

CHAPTER 6

Listening, Note Taking, and Participating

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In virtually every college class you take, you'll need to master two skills to earn high grades: listening and note taking. Taking an active role in your classes—asking questions, contributing to discussions, or providing answers—will help you listen better and take more meaningful notes. That in turn will enhance your ability to learn: to understand abstract ideas, find new possibilities, organize those ideas, and recall the material once the class is over.

Listening and note taking are critical to your academic success because your college instructors are likely to introduce new material in class that your texts don't cover, and chances are that much of this material will resurface on quizzes and exams. Keep these suggestions in mind as you read the rest of this chapter:

IN THIS CHAPTER, YOU WILL LEARN

- How to assess your note-taking skills and how to improve them
- Why it's important to review your notes as soon as reasonable after class
- How to listen critically and take good notes in class
- Why you should speak up in class
- How to review class and textbook materials after class

1. Since writing down everything the instructor says is probably not possible and you are not sure what is important to remember, ask questions in class, go over your notes with a tutor or someone from your campus learning center, or compare your notes with a friend's.
2. Don't record a lecture unless you can concentrate on listening to the tape while commuting. Instead, consider asking the instructor to speak more slowly or to repeat key points, or meet with a study group to compare notes. If there is a reason you do need to tape-record a lecture, be sure to ask the instructor's permission first. But keep in mind that it will be difficult to make a high-quality recording in an environment with so much extraneous noise. And even though you're recording, take notes.

3. Instead of copying an outline from the board, wait until the instructor covers each point in sequence. Write down the first point and listen. Take notes. When the next point is covered, do the same, and so on.
4. Take notes on the discussion. Your instructors may be taking notes on what is said and could use them on exams. You should be participating as well as taking notes.
5. Choose the note-taking system that works for you.
6. If something is not clear, ask the instructor in class or after class.
7. Instead of chatting with friends before class begins, use the time to review your study notes for the previous class.
8. Make it a habit to review notes with one or two other students.
9. Be aware that what the instructor says in class may not always be in the textbook, and vice versa.
10. Speak up! People tend to remember what they have said more than what others are saying to them.

Short-Term Memory: Listening and Forgetting

Ever notice how easy it is to learn the words to a song? We remember songs and poetry more easily in part because they follow a rhythm and a beat, in part because we may repeat them—sometimes unconsciously—over and over in our heads, and in part because they often have a personal meaning for us—we relate them to something in our everyday lives. We remember prose less easily unless we make an effort to relate it to what we already know. And, because it is the most unstructured form of communication, and virtually impossible to relate to previous knowledge, we can hardly remember gibberish or nonsense words (see Figure 6.1).

Because most forgetting takes place within the first 24 hours after you see or hear something, it may be difficult to retrieve the material later. In two weeks, you will have forgotten up to 70 percent of the material! Forgetting can be a serious problem when you are expected to learn and remember a mass of different facts, figures, concepts, and relationships. Many instructors draw a significant proportion of their test items from their lectures; remembering what is presented in class is crucial to doing well on exams.

Using Your Senses in the Learning Process

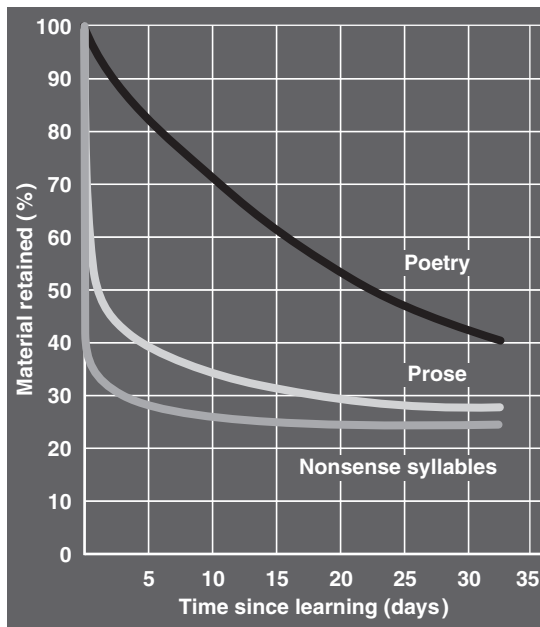
You can enhance memory by using as many of your senses as possible while learning. How do you believe you learn most effectively?

1. **Aural.** Do you learn by listening to other people talk, or does your mind begin to wander when listening passively for more than a few minutes?

2. **Visual.** Do you learn best when you can see the words on the printed page? During a test, can you actually visualize where the information appears in your text? Can you remember data best when it's presented in the form of a picture, graph, chart, map, or video?
3. **Interactive.** Do you enjoy discussing course work with friends, classmates, or the teacher? Does talking about information help you remember it?
4. **Tactile.** Do you learn through your sense of touch? Does typing your notes help you remember them?
5. **Kinesthetic.** Can you learn better when your body is in motion? Do you learn more effectively by doing it than by listening to or reading about it?
6. **Olfactory.** Does your sense of taste or smell contribute to your learning process? Do you cook following a recipe or by tasting and adding ingredients? Are you sensitive to odors?

Figure 6.1 Learning and Forgetting

Psychologists have studied human forgetting in many laboratory experiments. Here are the forgetting curves for three kinds of material: poetry, prose, and nonsense syllables. The shallower curves for prose and poetry indicate that meaningful material is forgotten more slowly than nonmeaningful information. Because poetry contains internal cues such as rhythm and rhyme, we tend to forget it less quickly than prose.



SOURCE: Used with permission from Wayne Weiten, *Psychology: Themes and Variations* (Pacific Grove, CA: Brooks/Cole, 1989, p. 254. Based on data from D. van Guilford, Van Nostrand, 1939).

In college, many faculty members share information primarily through lecture and the text. However, many students learn best through visual and interactive means, creating a mismatch between learning and teaching styles. This is a problem only if you do not learn how to adapt material conveyed by means of lecture and text to your preferred modes of learning. Following a system will help you remember and understand lecture material better and relate information to other things you already know. The approach we recommend consists of preparing to listen before class, listening and taking notes during class, and reviewing and recalling information after class.

Before Class: Prepare to Remember

Even if lectures don't allow for active participation, you can take a number of active learning steps to make your listening and note taking more efficient. Remember that your goals are improved learning in the classroom, a longer attention span, improved retention of information, clear, well-organized notes for when it's time to study for exams, and better grades.

Because many lectures are demanding intellectual encounters, you need to be intellectually prepared before class begins. You would not want to walk in cold to give a speech, interview for a job, plead a case in court, or compete in sports. For the same reasons, you should begin active listening, learning, and remembering before the lecture.

1. Do the assigned reading. Unless you do, you may find the lecturer's comments disjointed, and you may not understand some terms he or she uses. Some instructors refer to assigned readings for each class session; others may hand out a syllabus and assume you are keeping up with the assigned readings. Completing the readings on time will help you listen better, and critical listening promotes remembering.

As an experiment, don't take notes, but listen for the main points of a lecture. Then write down those main points and, with the permission of your instructor, compare them in small groups with other students. How many groups remembered all the main points? Why was there some forgetting?

2. Warm up for class. Read well and take good notes, or annotate (add critical or explanatory notes), highlight, or underline the text. Then warm up by reviewing chapter introductions and summaries and by referring to related sections in your text and to your notes from the previous class period.

3. Keep an open mind. Every class holds the promise of discovering new information and uncovering different perspectives. One of the purposes of college is to teach you to think in new and different ways and to provide

support for your own beliefs. Instructors want you to think for yourself. They do not necessarily expect you to agree with everything they or your classmates say, but if you want people to respect your values, you must show respect for them as well by listening with an open mind to what they have to say.

- 4. Get organized.** Develop an organizational system. Decide what type of notebook will work best for you. Many study skills experts suggest using three-ring binders because you can punch holes in syllabi and other course handouts and keep them with class notes. Create a recording system to keep track of grades on all assignments, quizzes, and tests. Retain any papers that are returned to you until the term is over and your grades are posted on your transcript. That way, if you need to appeal a grade because an error occurs, you will have the documentation you need to support your appeal.

• During Class: Listen Critically

Listening in class is not like listening to a TV program, listening to a friend, or even listening to a speaker at a meeting. Knowing how to listen in class can help you get more out of what you hear, understand better what you have heard, and save time. Here are some suggestions:

- 1. Be ready for the message.** Prepare yourself to hear, to listen, and to receive the message. If you have done the assigned reading, you will know what details are already in the text so that you can focus your notes on key concepts during the lecture. You will also know what information is not covered in the text, and will be prepared to pay closer attention when the instructor is presenting unfamiliar material.
- 2. Before taking notes, listen to the main concepts and central ideas, not just to fragmented facts and figures.** Although facts are important, they will be easier to remember and make more sense when you can place them in a context of concepts, themes, and ideas.
- 3. Listen for new ideas.** Even if you believe you are an expert on the topic, you can still learn something new. Do not assume that college instructors will present the same information you learned in a similar course in high school.
- 4. Really hear what is said.** Hearing sounds is not the same as hearing the intended message. Sit near the front and focus on the instructor. As a critical thinker, make a note of questions that arise in your mind as you listen, but save the judgments for later.
- 5. Repeat mentally.** Words can go in one ear and out the other unless you make an effort to retain them. If you cannot translate the information into your own words, ask for further clarification.

6. **Decide whether what you have heard is not important, somewhat important, or very important.** If it's really not important, let it go.
7. **Ask a question.** Early in the term, determine whether the instructor is open to responding to questions as they arise during lecture. If so, do not hesitate to ask if you did not hear or understand what was said. It is best to clarify things immediately, if possible, and other students are likely to have the same questions. If you can't hear another student's question, ask that the question be repeated.
8. **Listen to the entire message.** Concentrate on "the big picture," but also pay attention to specific details and examples that can assist you in understanding and retaining the information.
9. **Respect your own ideas and those of others.** You already know a lot of things. Your own thoughts and ideas are valuable, and you need not throw them out just because someone else's views conflict with your own. At the same time, you should not reject the ideas of others too casually.
10. **Sort, organize, and categorize.** When you listen, try to match what you are hearing with what you already know. Take an active role in deciding how best to recall what you are learning.

During Class: Use The Cornell Format to Take Effective Notes

You can make class time more productive by using your listening skills to take effective notes. Here's how.

1. **Use a recall column.** One method for organizing notes is called the Cornell format, in which you create a "recall" column on each page of your notebook by drawing a vertical line about 2 to 3 inches from the left border. As you take notes during lecture, write only in the wider column on the right and leave the recall column on the left blank.

You may also want to develop your own system of abbreviations. For example, you might write "inst" instead of "institution" or "eval" instead of "evaluation." Just make sure you will be able to understand your abbreviations when it's time to review.

2. **Identify the main ideas.** Good lectures always contain key points. The first principle of effective note taking is to identify and write down the most important ideas around which the lecture is built. Although supporting details are important as well, focus your note taking on the main ideas.

Some instructors announce the purpose of a lecture or offer an outline, thus providing you with the skeleton of main ideas, followed by the details. Others develop overhead transparencies or PowerPoint presentations, and may make these materials available on a class Web site before

the lecture. If so, you can enlarge them, print them out, and take notes right on the teacher's outline.

Some lecturers change their tone of voice or repeat themselves for each key idea. Some ask questions or promote discussion. If a lecturer says something more than once, chances are it's important.

Ask yourself, "What does my instructor want me to know at the end of today's session?"

- 3. Stop being a stenographer.** Some first-year students try to do just that. If you're an active listener, you will ultimately have shorter but more useful notes (see Figure 6.2).

As you take notes, leave spaces so that you can fill in additional details later that you might have missed during class. But remember the forgetting curve—do it as soon as possible.

- 4. Don't be thrown by a disorganized lecturer.** When a lecture is disorganized, it's your job to try to organize what is said into general and specific frameworks. When the order is not apparent, you'll need to indicate in your notes where the gaps occur. After the lecture, you will need to consult your reading material or classmates to fill in these gaps.

You might also consult your instructor. Though most instructors have regular office hours for student appointments, it is amazing how few students use these opportunities for one-on-one instruction. You can also raise questions in class. Asking such questions may help your instructor discover which parts of his or her presentation need more attention and clarification.

- 5. Return to your recall column.** The recall column is essentially the place where you write down the main ideas and important details for tests and examinations as you sift through your notes as soon after class as feasible, preferably within an hour or two. It can be a critical part of effective note taking and becomes an important study device for tests and examinations. In anticipation of using your notes later, treat each page of your notes as part of an exam-preparation system.

Look at the recall column while you cover the rest of the page, and recite out loud in your own words what you remember from your notes. Keep in mind that you want to use as many of your five senses as possible to enhance memory. The recall column is a powerful study device that reduces forgetting, helps you warm up for class, and promotes understanding during class.

Taking Notes in Nonlecture Courses

Always be ready to adapt your note-taking methods to match the situation. Group discussion is becoming a popular way to teach in college because it involves active learning. On your campus you may also have Supplemental

Figure 6.2 Sample Lecture Notes

Sept. 21 <u>How to take notes</u>	
Problems with lectures	Lecture <u>not</u> best way to teach. Problems: Short attention span (may be only 15 minutes!), Teacher dominates. Most info is forgotten. "Stenographer" role interferes with thinking, understanding, learning.
Forgetting curves	Forgetting curves critical period: over $\frac{1}{2}$ of lecture forgotten in 24 hours.
Solution: Active listening	Answer: Active listening, really understanding during lecture. Aims— (1) immediate understanding (2) longer attention (3) better retention (4) notes for study later
Before: Read Warmup	BEFORE: Always prepare. Read: Readings parallel lectures & make them meaningful. Warm up: Review last lecture notes & readings right before class.
During: main ideas	DURING: Write main ideas & some detail. No steno. What clues does prof. give about what's most important? Ask. Ask other questions. Leave blank column about 2½" on left of page. Use only front side of paper.
After: Review Recall Recite	AFTER: Left column for key recall words, "tags." Cover right side & recite what tags mean. Review/Recall/Recite

Instruction (SI) classes that provide further opportunity to discuss the information presented in lectures.

How do you keep a record of what's happening in such classes? Assume you are taking notes in a problem-solving group assignment. You would begin your notes by asking yourself "What is the problem?" and writing down the answer. As the discussion progresses, you would list the solutions offered. These would be your main ideas. The important details might include the positive and negative aspects of each view or solution.

The important thing to remember when taking notes in nonlecture courses is that you should record the information presented by your classmates as well as from the instructor and consider all reasonable ideas, even though they may differ from your own.

When a course has separate lecture and discussion sessions, you will need to understand how the discussion sessions augment and correlate with the lectures. How to organize the notes you take in a class discussion depends on the purpose or form of the discussion. But it usually makes good sense to begin with a list of issues or topics that the discussion leader announces. Another approach is to list the questions that the participants raise for discussion. If the discussion is exploring reasons for and against a particular argument, it makes sense to divide your notes into columns or sections for pros and cons. When conflicting views are presented in discussion, it is important to record different perspectives and the rationales behind them.

Class Notes and Homework

Good class notes can help you complete homework assignments. Follow these steps:

- 1. Take 10 minutes to review your notes.** Skim the notes and put a question mark next to anything you do not understand at first reading. Draw stars next to topics that warrant special emphasis. Try to place the material in context: What has been going on in the course for the past few weeks? How does today's class fit in?
- 2. Do a warm-up for your homework.** Before doing the assignment, look through your notes again. Use a separate sheet of paper to rework examples, problems, or exercises. If there is related assigned material in the textbook, review it. Go back to the examples. Cover the solution and attempt to answer each question or complete each problem. Look at the author's work only after you have made a serious effort to remember it.

Keep in mind that it can help to go back through your course notes, reorganize them, and highlight the essential items, thus creating new notes that let you connect with the material one more time and are better than the originals.

3. Do any assigned problems and answer any assigned questions.

Now you are actually starting your homework. As you read each question or problem, ask: What am I supposed to find or find out? What is essential and what is extraneous? Read the problem several times and state it in your own words. Work the problem without referring to your notes or the text, as though you were taking a test. In this way, you'll test your knowledge and will know when you are prepared for exams.

4. Persevere. Don't give up too soon. When you encounter a problem or question that you cannot readily handle, move on only after a reasonable effort. After you have completed the entire assignment, come back to those items that stumped you. You may need to mull over a particularly difficult problem for several days. Let your unconscious mind have a chance.**5. Complete your work.** When you finish an assignment, talk to yourself about what you learned from this particular assignment. Think about how the problems and questions were different from one another, which strategies were successful, and what form the answers took. Be sure to review any material you have not mastered. Seek assistance from the teacher, a classmate, study group, learning center, or tutor to learn how to answer any questions that stumped you.

You may be thinking, that all sounds good, but who has the time to do all that extra work? In reality, this approach does work and can actually save you time. Try it for a few weeks. You will find that you can diminish the frustration that comes when you tackle your homework cold, and that you will be more confident going into exams.

Computer Notes in Class?

Laptops are often poor tools for taking notes. Computer screens are not conducive to making marginal notes, circling important items, or copying diagrams. And although most students can scribble coherently without watching their hands, few are really good keyboarders. Entering notes on a computer after class for review purposes may be helpful, especially if you are a tactile learner. Then you can print out your notes and highlight or annotate just as you would handwritten notes.

After Class: Respond, Recite, Review

Don't let the forgetting curve take its toll on you. As soon after class as possible, review your notes and fill in the details you still remember, but missed writing down, in those spaces you left in the right-hand column.

Relate new information to other things you already know. Organize your information. Make a conscious effort to remember. One way is to recite impor-

tant data to yourself every few minutes; if you are an aural learner, repeat it out loud. Another is to tie one idea to another idea, concept, or name, so that thinking of one will prompt recall of the other. Or you may want to create your own poem, song, or slogan using the information.

Use these three important steps for remembering the key points in the lecture:

- 1. Write the main ideas in the recall column.** For five or ten minutes, quickly review your notes and select key words or phrases that will act as labels or tags for main ideas and key information in the notes. Highlight the main ideas and write them in the recall column next to the material they represent.
- 2. Use the recall column to recite your ideas.** Cover the notes on the right and use the prompts from the recall column to help you recite *out loud* a brief version of what you understand from the class in which you have just participated.

If you don't have a few minutes after class when you can concentrate on reviewing your notes, find some other time during that same day to review what you have written. You might also want to ask your teacher to glance at your recall column to determine whether you have noted the proper major ideas.

- 3. Review the previous day's notes just before the next class session.** As you sit in class the next day waiting for the lecture to begin, use the time to quickly review the notes from the previous day. This will put you in tune with the lecture that is about to begin and will also prompt you to ask questions about material from the previous lecture that may not have been clear to you.

These three engagements with the material will pay off later, when you begin to study for your exams.

What if you have three classes in a row and no time for recall columns or recitations between them? Recall and recite as soon after class as possible. Review the most recent class first. Never delay recall and recitation longer than one day; if you do, it will take you longer to review, make a recall column, and recite. With practice, you can complete your recall column quickly, perhaps between classes, during lunch, or while riding a bus.

Participating in Class: Speak Up!

Participation is the heart of active learning. We know that when we say something in class, we are more likely to remember it than when someone else does. So when a teacher tosses a question your way, or when you have a question to ask, you're actually making it easier to remember the day's lesson.

Naturally, you will be more likely to participate in a class in which the teacher emphasizes discussion, calls on students by name, shows students signs of approval and interest, and avoids shooting you down for an incorrect answer. Often, answers you and others offer that are not quite correct can lead to new perspectives on a topic. To take full advantage of these opportunities in all classes, try using these techniques:

- 1. Take a seat as close to the front as possible.** If you're seated by name and your name is Zoch, plead bad eyesight or hearing—anything to get moved up front (the only time in this book we encourage you to avoid the truth!).
- 2. Keep your eyes trained on the teacher.** Sitting up front will make this easier to do.
- 3. Raise your hand when you don't understand something.** But don't overdo it. The instructor may answer you immediately, ask you to wait until later in the class, or throw your question to the rest of the class. In each case, you benefit in several ways. The instructor gets to know you, other students get to know you, and you learn from both the instructor and your classmates.
- 4. Never feel that you're asking a "stupid" question.** If you don't understand something, you have a right to ask for an explanation.
- 5. When the instructor calls on you to answer a question, don't bluff.** If you know the answer, give it. If you're not certain, begin with, "I think . . . but I'm not sure I have it all correct." If you don't know, just say so.
- 6. If you've recently read a book or article that is relevant to the class topic, bring it in.** Use it either to ask questions about the piece or to provide information from it that was not covered in class. Next time you have the opportunity, speak up.

Listening, note taking, and participating are the three essentials for success in the classroom. If you think of the classroom as a workplace, where it's essential that you listen, jot down things to remember, and ask others for guidance, you'll understand why.

YOUR PERSONAL JOURNAL

Here are several things to write about. Choose one or more. Or choose another topic related to this chapter.

1. Think of one of your courses in which you're having trouble taking useful notes. That must be frustrating! Now write down some ideas from this chapter that may help you improve your note taking in that course.

2. How might a study group help you improve your note taking and other study habits? Is there a possibility that you might join one? Jot down the names of students in your classes whom you admire for their academic achievements. Ask one of them if he or she is interested in forming a group. If that person already belongs to a group, ask if you might join.
3. What behaviors are you willing to change after reading this chapter? How might you go about changing them?
4. What else is on your mind this week? If you wish to share it with your instructor, add it to your journal entry.

READINGS

Why Do I Have to Take this Class?*

A Lesson in making the required course relevant.

By Chad M. Hanson

Today, students enrolled in required courses are more likely than ever to ask, Why do I have to take this class? I teach required social science courses exclusively, so I face the question a lot. But instead of giving students a sermon about why they need to take Introduction to Sociology, I use the “why” question as an opportunity to engage students in a round of Socratic dialogue about the relevance and value of general education.

In fact, I ask the “why” question myself, if students don’t beat me to it. I ask, “Why is this class required? Why do we bother?” In response, I often receive comments like that of a former student who said, “These classes make us well rounded.” The answer suits me, of course, but even when I get good, positive responses like that one I continue turning questions back to the group. In this case I said, “Excellent! I think that’s true,” but I continued, “By the way, what does it mean to be well rounded?”

At points like these, depending on how students respond, I make a spur-of-the-moment decision about whether to continue or change the format. If students are responding well, I continue with the entire class. If they are reticent, I form small groups to give them more time to think. Either way, I try to lead people toward ideas found in the literature on the role of social science in general education.

For example, I emphasize the idea that social science courses are a chance for students to explore how their own thoughts and feelings are determined in

**College Teaching*, Winter 2002, v50, i1, p. 21(1). Copyright 2002 Heldref Publications. Reprinted with permission.

part by their society and their place in history. I ask them, “What do you want to become?” After listening to a round of reasonable career choices I ask, “How come no one wants to be a blacksmith?” Faces light up as students begin to see how their own choices are determined by the structure of opportunities in the United States.

I also question them along lines that show how their own personal decisions help maintain the structure of society. I ask, “How many of you came to school by yourself in an automobile?” When everyone raises their hand it is possible to see how individual decisions lie at the base of our broadest social patterns.

In my experience, acknowledging the “Why do I have to take this class?” question in the open has improved students’ morale, improved their performance, and had a positive impact on the way they evaluate my classes. If, despite my efforts, students miss the relevance of my course at some point, they know the “why” question is a fair one to ask. Every time they do, I seize the opportunity. I believe it is my duty to honor students’ doubt and to lead them past asking, Why do I have to take this class? and toward a genuine appreciation of general education.

Making the Grade*

Ace your college classes with this advice on choosing courses, selecting a major, writing papers, and dealing with professors.

By Tracey Randinelli

Swarthmore College? One of the toughest liberal arts schools in the country? No sweat, thought Esther Zeledon. After all, the Miami resident graduated sixth in her class from Braddock High School, the largest secondary school in the U.S., with more than 5,400 students. In high school, she took 10 AP courses and pulled mostly A’s. She figured work at Swarthmore would be more of the same. “I thought college was going to be like high school: Do some homework, a test here and there,” she says. “I thought I would be able to get straight A’s.”

It didn’t take long for Zeledon to realize she wasn’t in high school anymore. The environmental science major soon discovered the workload was staggering. “I got about one paper a week for English and one every other week for history, as well as 800 pages a week to read,” she says. That did not include a five-hour chemistry lab and four hours of pre- and post-lab work, as well as stuff like eating and sleeping.

**Careers & Colleges*, March-April 2004, v24, i4, p. 12(5). Reprinted with permission.

But the worst part, says 20-year-old Zeledon, was that despite long hours of studying, she couldn't manage to pull the top-notch grades that came so easily in high school. "It was so difficult to get an A," she says. "I didn't see that pretty letter my first year."

Zeledon's story isn't unique. Even the most successful high school students can find their academic world turned upside down at college. The problem: They haven't been prepared for the vast differences between high school and college academia.

"Students find that the strategies that served them in high school are not good enough for college," says Pat Grove, campus director of the Learning Resource Center at Rutgers University in New Brunswick, New Jersey. "The volume and complexity of the material is so vastly different, and the expectations of the faculty are entirely different from the expectations of their high school teachers."

In high school, says Grove, students are required to memorize and recall information. But in college, professors expect students to truly analyze and understand concepts.

Colleges are just beginning to recognize that graduating high school students need more guidance to make the transition. Many schools now require freshmen to take orientation courses designed to teach them time management, communication dynamics, and other skills they need to be successful in the brand-new world of college.

CHOOSING COURSES

In high school, choosing your courses is easy—most are requirements and very few are electives. At many colleges, however, it's a little more complicated. You get a course book that may contain several hundred pages of classes. Which classes you take, the times you take them, the days you take them—it's more or less all up to you.

It doesn't have to be overwhelming, though. You most likely will have an academic advisor to help you. "Your advisor is your university resource broker," says Elizabeth Teagan, director of the University Transition Advising Center at Texas Tech University in Lubbock. The college advisor is familiar with faculty, knows what's needed to fulfill requirements within the university and in your major, and he or she can spot problems that you are likely to miss.

For many students, one of those problems is filling general education, or gen-ed, requirements. In order to graduate, many colleges require that you take a number of credits in liberal arts disciplines—English, math and science, a foreign language.

"Gen-ed courses teach a lot of skills that students will need in their other courses—working in groups, critical thinking, analysis," says Dave Meredith, director of enrollment management for the honors programs at the University

of Cincinnati. It's important to balance your schedule with a required math or foreign language course as well.

Getting gen-ed requirements out of the way early can be particularly beneficial to students who are still undecided about their major, adds Meredith. "If you can say I'm wiping off my history requirement, that can make you feel like you're progressing."

Plan a Balanced Schedule

Consider courses that are extra-challenging and courses that require less effort. "You shouldn't take biology, calculus, physics, and chemistry together the first semester—that's ridiculous," says Rutgers University's Grove.

Robin Diana, associate director of the Center for Student Transition and Support at Rochester Institute of Technology in New York, suggests meeting with your advisor early in the course selection process. Take a look at the course sequence for your major with an eye toward the next four years, not just the coming semester. Then agree on what courses you should be taking, says Diana, "so that four years down the road you don't realize you need two that are not being offered that semester." Other points to remember:

Be Flexible

At many universities, first-year students are the last to register. That means that many of the more popular classes and class times have already been filled. "Know that the days and times that you want will probably not be the days and times you get," says Diana. "Have a plan A, a plan B, and a plan C ready to go."

Keep Your Own Personality in Mind

If you're a morning person, schedule your classes early in the day. (Early birds are at an advantage, since the competition for an 8 a.m. class is much less fierce than for a class at a later hour.) If you know you can't function before 10 a.m., however, don't force yourself to take early-morning classes.

Make Sure You're Prepared

Some classes have prerequisites. An introductory class in chemistry, for example, may require that you have had several years of chemistry in high school.

GET TO KNOW YOUR PROFESSOR

You'll find that one of the biggest differences between school and college academics is the relationship you have with the person standing in front of the class. "In high school, teachers pretty much tell you what your responsibilities are," says Bonnie B. Gorman, director of first-year programs at Michigan

Technological University in Houghton. “In college, you have to figure that out.” It’s your job—not the professor’s—to make sure you are keeping up with assignments and progressing through the class.

What’s more, a college professor is often less accessible than a high school teacher. In high school, you saw your teachers every day; in college, you may spend only an hour or two with a professor each week. And that hour or two is far from intimate: In an introductory class, it may well be you, the professors, and several hundred other students.

“In a lecture hall, it’s not likely a professor is going to know you one on one,” says Diana. “You need to take the initiative to get to know your professors and have them know who you are.”

Classroom Impressions

Start in the classroom environment itself. That means showing up—and on time. (An interesting side note, says Victoria McGillin, dean for academic advising at Wheaton College in Norton, Massachusetts: Depending on a college’s costs, each class you cut costs between \$70 and \$150. Ouch.)

Sit as close to the front as you can, and particularly in larger classes, try to sit in the same seat or area of the room for each session. The professor may not immediately know your name, but he or she will begin to recognize your face. Show that you’re attentive by making eye contact on a consistent basis. “It’s about being present versus that vague stare students get after the first 20 minutes,” says Texas Tech University’s Teagan.

In smaller, less lecture-driven sessions, class participation can also help get you noticed by a professor, particularly when you’ve done the assigned reading or writing. While raising your hand to make a point is great, don’t forget that asking probing questions can be an effective way to participate in class discussions.

Communication Is Key

If participating is difficult because of class size, see if available alternatives exist. “Some faculty are increasingly playing around with Web-based email discussions,” says McGillin. “They’ll consider that comparable to having raised your hand in class.” If all else fails, drop the professor an email with questions or comments on the day’s lecture. “If it’s clear to a professor that a student is making an effort in their class,” says Gorman, “that’s what’s important.”

The Office Visit

One of the best ways of getting to know a professor is also one of the most underutilized. At most colleges, professors designate several hours a week as “office hours”: times when students can talk to them about grades, assignments, and problems they have with the class material. But if you ask

most professors, you'll find that office hours are often very quiet. "We have several professors who use our center for their office hours," says Rutgers University's Grove, "and they get lonely sitting there."

The University of Cincinnati's Meredith suggests visiting a professor early in the semester to say hello and introduce yourself. "If you only see the professor after you've bombed the midterm, they may look at it as, 'Oh they're just trying to save their grade.'" Meredith stresses that taking advantage of office hours throughout the semester can definitely help your final grade. "If it's a difference between a B-plus and an A, maybe if you've been to his office a couple of times he'll remember it and you'll get the A."

Facing Problems

It's also important to remember that professors are people, too. Sure, they might have Ph.Ds, but as Teagan says, "They're dads and moms and aunts and uncles just like anybody else. If you're having a problem, most will do whatever they can to help." Becky Libby, a student at the University of Southern California, found herself floundering in a first-year writing class. To her surprise, her professor noticed something was bothering her and came to her rescue. "She met with me every day for literally two weeks to bring my writing up to par," Libby remembers.

TAKE NOTES

In high school, studying is a day-to-day process. You go to class, you get homework, you do it. Your teacher tells you you're having a test next Friday, you study, you take the test. You might know a paper is due in two weeks, but that's about as far into the future as you get.

In college classes however, your semester is usually mapped out from day 1. Most professors hand out a syllabus on the first day of class. The syllabus tells you when to expect quizzes and tests, when papers are due, what you'll be expected to read in time for each class, even the topics that will be covered in each day's lecture. The syllabus makes it easier to see how you'll be progressing throughout the semester, but it also puts more responsibility on you to make sure you're getting the work done—and doing it well.

Taking good notes is a vital step in the process. Again, you'll probably find it was easier in high school. A high school class environment is usually more interactive, while a college-level introductory class can consist of 90 minutes of lecture. Trying to copy the lecture verbatim isn't very smart, unless you happen to be a court reporter or stenographer. Taping a lecture helps, but it takes valuable time to transcribe the tape.

Instead, make sure you've read the assigned material before class—that way, you'll have some idea of what the professor is going to say before he or she says it. During the lecture, don't try to take down every word the profes-

sor says. Instead, look or listen for clues that will tell you what topics or ideas the professor thinks matter. Did he or she write something on the board? Mention something more than once? Illustrate an idea with examples? Chances are, those are things the professor considers important—and will probably include on an exam. “You want to synthesize and identify the main points,” says Michigan Technological University’s Gorman.

Many high school students find their note-taking strategies—if in fact they have any—have to change once they get to college. There’s no one “right” way to take notes; different strategies work for different people. Some prefer an outline. Others favor some variation of the Cornell, or “one-third, two-thirds” method, in which you record specific notes from the lecture on the right two-thirds of the page, and later, in your own words, summarize the main ideas on the left side of the page. Still other students prefer mapping out ideas on the page and linking relationships visually. You may even find you need to use several different strategies, depending on the subject.

EXAM TIME

College and high school exams are similar in that they measure what you’ve learned. What’s different is the learning process itself. “A lot of learning in high school is memorization,” explains Texas Tech’s Teagan. “In college, memorization may be part of a body of investigation, but it’s really just the first step.” College learning isn’t just about knowing concepts—it’s about understanding the relationships between those concepts.

In high school, you’re usually tested on a few chapters or concepts every couple of weeks. Many college classes, on the other hand, hold just two exams—a midterm and a final—that measure your knowledge of weeks of lectures, dozens of pages of notes, and hundreds of pages of text. Obviously, this is not a process that happens overnight.

“Studying for an exam is really an extended review period you should be doing every day,” says Ken Miller, director of student affairs at Pennsylvania State University at Erie. “Day by day the material may not be difficult, but over 12 weeks, it will be more difficult to absorb and recall all the material. Students who keep up are more prepared than those who try to cram.”

When you’re faced with prepping for an exam, your first step is to find out what kind of exam it’s going to be. A closed-ended (i.e., multiple choice, true/false) will stress concepts: Was Robert E. Lee a southern or northern general? An open-ended (i.e., essay) exam will stress relationships between concepts: Compare Lee’s battle strategy to Grant’s. Knowing the type of exam you’re facing will give you a better idea of how you’ll need to study for it.

If you’ve kept up with the reading, paid attention during class, and practiced good note taking, you probably have a good idea of what material is going to be on the exam. “A professor is not going to put together a final that

doesn't look like anything you've seen during the semester," says Rochester Institute of Technology's Robin Diana. Many professors also keep copies of previous exams on file; while they won't tell you the exact questions you'll be facing, they will give you an idea of what to expect. In any case, it's your right to ask for guidance, says Teagan.

YOU WILL SURVIVE!

You know the academic strategies—but you still feel like you can barely keep your head above water. What can you do? Nearly all campuses have academic advisement centers you can turn to if you're feeling the crunch. Also, take comfort from the fact that even the most successful high school students go through much of the college academic process with some difficulty. "It is just getting used to the whole process," says Swarthmore freshman Esther Zeledon. "It's hard, but at least there are a lot of support groups that really make things easier. Just don't give up!"

8 STEPS (AND A WARNING*) TO A GREAT PAPER

Chuck Guilford, associate professor of English at Boise State University, author of *Beginning College Writing* (Little, Brown), and creator of the Paradigm Online Writing Assistant (www.powa.org), offers these tips:

1. Own the topic. Ask yourself, "What about this topic do I care about? What about it has value to me?" Make the subject your own.
2. "Problematize" the topic. Mold the topic into a core question or problem that must be solved using research and investigation.
3. Survey what's out there. Your professor, former students in the class, or other faculty may have suggestions for finding sources.
4. Get the information. Use the library, Internet, and even interviews, when appropriate.
5. Come up with the solution. Propose a hypothesis to your research problem, which you can use to help structure the paper.
6. Start writing. Divide the problem into the main points, and then plug in your information. The final solution or answer to the research problem should be the conclusion of the paper.
7. Document your sources. Note that departments within a university often have different requirements for citing sources.
8. Write it again . . . and again. Be prepared to do at least three drafts, plus a final edit.

*And here's that warning. Don't be tempted to buy an essay off the Web. "Plagiarized papers lack the voice that students bring to their writing," says Guilford. Having someone else write your paper for you may save you a few

days or weeks of work, but the reward may end up being an F for the paper or even the course.

MAJOR DECISIONS

For many students, their first academic dilemma arrives in the form of that little box on the college application labeled “desired major.” Most students do not have a clear idea of what they want to do for the next 40 years—and that can cause some “major” stress. Students also feel pressure to choose, says Texas Tech’s Teagan. “[Not having a major] has a negative connotation. The first question people ask after ‘What college are you going to?’ is ‘What’s your major?’ ”

If you fall into the undecided category, you’re not alone. According to Ablongman.com, a college-planning Web site, one-third of high school students haven’t a clue what they want to do for a living, and more than half change their major during their freshman year. Eventually, you will have to choose your course. These tips can help:

- **Get to know yourself.** Pinpointing the qualities that make you who you are can often help you narrow down career choices that best coincide with those qualities. What type of personality do you have? What do you enjoy doing? What are your values?
- **Take advantage of campus facilities.** Career counseling or resource centers are not just for seniors arranging job interviews. Schedule an appointment with a career counselor. “Talk about what you like, what you don’t like, your interests, your dreams,” says Wheaton College’s McGillin. Your academic advisor can also be useful in helping you determine the major that will best prepare you for what you want to do.
- **Talk to everyone you know.** Everyone has a story about how they got into their field. Get the scoop first-hand from adults you know—and pay special attention to people whose career path took an unlikely turn.
- **Investigate internships.** Many companies offer internships to high school as well as college students. If you have an idea of what you want to do, find an internship in that field to solidify—or negate—that interest.
- **Take advantage of gen-ed requirements.** “We encourage students to think of general education courses as potential career avenues,” says McGillin. If you haven’t decided on a major by the time you matriculate, use your gen-eds to get a taste of several different job fields. You might not be excited about taking a required government course, but three weeks of the class might convince you that politics is your calling.
- **Don’t be afraid to go in undecided.** At most schools, you’re not even required to settle on a major until sometime during your sophomore year. “Undecided students are a step ahead of those who declare and change,” says Teagan.

DISCUSSION

1. One of the authors of this book couldn't do any better than C work (and often much worse) on most college exams until he learned how to take notes from a very successful upperclass student who let him see his notebook for comparison purposes. Interview several upperclass students who are making above-average grades, and then discuss in class what you have learned.
2. In a small group of fellow students, exchange your notebooks for any course and take a look at how other students literally "take" notes. Then discuss strategies for successful note taking. Make sure you define how you know what "successful" note taking is. As you listen to others, rate your own effectiveness.
3. In a group of five or six students, work out a division of labor whereby each of you agrees to interview faculty members representing such different subjects as math, physical and biological sciences, a social science such as history, humanities, and so forth. Ask these faculty members how they would advise students in their courses to take good notes. Discuss your findings with others in your group.
4. Why is the commonly asked question "Why do I have to take this class?" so relevant to students and so repugnant to teachers?
5. What does the teacher who wrote the article "Why do I have to take this class?" do to engage his students in their course work? As a student, how might you participate in this class? Would your listening and note taking skills improve? Why?
6. After describing what a tough time a bright student had during her first year of college, the author of "Making the Grade" writes, "You will survive." As you make your way through classes this year, tell yourself, "I will survive" as you plan strategies for doing so. Exchange those strategies with others in your class and reach a consensus on the best ways to survive college.