

On Course

Strategies for Creating Success in College and in Life

Seventh Edition

SKIP DOWNING



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Skip Downing

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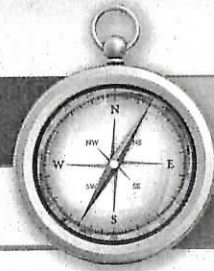
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Wise Choices in College

TAKING NOTES



In Chapter 2, we discussed the many hours you will spend in college **Collecting** information and skills from your reading assignments. In this chapter, we will examine the second most time-consuming way you will **Collect** information while in college: attending classes. In the pursuit of a four-year degree, students spend nearly 400 hours in a formal classroom. Students pursuing a two-year degree spend about half that time in class.

Your instructors, of course, expect you to learn what they cover in these class sessions. Unless you're motivated to take effective notes, however, most of what you hear in class will zip through your short-term memory and be quickly forgotten. More than one hundred years ago, Hermann Ebbinghaus conducted the first studies of memory and discovered that we lose about 75 percent of what we learn within twenty-four hours. That's why effective note-taking is an essential skill for achieving academic success in college.

Taking notes while attending a class is similar to taking notes while reading a textbook. However, taking notes during a class offers additional challenges. For one thing, as you mark or annotate a textbook, you stop reading. Thus, while reading you are in total control of how fast you receive new information. By contrast, when you take notes during a class, the speaker keeps talking. You have little or no control over the speed of information delivery. This situation places greater demands on your ability to identify key concepts, main ideas, and supporting details and write them down accurately and completely.

And that's not all. You're likely to encounter instructors who will provide their own unique obstacles to note-taking: They may speed talk until

your head spins. Or . . . drone . . . on . . . so . . . sloooowly . . . you . . . have . . . trouble . . . staying . . . awake. They may be poorly organized. Or have accents that you have difficulty understanding. Some instructors may wander maddeningly from the topic or distract you with irritating mannerisms. Or all of the above.

A summary of research on note-taking compiled by Kenneth Kiewra reports sobering news. Lecture notes taken by first-year students contain, on average, only 11 percent of the critical ideas presented during a class. No matter how well you study, you can't pass tests if you are studying only 11 percent of the important ideas in a course.

You can choose to complain, blame, and make excuses for why it's impossible to take good notes in a class. Or, you can take full responsibility for your learning outcomes and experiences. Regardless of how many obstacles the instructor or the subject presents, it's your job to take effective notes. In this chapter you'll learn how.

TAKING NOTES: THE BIG PICTURE

To take effective class notes, you need to answer two key questions: *What* should I write in my notes and *how* should I write that information?

First, consider what to write in your notes. Despite a popular misconception, the answer is not "everything the instructor says." Even if you could write that fast, having a word-for-word transcript of a class is not the goal of note-taking. As with reading, the goal of note-taking is **Collecting** key concepts, main ideas, and supporting details. Thus, much of what you learned earlier about taking notes while reading also applies to taking notes in class. But you'll need some new strategies

to compensate for the challenges of writing notes while someone is speaking.

As for how to write your notes, a number of note-taking systems have been invented, but essentially they all fit into one of two categories: linear or graphic. Examples of these methods will be explained in this chapter.

Many students worry about taking perfect class notes because they use their notes to study for tests. In the CORE Learning System, however, you do not study from either your class notes or your textbooks. Instead, as you'll learn in the next chapter, after **Collecting** key concepts, main ideas, and supporting details from all sources, you'll **Organize** this information into effective study materials. It is these materials that will help you create deep and lasting learning. For now, simply examine the note-taking strategies that follow and choose the ones that you think will best help you **Collect** important knowledge during each class. No single method of note-taking works best for everyone, so experiment and personalize a note-taking system that works best for you.

As you examine the following strategies, keep in mind that the big picture of note-taking is essentially the same as for reading: **You are Collecting key concepts, main ideas, and supporting details.**

BEFORE TAKING NOTES

1. Create a positive affirmation about taking notes. Some students hold negative beliefs about their ability to take good notes or the value of doing so. Create an affirming statement about taking notes. For example, *I take notes that record all of the main ideas and supporting details, making learning easy and fun.* Along with your personal affirmation, repeat this note-taking affirmation to motivate new learning attitudes and behaviors.

2. Assemble appropriate supplies. Experiment and decide on the best note-taking supplies for you. Find a pen you like writing with. Keep your notes in ring binders, composition books, spiral

binders, or a laptop computer. Ring binders are handy because you can add and remove pages easily. This option is helpful when an instructor provides handouts or you revise your notes. If you use one binder for all of your classes, use tabs to separate the notes for each class. If you take class notes on a laptop computer, be sure to back up your files often to avoid the disaster of losing notes because of a hard-drive crash.

3. Complete homework assignments before class.

Remember, neural networks created by prior learning make new learning easier. That's why completing assignments before class increases your ability to understand lectures and discussions. Also, you'll know what belongs in your notes. For example, you'll know if the instructor is repeating what was in the reading or adding new information. And, suppose the instructor's presentation style presents a challenge (such as speed talking). Because the information is already familiar, you'll more easily spot key concepts, main ideas, and supporting details. If your homework includes solving problems, complete them before class as well.

4. Prepare a list of questions. After completing homework assignments, write questions you have about the information. If you write them on binder paper, leave a space after each question for the answer. If you write questions on 3" × 5" cards, you can put answers on the other side. If you place questions in a computer file, it's easy to type in the answers. Bring these questions to class, study group meetings, tutoring sessions, or a conference with your instructor.

5. Attend every class. As obvious as this suggestion may seem, some students don't create good notes simply because they aren't in class. Sure, you can borrow notes from another student. But is it smart to bet your academic success on another student's note-taking skill? Remember, research reveals that first-year students' notes contain only 11 percent of the important ideas presented during a class. Your notes, after applying the strategies in this chapter, will be far more effective than that!

6. Be organized. At the end of each term, you'll have note pages galore for each course. To keep them organized, write some or all of the following information at the top of each note page:

- Course name
- Date of the class
- Topic of the class (usually listed in the course syllabus)
- Any associated reading assignments (also usually listed in the course syllabus)
- Page number (in case your notes get mixed up later)

WHILE TAKING NOTES

First, let's consider WHAT to write in your notes.

7. Listen actively for key concepts, main ideas, and supporting details. **Collecting** this information *accurately* and *completely* takes active listening. When you listen actively, you're able to reflect back what a speaker says. In a conversation with a friend, you might reflect: *Sounds like you had an exciting time white water rafting last weekend.* Or in a music class, you might reflect, *So, you're saying a divertimento is a short musical piece that was popular during the Classical period.* When taking notes, you'd simply write an abbreviated version of this reflection: *Divertimento—a short musical piece popular during the Classical period.* Be aware that inner chatter competes with active listening, so quiet your Inner Critic and Inner Defender during class. Don't judge yourself: *I have no clue what she's talking about; I am such a dunce.* And don't judge others: *This jerk is the worst teacher on the planet.* Replace judgments with an active effort to hear all of the speaker's key concepts, main ideas, and supporting details. After all, if you don't **Collect** the course information completely and accurately, then your entire learning effort is sabotaged from the start. See pages 158–159 for more suggestions to improve active listening.

8. Ask and answer questions. When you bring questions to class, raise your hand and ask. When your instructor asks a question, raise your hand and answer. When you don't understand an idea, raise your hand and ask: *Excuse me, Professor, what holds atoms together in a molecule?* Or, if you're too confused to formulate a question, simply request more information: *Would you please say more about Kant's idea that metaphysics can be reformed through epistemology?* If asking a question isn't an option, leave a space in your notes and write a question in the margin. Many options exist for later filling in the answer: Listen for the instructor to answer your question during the class. Visit the instructor during his or her office hours. Look for the missing information in your textbook. Ask a classmate or study group member for help. Seek assistance at your college's tutoring center.

9. Listen for verbal cues. Instructors will often provide verbal cues to introduce a main idea or supporting detail, thus helping you decide *what* to write in your notes. When you hear any of the following, get ready to record an important idea: *The point is . . . The following is very important . . . Be sure to write this next idea in your notes . . . On page 135 underline the following . . . Let me repeat that. . . The key here is . . . That's a great answer to my question . . . A third component is . . . The main symptom of this problem is . . . The next step for solving this problem is . . . If you remember only one thing from today's class, remember that . . . The key point here is . . .* (and the granddaddy of them all) *This will be on the test.* Also, instructors often give verbal cues before presenting supporting details. When you hear any of the following, get ready to record one or more supporting details: *To illustrate this point . . . Evidence for this includes . . . A good example is . . . To explain that idea further . . . This was proven in a study that showed . . .* Listen for additional kinds of supporting details such as personal experiences, experiments, dates, anecdotes, definitions, lists, names, facts, and data.

Now, we'll consider *HOW* to write your notes.

10. Take notes with an outline. Now that we've looked at ways to determine *what* to put in your notes, let's consider the second critical choice: *how* to write your notes. As mentioned earlier, the two general methods of note-taking are linear and graphic. First, we'll consider linear notes, which are the more common of the two. When you take notes in a linear fashion, you record ideas as much as possible in the order they are presented ("linear" means in a line). Outlines are good for this. They record ideas and supporting details on separate lines, using indentations to indicate levels of importance. You can view an example of an informal outline in Figure 3.1. Note the use of short phrases instead of full sentences to greatly condense what the speaker says. Here's how to take notes with an outline:

- Write a *key concept* at the top of a page. This information is usually expressed in a word or phrase. This might be the title of a chapter or a key word in the instructor's course outline. For example, the key concept in a history class might be "Causes of World War II," in a biology class it might be "Cell Communication," and in a psychology class it could be "Abraham Maslow."
- Record *main ideas (level 1)* beginning at the left margin. For a formal outline, start each level 1 line with a Roman numeral (e.g., I, II, III, IV).
- Under each main idea, indent a few spaces and record related *secondary ideas (level 2)*. For a formal outline, start each level 2 line with a capital letter (e.g., A, B, C, D).
- Under each secondary idea, indent a few more spaces and record any related *major supporting details (level 3)*. For a formal outline, begin each level 3 line with an Arabic numeral (e.g., 1, 2, 3, 4).
- If you need to add *minor supporting details (level 4)*, indent those lines a few more spaces

and, for a formal outline, begin those lines with small letters (e.g., a, b, c, d).

Outlines are most helpful when instructors present well-organized lectures. If your instructor provides printed lecture notes or uses PowerPoint slides, you've probably got an organized instructor. If, however, your instructor jumps from topic to topic and back again, all is not lost. That's when a concept map can ride to the rescue.

11. Take notes with a concept map. In this graphic note-taking method, *where* you place information (key concepts, main ideas, and supporting details) on the page shows both their level of importance and their relationship to one another. In general, ideas placed closer to the middle are more important than ideas placed farther away from the middle. Figure 3.2 shows an example of a concept map with content. Here's how to take notes with a concept map:

- Write the *key concept* in the middle of a page; then underline or draw a circle around it. This information is usually just a word or phrase. For example, if the topic of a class session is "Photosynthesis" or "Logical Fallacies" or "Abraham Maslow," that is what you would write in the middle of the page.
- Write *main ideas (level 1)* near the key concept, underline or circle them, and draw lines connecting them to the key concept.
- Write *secondary ideas (level 2)* near their related main idea, underline or circle them, and draw lines connecting them to the related main ideas.
- Write *major supporting details (level 3)* near their related secondary idea, underline or circle them, and draw lines connecting them to the related secondary idea.
- Write *minor supporting details (level 4)* near their related major supporting idea, underline or circle them, and draw lines connecting them to the related major supporting idea.

Concept maps are helpful when lecturers leap from idea to idea. They are also good for taking notes

Course: Psychology 101
 Date: October 5
 Topic: Abraham Maslow

Abraham Maslow (1908–1970)

- Family immigrated to Brooklyn
 - One of seven children
 - Unhappy, neurotic child
- Taught at Teachers College, Brooklyn College, Brandeis
- Sought to understand human motivations
- Became leader of humanistic psychology movement of the 1950's and 1960's

Maslow's Hierarchy: Theory of Human Motivation (like a pyramid)

- Physiological needs (the foundation)
 - Food, rest, shelter, etc.
- Safety needs
 - Security, stability, freedom from fear
- Psychological needs
 - Belonging, love, affiliation, acceptance, esteem, approval, recognition
- Self-actualization (top of the pyramid)
 - Need to fulfill oneself
 - Maslow: "to become everything that one is capable of becoming."

Humanistic psychology

- Maslow led the "Third Force" in psychology
 - Alternative to...
 - Freudian psychoanalysis
 - Behaviorist psychology
- Stressed the power of a person to choose how to behave
 - As opposed to...
 - Freudians: Choices controlled by childhood influences
 - Behaviorists: Choices controlled by conditioning
- Appealed to the individualistic, rebellious college students of the 1960's

Figure 3.1 Informal Outline Example

Source: From Carol Kanar, *The Confident Student*, Third Edition, p. 353. Copyright © 1998 by Houghton Mifflin Company. Used by permission.

on class discussions that move back and forth between topics. As a speaker returns to an earlier idea, go to that part of the concept map, add the new information, circle or underline it, and draw a line

connecting it to related information. The visual nature of a concept map makes it especially appealing to students who like a picture of what they are learning.

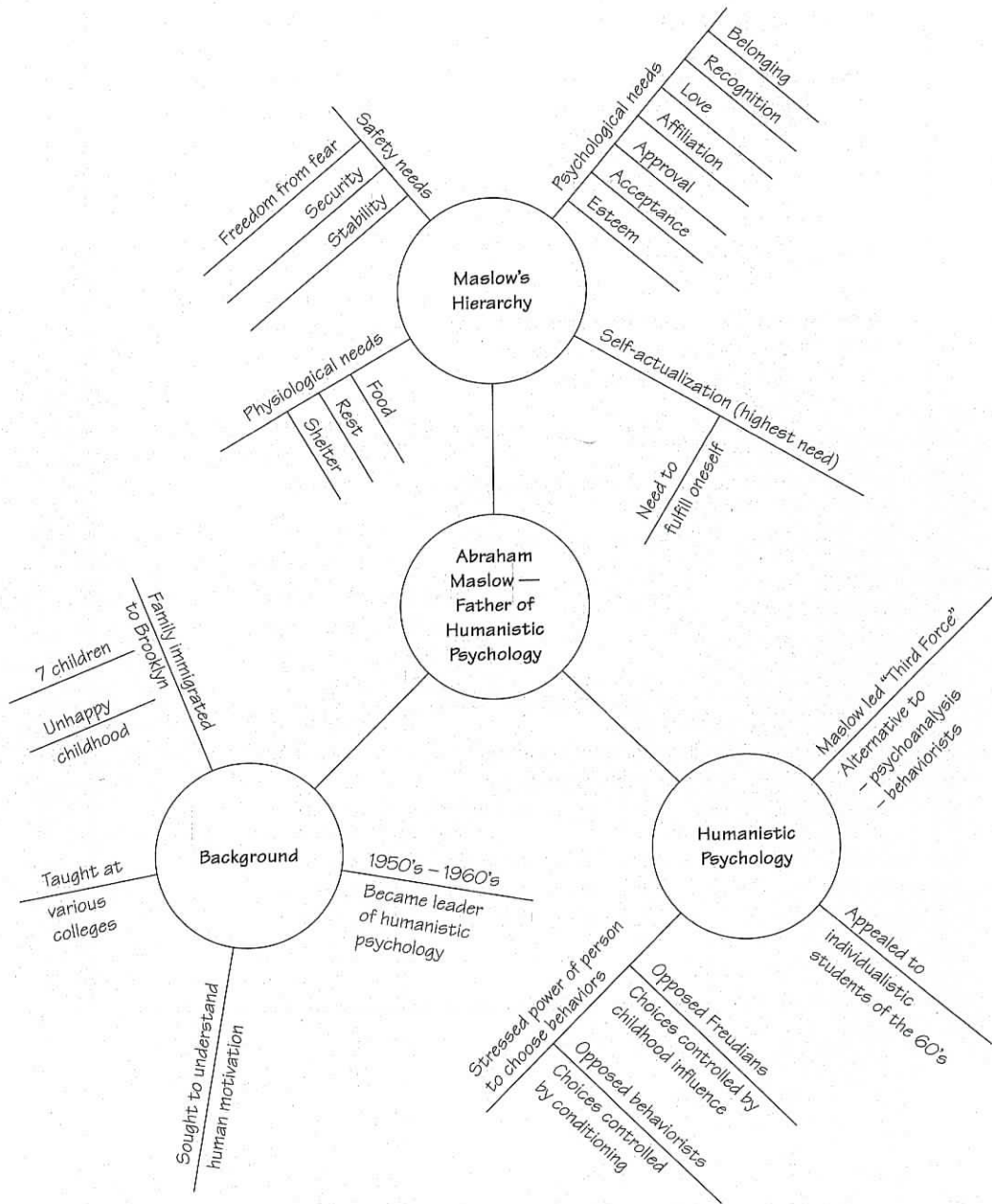


Figure 3.2 | Concept Map Example

12. Use three-column notes for mathematics.

Since math instructors spend much class time demonstrating how to solve problems, a three-column approach is extremely helpful for **Collecting** their methods. First, divide your note page into three columns. Title the left-hand column "Problem," the middle column "Solution," and the right-hand column "Explanation." When the instructor presents a problem, write it in the left column. As the instructor demonstrates how to solve the problem, write all steps in the middle column, making sure you understand each one. In the right-hand column, add any explanation that will help you understand how to solve similar problems. For example, you might add an explanation of each step or convert unfamiliar symbols into words.

Structure of Three-Column Math Notes

Problem	Solution	Explanation
The math problem as presented by the instructor	Step 1	Elaboration to explain steps of the solution
	Step 2	
	Step 3	
	Step 4	
	Step 5	
	Etc.	

You'll find an example of three-column math notes on page 145.

13. Speed up note-taking. Most speakers talk much faster than you can write (or even type, if using a computer), so here are three strategies for speeding up your note-taking:

- *Condense:* Instead of attempting to write everything, listen for a couple of minutes, identify the key concept, a main idea, and one or two secondary ideas, and then paraphrase them in your own words.
- *Leave a blank space:* When you miss something, skip down a few lines, and pick up writing what is being said now. As with unanswered questions, you can return later to fill in the blank space in a number of ways: ask the instructor

(in class, if appropriate, or during office hours), ask a classmate, ask a tutor, or review your reading assignment for the missing information.

- *Use abbreviations:* Create your own personal shorthand. The following are some possible abbreviations:

Ex	example	&	and
con't	continued	dept	department
imp	important	→	leads to
#	number	=	equals
1 st	first	vs	versus
w/	with	w/o	without
nec	necessary	etc	and other things

14. Record the class. If you try the previous suggestions and still aren't happy with the quality of your notes, ask your instructor for permission to record the class. You can listen to the recording as many times as needed to fill in gaps in your notes or review difficult concepts. *Caution:* Don't procrastinate until you have forty-five hours of recorded class sessions to listen to and only twenty-four hours before the final exam. Instead, listen often to short segments. Each time, practice different note-taking strategies until you perfect your own personalized system.

AFTER TAKING NOTES

15. Polish your notes within twenty-four hours.

As soon as possible after each class, make sure your notes are *accurate, complete, and understandable*. Do some or all of the following:

- Finish partial sentences.
- Expand on key words.
- Fill in spaces with missing information.
- Correct misspellings.
- Clarify unreadable words and confusing sentences.
- Delete unnecessary information.

- Revise drawings or charts.
- Correct steps in problem solving.

Afterward, if you still have gaps or confusion in your notes, meet with classmates, a tutor, or your instructor to address the problems. Not only does this action provide you with polished notes, it continues the active process of creating deep and lasting learning.

16. Compare notes. Compare your notes with those of your study group members or other motivated classmates. See if others have **Collected** important information that you missed. See where

their notes may have different information and decide whose version is more accurate. This effort will help you all **Collect** additional information and further polish your notes.

NOTE-TAKING EXERCISE

In an upcoming class, take notes in a new way. Compare your experimental notes with those of a classmate, seeing which of you has recorded more complete and accurate information for later studying.

A BIT OF HERESY

In many study skills books, another method of note-taking is usually presented. Named for the university where it originated, the Cornell Method calls for note paper to be divided into three sections (see page 146 for the structure). Section A is used for recording notes from a reading assignment or class session. However, the Cornell Method offers no unique suggestions about *how* to record notes in that section. Sections B and C are employed later for adding key words, questions, and summaries,

so they also offer no guidance about *how* to take notes. Thus, although the Cornell Method is usually presented as a note-taking system, it actually offers no strategies for *how* to take notes while reading or attending class (only *where* to record them). So, in the CORE Learning System, the Cornell Method is not considered a note-taking method. It is, however, a very powerful method for **Rehearsing** and **Evaluating** learning, so we will examine the use of this valuable learning strategy in Chapter 4.

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