creative. But I want to repeat that the computer does not do work that we are incapable of doing.

6. Last week we finished our discussion of the executive branch of our government. Today let's begin a discussion of the judicial branch -- specifically the Supreme Court. What makes up the Supreme Court, and what are some of its powers? The Supreme Court consists of nine justices appointed by the President with the approval of Congress. These justices, I must add, serve a life term.

Let's talk about three of the court's major duties. First, the Court listens only to cases brought before them
-- it cannot act on its own in bringing cases to hear. The Supreme Court can listen only to certain kinds of cases. The Constitution spells this out. The Court can hear only cases dealing with ambassadors, statesmen, and problems that occur sometimes between states. Finally -- and this is very important -- once the Supreme Court has acted, the decision must stand. It becomes the law of the land. Only an amendment to the Constitution can change it. Here, I think lies much of the Court's respect and power.

7. The bulk of today's lecture will concern the territory an animal claims. Let's first define the term. A territory for an animal is a geographical area that the animal chooses to have dominance over. The key word here is dominance. Birds and land animals alike seem to exert control over their territory. Interestingly, animals are more aggressive in defending the center, or core, of their territory and less aggressive in the outer limits of their territory.

What happens to an animal whose territory is disturbed? And do the answers to these questions say anything about human beings? Many psychological studies show that animals show greater stress if they are put too close to one another. What does this have to do with us? Aren't people put too close together in cities? And don't city dwellers exhibit more crime and anxiety than rural dwellers? Their theory that the human being has a territory is a speculative one and still needs much more careful research.

8. We are going to begin a discussion of language. And I think it is best to consider what are its possible origins. We first need to look at our human ancestors to see what it was that made it necessary for them to develop language. I must emphasize that language's development was a gradual process indeed.

Once theorist suggests in an interesting way that language began to be needed once these ancestors moved from the protection of the forest to more open grasslands. First, on grass, our ancestors had to learn to walk efficiently on two feet. Walking on two feet caused better vision, better use of the hands, and a brain that became more complex. Our ancestors needed these skills for two reasons: to protect themselves against predators and to find food more easily.

What did language sound like at this time? It was likely at first no different than the howl of the chimps. New sounds may have emerged as our ancestors found themselves in play. It is important to note that any language that they had was tied to the present, not the past or future. Language, in other words, was not related to human memory.

Then something very important occurred. Our ancestors needed to tie language to memory. Some language experts believe that hunting was the major cause of this; I tend to agree. Hunters had to communicate both to those who were hunting with them and to those who were hunting close behind. These hunters would need to say things such as "I killed an animal," or "The animal got away," or "I need another spear."

Once our ancestors began to settle in larger social groups, their need to organize became even more complex. Language theorists and anthropologists speculate that a more advanced social organization led to more advanced speech. This idea is quite an interesting one for me.

I must emphasize that these comments are only theories. Language is still a mysterious mechanism. Its histories and its origins are just as unclear as the mechanism itself.

9. Let's talk a little about converting temperature from one scale to another. There are two major temperature scales I want you to know: Fahrenheit and Celsius. On the Celsius scale, zero degrees is the freezing point of water, and 100 degrees is the boiling point of water. On the Fahrenheit scale, 32 degrees is the freezing point of water, and 212 degrees is the boiling point of water. If you want to convert Celsius to Fahrenheit and vice versa, you should use the following equations: temperature Celsius = (5/9 * temperature Fahrenheit) + 32 and temperature Fahrenheit = (9/5 * temperature Celsius) + 32. You will be using these formulas often for the rest of the semester.

10. Today we will continue our discussion of the Middle Ages by first considering the Black Death, which struck Europe in the 1300s. First, let me give you some information about this dreaded plague. In England, for example, between 1348 and 1349, one-third of the population was taken by this plague. What was the Black Death? It was a disease that was caused by fleas found in black rats. And it is for this reason that the disease is called the Black Death. This disease, I want to emphasize, did not die out in the 1300's but attacked Europeans off and on for the next 300 years. It was a frightening disease indeed.

11. This will be the first of two lectures on the history of the American city. Here are some facts that I think are revealing. About 200 years ago, 95 percent of Americans lived on farms. Then, there were only twenty-four urban areas, all of which had changed dramatically. Consider these facts. In 1960, 70 percent of the American public lived in urban areas. From 5 percent to 70 percent! In 1960 there were over 6,000 cities or urban areas. Why has life in America changed so drastically? We will soon find out.

12. Let's look at the effects of the Industrial Revolution on energy and society. The first principal effect was that more work could be done in less time. And this is an important effect. Steam and coal became the major energy sources to power the very big machines that were being built. Today we find that oil and nuclear fission are even more powerful energy sources. The introduction of technology also caused a change in people's socializing--at least the way people socialized while they worked. Workers in large factories or companies no longer boasted about knowing how to do all the tasks that went into making the product. They were assigned to do only one small task. It is the sociological and psychological aspects of technology that I want to discuss next time.

13. Let's talk a bit today about how television advertising affects its viewers. Each television commercial suggests a certain set of values. First, you will find that good looking people are usually actors in commercials. Advertisers are suggesting that good-looking people are generally better people. Second, you will find that soap ads are suggesting that to be physically clean from their product makes you a better person. Third, beer commercials are suggesting that the definition of happiness for the American male is drinking with the boys and having a loud, good time. Somehow fun for men is associated with alcohol. Fourth, sex is almost everywhere in ads. This suggests, I think, that sex is the most significant part of life.

14. I will begin my lecture this afternoon by introducing one of my favorite writers. His name is Henry David Thoreau. He did not have a very long life. He was 45 when he died of tuberculosis in 1862. But he left his mark on American literature. He made nature come alive for many readers. Thoreau believed that to experience nature was to experience a heightened spiritual appreciation. In short, nature for Thoreau was a blessing.

Perhaps Thoreau's most famous work was Walden. In this first person narrative, Thoreau traces his solitary experiences on Walden Pond in Concord, Massachusetts. A major statement that Thoreau makes is one that we can relate to today. He asks us to strip life of its nonessentials. If we do, we will have a greater love of the world around us. Another thought that will stay with you is this: You will learn to understand yourself much better if you understand the workings of nature. Let's now talk further about what these two statements suggest.