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Preface

Our primary goal in writing *College Success* is to help you succeed in college.

According to Department of Education data, 30 percent of college freshmen leave school in their first year and as many as 50 percent never graduate. *College Success* is designed to help change that. *College Success* has a student-friendly format arranged to help you develop the essential skills and provide the information you need to succeed in college. This is not a textbook full of theory and extensive detail that merely *discusses* student success; rather, this is a how-to manual for succeeding in college. The book provides realistic, practical guidance ranging from study skills to personal health, from test taking to managing time and money. Furthermore, *College Success* is accessible—information is presented concisely and as simply as possible.

*College Success* has the following features to help you achieve your goals: Each chapter asks you to evaluate yourself because success starts with recognizing your strengths and weaknesses, your hopes and desires, and your own personal, individual realities. You’ll develop your own goals based on these self-assessments, determining what success in college really means for you as an individual.

Throughout the book, you will find numerous interactive activities created to help you improve your skills. To assist you with this, the material is presented in easily digestible “chunks” of information so you can begin applying it immediately in your own life—and get the most out of your college education.

*College Success* was developed in partnership with Career Management, LLC, whose cofounders developed SuccessHawk® ([http://www.successhawk.com](http://www.successhawk.com))—interactive online job search software, designed to help you achieve your ultimate goal of landing a great job.

Welcome aboard!
Chapter 1
You and Your College Experience

Where Are You Now?
Assess your present knowledge and attitudes.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Unsure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I understand all the benefits of a college education for my future life.</td>
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<td></td>
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<tr>
<td>2. I have clear-cut career interests and have already planned my college program to prepare me best for my future work.</td>
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<tr>
<td>3. I am aware of how my previous educational background has prepared me for college work.</td>
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<tr>
<td>4. I have all the personal traits of a successful college student.</td>
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<tr>
<td>5. I know how the learning process functions and make an effort to maximize my learning at each step in this process.</td>
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<tr>
<td>6. I know my personal learning style and use it to my advantage when learning new things.</td>
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<tr>
<td>7. I know how to pay attention to gain the most from my classes.</td>
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<tr>
<td>8. I am aware of my college’s policies for academic honesty and behavior on campus.</td>
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<tr>
<td>9. I know where to find all the resources of my college that can help me succeed both academically and personally.</td>
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<tr>
<td>10. I am confident I can earn the grades I need to achieve success in my college courses.</td>
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<td></td>
</tr>
<tr>
<td>11. I know the first year of college will be the most difficult, but I am fully prepared and take responsibility for my own success.</td>
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<td></td>
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<tr>
<td>12. I am taking steps every day to ensure I am successful in every aspect of the college experience.</td>
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</table>

Saylor URL: [http://www.saylor.org/books](http://www.saylor.org/books)
Where Do You Want to Go?

Think about how you answered the questions above. Be honest with yourself. On a scale of 1 to 10, how would you rate your present skills for succeeding in college?

<table>
<thead>
<tr>
<th>Not very strong</th>
<th>Very strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
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<tr>
<td>2</td>
<td>9</td>
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<tr>
<td>3</td>
<td>8</td>
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<td>4</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

In the following list, circle the three most important areas in which you think you can improve:

• Relating my personal values to education
• Choosing a program or degree major
• Finding the best career for my interests and skills
• Being prepared for college-level work
• Developing a positive attitude for college
• Successfully using each step of the learning process
• Adapting and broadening my personal learning style
• Getting the most out of classes large and small
• Following all college policies
• Taking advantage of all college resources
• Getting the best grades I can get
• Successfully transitioning to college and completing the first year
• Doing everything I can every day to ensure I succeed in college

Are there other areas or skills that need more attention in order for you to succeed in college? Write down other things you feel you need to work on.

How to Get There

Here’s what we’ll work on in this chapter:

• Viewing college in terms of your personal values
• Recognizing the importance of making a commitment to succeed in the first year of college
- Discovering what career and college major best match your interests and skills
- Understanding the obstacles students like you may have to overcome when transitioning into college
- Figuring out how to learn best in each step of the learning process
- Using your personal learning style effectively while also expanding to include other forms of learning
- Staying motivated and succeeding in large lecture classes as well as small discussion classes
- Working with your academic advisor to select courses and plan your program
- Discovering what resources your college offers students to succeed not only in classes but also in their personal and social lives
- Understanding why grades matter
- Understanding why the first year of college is so critical and how to ensure you make it through
- Knowing what steps you can take starting today and every day to ensure your success in college

## Welcome to College!

Congratulations on your decision to attend college! For the great majority of college students, it really was your decision—not just an automatic thing to do. If you happen to be one of the few who just sort of ended up in college for want of anything better to do, the benefits of college will soon become obvious. The reason for this book, and for almost all college courses, is that college does require commitment and effort. Like everything else in life that leads to meaningful results, success in college is not automatic. But when you apply yourself to your studies using the skills you’ll learn in this book, you’ll find you can succeed.

When asked, most students say they’re in college primarily for the job or career they expect to follow after college. And they are correct that college pays off enormously in terms of future earnings, job security and stability, and job satisfaction. Every statistic shows that people with a college education will make much more in their lifetime (much, much more than the cost of college itself) and be much happier with the work they do.
But job and career issues are only a part of the big picture. A college education results in many other personal benefits, and these also should be part of your motivation for doing well and continuing with your college plans. Here are a few additional, less tangible benefits of a college education:

- You will have a fuller life and a better understanding of the world around you.
- You will gain decision-making and problem-solving skills.
- You will meet many interesting and diverse people and have a richer social life.
- You will gain self-confidence.
- You will gain learning skills that can continue for a lifetime.
- You will make wiser decisions about lifestyle issues and live healthier.
- You will make wiser economic decisions the rest of your life.
- You will be better equipped to deal with other people, organizations, governmental agencies, and all the hassles of daily life.
- You will feel more fully a part of your community, the larger culture, and history.

A college education is correlated with greater success in all those areas, even though most students are usually more concerned with making it through the next class or test than the rest of their lives. But sometimes it helps to recall what a truly great step forward you are taking!

Sadly, however, it’s important to recognize that some students do not succeed in college and drop out within the first year. Sometimes it’s due to an unsolvable financial problem or a personal or family crisis, but most of the time students drop out because they’re having problems passing their courses. The two biggest causes of this problem are a lack of motivation and not having learned the skills needed to succeed in college.

A book like this one can help you stay motivated when things get tough, but it can’t necessarily give you motivation to start with. That’s part of what you yourself have to bring to college. What we can promise you is that you can learn the skills for succeeding in college.

Special skills are needed because college isn’t the same as high school. Throughout this book, we’ll be looking at the many ways college is different from high school. To name just a few, college is different in study skills needed, in personal skills related to being independent, in social skills for getting along with instructors and others on campus, in financial realities, in matters of personal health, and more.
Remember, you can learn whatever you need in order to succeed. That’s what this book is all about. You’ll learn how to get the most out of going to class. You’ll learn how to study in ways that use your time efficiently and help you pass tests. You’ll even learn how to remember what you read in your college textbooks. You’ll learn how to manage your time more effectively than you might have in the past, so that studying is less a burden and more a simple routine. You’ll even learn how things like eating well and getting enough sleep and exercise make it easier to do well in your classes.

One warning: you might not at first see an immediate payoff for everything you read in this book. When it comes to certain things, such as tips for how to take good notes in class to help you study later on for a test, you will get specific, practical advice you can put to use immediately to get a better grade. But not everything is as obvious or immediately beneficial. Some of the things you’ll read about here involve ideas you’ll need to think about. Some things will help you get to know yourself better and understand more clearly what you really want from your education and how to go about attaining them.

But we promise you this: if you care enough to want to succeed in college and care enough to read these chapters and try to use the information, suggestions, and tips presented here, you will succeed in college.

### 1.1 Who Are You, Really?

**LEARNING OBJECTIVES**

1. List your most important personal values and relate them to a college education.
2. Begin thinking about what kind of career will best match your interests, skills, and personality.
3. Understand how college is different from high school in many ways.
4. Develop a positive attitude about yourself as a college student.
5. Accept responsibility for your college experience and your life.

Succeeding in college is rather like succeeding in life. It’s really much more about you than it is about college. So the most important place to start is to consider why you’re here, what matters to you, and what you expect to get out it. Even if you have already thought about these questions, it’s good to reaffirm your commitment to your plan as we begin to consider what’s really involved in being a college student.
What’s Your Plan?

Take a few minutes and write down short answers to the questions in Activity 1. Be honest with yourself, and write down what you really feel. You are not writing for an instructor here—not what you think someone expects to hear—and you are not being graded on your answers!

### Activity 1: Your College Plan

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long do you anticipate being in college?</td>
<td></td>
</tr>
<tr>
<td>How many courses will you need to take per term to finish college in your planned time period?</td>
<td></td>
</tr>
<tr>
<td>What do you anticipate will be the most difficult part of completing college?</td>
<td></td>
</tr>
<tr>
<td>Are you confident you will be able to overcome any possible difficulties in completing college?</td>
<td></td>
</tr>
</tbody>
</table>

Were you able to easily answer the questions in Activity 1? How confident do you feel about your plan? These are important questions to think about for the simple reason that students who have a clear plan and who are prepared to overcome possible obstacles that may arise along the way are much more likely to succeed in college. In other words, just thinking in a positive way about your future can help that future come true!

What Matters to You?

The word values refers to things that matter to a person. What makes you feel good? What things would you be doing if you had all the time, money, and opportunities in the world? Questions like these help us define our own values. Every individual has his or her own values. Thinking about your own values can help you know what you want from life and from college. Take a moment and consider the list of things in Activity 2 that are valued by some people. For each value, rate how important that thing is to you.
### ACTIVITY 2: YOUR VALUES

Following is a list of things that different people say they value. For each item on this list, indicate how important it is to you yourself by ranking it as very important (5), not important (0), or somewhere in between.

<table>
<thead>
<tr>
<th>Value</th>
<th>Not important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making a good income</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Having good friends</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Learning new things about your interests</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Having a nice car</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Having intelligent conversations</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Staying current with the news</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Playing sports</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hanging out with friends</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Playing computer or video games</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Cooking</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Online social networking</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sleeping</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Reading a good book</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Traveling to new places</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Shopping</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Value</td>
<td>Not important</td>
<td>Very important</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Being liked by others</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Studying and reading textbooks</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Having nice clothing</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Watching television</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Enjoying time alone</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Getting out in nature</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Working your job</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Looking good, personal hygiene</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Meeting new people</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Going to movies or entertainments</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Eating nice meals out</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Exercising, being physically active</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Being your own boss</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Having a positive romantic relationship</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Engaging in your hobbies</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Setting your own schedule</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Volunteering your time for a good cause</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Cleaning house</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>
Look back at the values you rated highly (4 or 5) in Activity 2, which probably give a good indication of how you enjoy spending your time. But now look at these things you value in a different way. Think about how each relates to how you think you need to manage your time effectively while in college. Most college students feel they don’t have enough time for everything they like to do. Do some of the activities you value most contribute to your college experience, or will they distract you from being a good student? Students who enter college with their eyes open and who think about their own values and motivations will be more successful. If you have a good idea of what you want from life, the rest of it can be learned. We’ll start right away in Chapter 2 “Staying Motivated, Organized, and On Track” by helping you stay motivated and manage your time well. The following chapters will then lead you through learning how to study well and everything else.

**Thinking Ahead to a Major and Career**

If you’ve just begun college, should you already know what career you seek in the future and what courses you should take or what you should major in? Good question!

Some students say they have known from a very early age what they want to do after college, choose the college that is best for that plan, never waiver from the plan and choose each course with the one goal in mind, and then enter their chosen career after college or graduate school. At the other extreme, some
students have only a vague sense of direction before beginning college, take a wide variety of courses, select a major only when they reach the point that they must major in something (or perhaps change majors multiple times), and then after college choose to work in an entirely different field. Some students choose to major in an academic subject simply because they enjoy that subject, never concerned with what kind of job they may get afterward. The traditional idea of the liberal arts education is that you can go to college not to prepare for a specific career but to become a well-educated person who is then in a better position to work in any number of careers. None of these different approaches to choosing a major and a career is better than others. All students receive the many benefits of college, and all are likely to find a more fulfilling career. So where are you in this great variety of attitudes about career and major choices?

Assuming you are still early in your college program, the take-home message here is that you don’t need to make any decisions yet. Chances are, as you take courses in a variety of subjects and meet people in many different fields, you’ll naturally discover something about what you really enjoy doing and what career options you may choose to pursue.

On the other hand, help is available for discovering your interests, strengths, and personality factors related to careers. You can learn a lot about your options and what you would be good at by visiting your college’s advising or counseling department. Almost all colleges have tools to help you discover what careers you would most enjoy.

The Strong Interest Inventory is such an assessment tool used by many colleges and universities. You answer a series of simple questions, and the computer-scored tabulation provides information about your interests, strengths, and personality related to different types of careers. This tool can also suggest specific courses, jobs and internships, and extracurricular activities relevant to personal and career interests. Ask your college’s career counseling center if such a tool is available.

Another widely used tool is the Myers-Briggs Type Indicator (MBTI). The MBTI is a personality inventory that identifies you as one of sixteen distinct personality types. Each personality type correlates with happiness in certain careers. Ask your college’s career counselor to see if the MBTI is available for you.

A free online assessment, like the CareerLink Inventory (http://www.mpcfaculty.net/CL/climain.htm), is a relatively simple tool that can teach you a lot about yourself. Follow the steps in the “Outside the Book” section to maximize your results.
Although there's nothing wrong with starting out without an intended major or career path, take care not to accidentally take courses that end up not counting toward your program goal or degree. You could end up in college longer than needed or have to pay for additional courses. Be sure to read your college catalog carefully and to talk to your academic advisor.

**Your Past Educational Experience**

It is important to understand how college is different from high school and how well your own past educational experiences have prepared you for what you will find in college. This is another way in which entering college “with your eyes wide open” will prove beneficial.

College is a unique experience for all students—whether you just graduated from high school or are returning to education after years of working. You are transitioning from one form of education to another. Some students have difficulty because of the differences between college and high school. Generally speaking, however, the college experience is usually different from high school in these ways:

- Time management is more important in college because of varying class and work schedules and other time commitments.
- College instructors seldom seek you out to offer extra help if you’re falling behind. You are on your own and expected to do the work, meet deadlines, and so on, without someone looking over your shoulder.
- There may be no attendance policy for classes. You are expected to be mature enough to come to class without fear of penalties.
- Many classes are large, making it easy to feel lost in a crowd.
- Many instructors, especially in large classes, teach by lecture—which can be difficult for those whose high school teachers interacted a great deal with students.
- College courses require more study time and require you to work on your own.
- Your social and personal life in college may be less supervised. Younger students may experience a sudden increase in freedom to do what they want.
- You will meet more people from more diverse backgrounds in college.
- All of these differences, along with a change in living situation for many students, can lead to emotional changes—both positive and negative.
What does all this add up to? For some students, the sudden independence and freedom can lead in negative directions: sleeping late, skipping classes, missing deadlines, failing to study adequately for tests, and so on. Other students who are highly motivated and work hard in their classes may also have difficulty transitioning to the higher academic standards of college. Suddenly, you’re responsible for everything. That can be thrilling but also a challenge to get used to. All the chapters in this book will help you make this transition successfully.

**Liking Yourself as a Student and Why That Matters**

Of all the factors that affect how well one does in college, attitude is probably the single most important. A positive attitude leads to motivation, and someone who is strongly motivated to succeed can overcome obstacles that may occur.

In Chapter 2 "Staying Motivated, Organized, and On Track", we’ll discuss things you can do to keep a positive attitude about college and stay motivated in your studies. But your attitude toward yourself as a student matters just as much. Now that you are in college, you are a new person, not just the same person who happens now to be a college student. What do you think of this new person?

If you’re feeling excited, enthusiastic, capable, and confident in your new life—great! Skip ahead to the next section. But if you’re less sure how well you’ll do in your new role, take comfort in knowing that you’re not alone. A lot of new college students, once they begin experiencing the differences from high school, start having doubts. Some may start to feel “I’m not a good enough student” or “I can’t keep up with all this.” Some may become fearful or apathetic.

These feelings, while a perfectly natural response to a big change in one’s life, can hinder one’s motivation and ability to succeed. If you think you can’t make it, that might become true. If you’re sure you’ll make it, you will.

Again, we’ll ask you to think honestly about this. If you have these thoughts sometimes, why is that? Are you just reacting to a low grade on your first test? Are you just feeling this way because you see other students who look like they know what they’re doing and you’re feeling out of place? Most likely, if you have doubts about being able to do well, this is just a reaction to college being more difficult than what you’re used to. It’s mostly a matter of having the right skills for succeeding in college. This book will help
you learn them—everything from how to study effectively, how to do better on tests, even how to read your textbooks more effectively.

Why is it that some students need to work on strengthening their skills after beginning college while others seem to waltz right in and do well from the start?

The answer sounds simple but is actually rather complex. There simply are many differences among people. There are differences among high schools as well as one’s past teachers, one’s peer group, one’s family, one’s cultural background, and many other factors. As a result of many different things, some students just need a little more help to succeed in college. No student is better or automatically more capable than another, however, and everyone can learn the skills to succeed.

**Self-Management**

To succeed in college, you need to take control of your life. Gone are the days when you could just “cruise” through school, or life, or let others motivate you or establish schedules to manage your time. This change presents an exciting opportunity. It’s your first step in your new life and the key to your future. Here are a few thoughts to get you started in the right direction:

- **Accept responsibility for your life.** You are on equal footing with everyone else and have the same opportunities to succeed.
- **Decide what you want to do.** Don’t let things just happen—make them happen by deciding that they should happen.
- **Realize you can change.** You can change your habits to become a better student. You can change your attitudes and become a more positive, motivated student.
- **Develop a personal ethical code.** Do what is right for you and for others. The college world demands ethical standards and rewards responsible, ethical behavior. Be proud of who you are and your good decisions.
- **Enjoy your life!** Going to college might seem overwhelming at times, but no one is asking you to “give up your life” to succeed in college. Enjoy meeting new people, learning new things, and experiencing the diversity of the college experience. Most college graduates look back on their college years as one of the best periods in their whole lives!
KEY TAKEAWAYS

• A college education provides many intangible benefits as well as much better prospects for a career you will enjoy.
• Thinking about your personal values and how they relate to your education can help you stay motivated to succeed in college.
• Personality and skill inventories can help you discover the right career for your future and the best major in college.
• Because college is a new and different life experience for most students, taking responsibility for new freedoms and managing time well are critical.

CHECKPOINT EXERCISES

1. Which of the following are benefits of a college education?
   a. A better understanding of the world
   b. Developing problem-solving skills
   c. Meeting interesting people
   d. Making wiser financial decisions in the future
   e. All of the above

   What do you value that will be richer in your future life because you will have a college education?

   ________________________________________________________________
   ________________________________________________________________

   What do you value that will you likely have less time or money to spend on while in college?

   ________________________________________________________________
   ________________________________________________________________

   Life in college usually differs in many ways from one’s previous life in high school or in the workforce. What are the biggest changes you are experiencing now or anticipate experiencing this term?
1.2 Different Worlds of Different Students

LEARNING OBJECTIVES

1. Understand how you may be similar to, and different from, other traditional students or returning students.
2. Describe the characteristics of successful students.

Not all college students are the same, and the world of college is therefore sometimes different for different students. Students will answer the following questions in a variety of different ways:

1. Are you attending college directly from high school or within a year of graduation?
2. Are you a full-time student?
3. Is English your first language?
4. Are you the first person in your family to attend college?
5. Have you spent most of your life in a country other than the United States?
6. Are you married or living with a partner? Do you have children?
7. Do you now or have you worked full time?

For each of the following statements, circle T for true or F for false:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>F</td>
<td>Attitude is one of the most important factors affecting college success.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>If you sit back, wait patiently, and stick it out long enough, success in college will inevitably come to you.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>To do well in college, you basically have to give up everything else in life for a while.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>Most college graduates later look back on their college years as one of the best times in their lives.</td>
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When thinking about different “types” of students, be careful to avoid stereotyping. While there are genuine differences among individual students, we must never assume an individual person has certain characteristics simply because he or she is a certain “type” of student. For example, if you answered yes to questions 1 through 3 and no to the other questions, you may be called a “traditional” student—young and attending college after high school. The word “traditional” is used simply because, in the past, this group of students formed the majority of college students—even though, at many colleges, these students are now the minority. On the other hand, if you are older and have worked for some years before returning to school, or if you are an international student or are working and attending classes part time, you might be considered a “nontraditional” student. Again, this term comes from past statistics, even though very many colleges have more “nontraditional” students than “traditional” students.

What does that mean to you? First, realize that not everything discussed in this book will apply to you. If you’re eighteen and living away from your family for the first time in a college dormitory, you will likely not face the same issues of finding time for studying as an older student working full time and having children at home. If you’re thirty and returning to school after years of successfully managing a job, you may have to reestablish your study skills but will not face the same issues as a younger student who may be tempted by the sudden freedom of college and have difficulty setting boundaries.

Every student brings certain advantages to college from their background experience. Every student may also face certain kinds of difficulties. Understanding how your own background may impact your own preparedness for college can help you make a good start in your college experience.

“Traditional” Students

We’re putting the quotation marks around the word “traditional,” again, because this group of college students is no longer the majority at many colleges, although the term is still sometimes used by educators. Coming directly or almost directly from high school, “traditional” students are used to attending classes, reading textbooks, and studying and thus may find the transition to college easier. Many are single and unattached and have fewer time commitments to others. Although a high percentage do work while in college, the work is typically part time or during the summer and does not have a severe
time impact on their studies. As first-year students, usually living on campus at a four-year college or university, they do not lose time to commuting and typically their housing plan includes meals and otherwise simplifies their living arrangements. In all, many have few responsibilities other than their academic work.

On the other hand, “traditional” students living away from home for the first time may face more psychological and social issues than other student groups. One is away from family and old friends, perhaps forced to cope with an incompatible roommate or living arrangements, and facing all sorts of new temptations. Experiencing this sudden new freedom, many students experiment with or develop habits such as poor dietary and sleep habits, lack of exercise, and sometimes substance abuse or other behaviors that disrupt their academic routine and study habits. Many young students are forced to “grow up” quickly after arriving at college. Some students who do not adjust to the freedoms of college end up dropping out in their first year.

**Returning Students**

Students returning to their education are often older, may have worked for a number of years, and may be used to living on their own and being financially and psychologically independent. They are often more mature and have a stronger sense of what they want from college; they may be more goal driven. They may be paying their own way through college and want to get their money’s worth. They may be full-time students but frequently are still working and can take only a part-time course load. They often live off campus and may own a home and have a mortgage. They may have children. Because they have made a very deliberate decision to go to college, returning students are often serious students and are motivated to do the work. Having spent time in the work world, they may also have developed good problem-solving and decision-making skills as a result of their “real-world” experience.

On the other hand, returning students may have less time for studying because of work and family commitments. They may feel more stress because of the time and financial requirements of college. Spending less time on campus may contribute to not feeling completely at home in the academic world. They may not have time for many extracurricular and campus activities. Although they may be dedicated and hardworking students, they may also be less patient learning “theory” in courses and want all their coursework to relate directly to the real world.
Other Student Groups

Beyond this difference of age, some other common differences also affect one’s college experience. Students in the following groups may be either “traditional” students by age or returning students.

Commuter Students

Many returning students are commuter students, and it is increasingly common also for many young people after high school to continue to live at home or in their own apartment, coming to campus only for classes. Commuter students often face the same issues of limited time as returning students. They may find it difficult to find time to talk with an instructor outside of class.

First-Generation Students

The phrase “first-generation student” refers to students who are the first in their families to attend college. These students may be “traditional” students enrolled right after high school or may be returning students. Students whose parents did not attend college may be less familiar with some or all aspects of the college experience and thus may have to transition into their new life.

Recent Immigrant and International Students

Many colleges have a significant percentage of students who have recently immigrated to the United States or who are attending college here. What both groups may have in common is coming from a different culture and possibly speaking English as a second language. They may have to make cultural adjustments and accommodations. Language issues are often the most serious obstacle to overcome, especially since so much of college education is based on reading and writing in English.

Students with Disabilities

The Americans with Disabilities Act prohibits colleges and universities from discriminating on the basis of disabilities and forces them to ensure that both classes and extracurricular activities are accessible to students with disabilities. Accessibility includes both physical accessibility to campus buildings and housing and accessibility to services and aids necessary for effective communication. Students with disabilities have the right to request any accommodations needed to allow them to succeed in college. For more information or to receive answers to any specific questions, contact the Association on Higher Education And Disability (AHEAD) at http://www.ahead.org.
**Students Who Are Working**

The key issue for working students often is time—how to find enough time for studying enough to do well in classes. Since it is very difficult to maintain two full-time schedules—work and school—one or the other may suffer. For those working long hours, Track” presents many tips for managing your time when you have less of it; Chapter 11 “Taking Control of Your Finances” also suggests ways to cut back on expenses while in college so that you don’t have to work so many hours.

**Students with a Family**

Typically it is returning students who have families of their own, although younger students may also have families to care for. Having children of your own means you have different priorities from most some students, but a family shouldn’t be viewed as an obstacle to college success. Time may be short, and you’ll have to manage it carefully to avoid falling behind in your studies. Chapter 2 "Staying Motivated, Organized, and On Track” describes some creative ways students can involve their families in the experience to prevent normal student stresses from disrupting family happiness.

**Profile of a Successful Student**

While it’s important to consider your strengths, it’s also important to develop a plan for moving forward and ensuring you have the knowledge and skills needed to succeed. The following are some of the characteristics of the successful student you can be:

- Successful students have a good attitude and know how to stay motivated. You will learn about this in Chapter 2 "Staying Motivated, Organized, and On Track”.

- Successful students have developed good time management strategies, such as scheduling study time and getting started early on assignments and projects. You will also learn about this in Chapter 2 "Staying Motivated, Organized, and On Track”.

- Successful students have developed their critical thinking skills and apply them in their studies. Chapter 3 "Thinking about Thought” gets you started in this direction.

- Successful students have effective strategies for taking good notes in class and using them. Chapter 4 "Listening, Taking Notes, and Remembering” guides you through this learning process.
• Successful students have learned how to gain the most from their assigned readings for classes. Chapter 5 "Reading to Learn" presents guidelines for effective reading and taking notes to help you understand and retain information.

• Successful students know how to prepare for and take tests successfully. Chapter 6 "Preparing for and Taking Tests" tells you what you need to know and presents tips for effective test taking.

• Successful students interact well with their instructors and fellow students in and outside of class. Chapter 7 "Interacting with Instructors and Classes" helps you gain these skills.

• Successful students have learned to write well for their classes, an essential aspect of college education. Chapter 8 "Writing for Classes" introduces key principles of effective college writing to get you started.

• Successful students develop social relationships that contribute to, rather than detract from, their educational experiences. Chapter 9 "The Social World of College" will show you how to manage your social life.

• Successful students take control of their health with good habits that help them be better students and feel less stress. Chapter 10 "Taking Control of Your Health" can help you get started on good habits.

• Successful students have control over their finances. Because getting into debt is a very common reason that students have to drop out of college, it’s important to control expenditures and manage your finances well, as we’ll see in Chapter 11 "Taking Control of Your Finances".

• Successful students are able to transition well from the world of college into their future careers. You will learn these important principles in Chapter 12 "Taking Control of Your Future" to carry forward into your future.

### Key Takeaways

<table>
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<th>College students vary widely in terms of age, work experience before college, cultural background, family, and other factors that may affect how they learn.</th>
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<td>Traditional, young students just out of high school face a transition involving new freedoms and new situations they may need to master in order to succeed academically.</td>
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<tr>
<td>Returning students who work and may also have family responsibilities often have time issues and may feel out of place in the college environment.</td>
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• Other student groups include commuters, first-generation students, immigrant and international students, students with disabilities, and others, each of whom may need to face additional issues to be successful.
• Regardless of individual differences, all successful students share a number of traits, including a good attitude, effective time management strategies, good studying and test-taking skills, and more.

CHECKPOINT EXERCISES

1. Are you a “traditional” or “returning” student? List an important advantage you have as a result of being in this classification:

2. Check off which traits in this list are true of successful students:

- They know how to stay motivated.
- They don’t need to schedule study periods because they study at every available moment every day.
- They know better than to try to think on their own.
- They know how to speed-read so they don’t have to underline or highlight in their textbooks.
- They avoid talking with their instructors, so they can remain anonymous.
- They develop their writing skills.
- They eat fast food so they have more time for studying.
- They have few friends, because social relationships distract one from academics.
- They use several credit cards so they don’t have to worry about finances until after graduation.

1.3 How You Learn

LEARNING OBJECTIVES

1. Understand and make effective use of the four steps of the learning process.
2. Describe the different learning styles of different college students and recognize your own learning preferences.

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3. Know how to benefit from your own learning style and how to expand your learning skills with the techniques of other styles.

4. Take action to learn effectively when your learning style differs from your instructor’s teaching style.

One of the first steps for becoming a successful student is to understand the learning process itself. Certain characteristics of effective learning, including the four-step learning cycle, are true of all people. At the same time, people have different learning styles. Understanding these processes is important for maximizing your own learning while in college.

**The Learning Cycle: Four Steps to Learning**

Adult learning is different from learning in primary and secondary school. In high school, teachers often take much of the responsibility for how students learn—encouraging learning with class discussions, repeating key material, creating study guides, and looking over students’ shoulders to make sure no one falls behind. In college, most of the responsibility for learning falls on the student. You’re free to fail—or succeed—as you choose. This applies as well to how well you learn.

Learning an academic subject means really understanding it, being able to think about it in meaningful ways and to apply that understanding in new situations. This is very different from simply memorizing something and repeating it back on a test. Academic learning occurs most effectively in a cycle of four steps:

1. Preparing
2. Absorbing
3. Capturing
4. Reviewing

Think first about the different situations in which you learn. Obviously you learn during class, whether by listening to the instructor speak or in class discussions in which you participate. But you also learn while reading your textbooks and other materials outside of class. You learn when you talk with an instructor during office hours. You learn by talking with other students informally in study groups. You learn when you study your class notes before an exam. All of these different learning situations involve the same four-step process.
Prepare

One student rolls out of bed a few minutes before class and dashes across campus and grabs the last seat in the hall just as the instructor begins a lecture; it takes him a few minutes to find the right notebook in his backpack, and then he can’t find a pencil. He’s thinking about how he should’ve set his alarm a little earlier so he’d have had time to grab a cup of coffee, since he’s having trouble waking up. Finally he settles in his seat and starts listening, but now he can’t figure out what the instructor is talking about. He starts jotting down phrases in his notes anyway, thinking he’ll figure it out later.
Another student looks over his notes from the previous class and quickly glances back at passages he’d highlighted in the textbook reading. He arrives at class a few minutes early, sits up front where he can hear well, and has his notebook open and pencil out. While waiting for the instructor to arrive, he talks to another student about her ideas for the paper due next week in this class.

It’s obvious which of these students will learn more during today’s class lecture. One has prepared and the other has not, and they will experience a huge difference in their understanding of today’s topic. Preparing to learn is the first step for learning. The same is true when you sit down to read your textbook, to study for an exam, or to work on an out-of-class project. Partly you are putting yourself in the right mind-set to learn. But when you review yesterday’s notes to prepare for today’s class, you are also solidifying yesterday’s learning.

**Absorb**

“Absorbing” refers to the actual taking in of new ideas, information, or experience. This is what happens at the moment a student listens to a class lecture or reads a textbook. In high school, this is sometimes the only learning step taken by some students. They listened to what the instructor said and “regurgitated” it back on the test. But this won’t work in college because learning now requires *understanding* the topic, not just repeating facts or information. In coming chapters you’ll get tips for improving in this step.

**Capture**

“Capturing” refers to taking notes. No matter how good your memory, you need to take good notes in college simply because there is so much to learn. Just hearing something once is seldom enough. You have to go back over the material again, sometimes several times again, thinking about it and seeing how it all fits together.

The more effective your note-taking skills, the better your learning abilities. Take notes also when reading your textbooks. You’ll learn methods for taking good notes in later chapters.

**Review**

The step of reviewing—your class notes, your textbook reading and notes, and any other course materials possibly including recordings, online media, podcasts, and so on—is the next step for solidifying your learning and reaching a real understanding of the topic. Reviewing is also a way to prepare for new information and ideas. That’s why this is a learning cycle: the end of the process loops back to the beginning as you prepare for additional learning.
Reviewing is also the step in which you discover whether you really understand the material. If you do not understand something fully, you may need to reread a section of the book, talk it over with a friend in the class, or go see your instructor.

**What’s Your Learning Style?**

Different people have different learning styles. Style refers to a student’s specific learning preferences and actions. One student may learn more effectively from listening to the instructor. Another learns more effectively from reading the textbook, while another student benefits most from charts, graphs, and images the instructor presents during a lecture.

Learning style is important in college. Each different style, described later in more detail, has certain advantages and disadvantages compared with other styles. None is “right” or “wrong.” You can learn to use your own style more effectively.

College instructors also have different teaching styles, which may or may not match up well with your learning style. Although you may personally learn best from a certain style of teaching, you cannot expect that your instructors will use exactly the style that is best for you. Therefore it is important to know how to adapt to teaching styles used in college.

Different systems have been used to describe the different ways in which people learn. Some describe the differences between how extroverts (outgoing, gregarious, social people) and introverts (quiet, private, contemplative people) learn. Some divide people into “thinkers” and “feelers.” A popular theory of different learning styles is Howard Gardner’s “multiple intelligences,” based on eight different types of intelligence:

1. Verbal (prefers words)
2. Logical (prefers math and logical problem solving)
3. Visual (prefers images and spatial relationships)
4. Kinesthetic (prefers body movements and doing)
5. Rhythmic (prefers music, rhymes)
6. Interpersonal (prefers group work)
7. Intrapersonal (prefers introspection and independence)
8. Naturalist (prefers nature, natural categories)
The multiple intelligences approach recognizes that different people have different ways, or combinations of ways, of relating to the world.

Another approach to learning styles is called the VARK approach, which focuses on learning through different senses (Visual, Aural, Reading/Writing, and Kinesthetic):

- Visual learners prefer images, charts, and the like.
- Aural learners learn better by listening.
- Reading/writing learners learn better through written language.
- Kinesthetic learners learn through doing, practicing, and acting.


There are still more systems used by educators to describe the various ways in which people learn. All of these systems can help you learn more about how you as an individual person and college student learn best. You can use the online assessment in the “Outside the Book” section at the end of this chapter to learn more about your style.

Just knowing your style, however, doesn’t automatically provide a solution for how to do your best in your college courses. For example, although you may be a kinesthetic learner, you’ll likely still have textbook reading assignments (verbal learning) as well as lecture classes (listening). All students need to adapt to other ways of learning.

The following sections look at the key ways in which learning occurs in college classes and offer some suggestions about how to adapt your strengths for success.

**Reading**

Reading skills are critically important in college. Most classes involve reading assignments. Although many instructors may cover some of the textbook’s content in lectures or class discussions, students cannot skip the reading assignments and expect to do well.

If your personal learning style is verbal and independent—that is, if you learn well by sitting alone and reading—then you will likely not have difficulty with your college reading. Here are some tips to help maximize your learning:

- Underline and highlight key ideas when reading.
- Take good notes on your reading, using your own words.
• Write descriptions that summarize information presented in nonverbal modes, such as through charts and graphs.
• Do all optional and supplemental readings.
• Take good notes in class, as you may remember more from your written words than from the instructor’s spoken words.
• If a class involves significant non reading learning, such as learning hands-on physical processes, study with other students who are kinesthetic or “doing” learners.

If you have a different learning style, then you may need to give more attention to your reading skills. Always allow plenty of time for reading assignments—rushing makes it harder to understand what you are reading. Do your reading at times of the day when you are most alert. Find a quiet, comfortable place conducive to reading.

Try also to maximize your learning through your personal style. If you learn better by listening, for example, sit up front in lecture classes where you can see and hear the instructor better. If needed, ask if you can tape-record an instructor's lectures and then listen again at a convenient time, such as when commuting to class or work. If you are more of a visual learner, sit in class where you can see PowerPoint slides and other visual presentations most clearly. Use a visual approach in your class notes, as described in Chapter 4 "Listening, Taking Notes, and Remembering". Check out whether video podcasts may be available for reviewing lectures. Try to relate all of these visual images to the textbook’s content when you’re reading an assignment. In addition, pay special attention to illustrations and diagrams in the book, which will further help you understand the written ideas and information. If you are more of an interpersonal learner, form a study group with other students and talk with others about the course topics. Take advantage of your instructors’ office hours to help clarify your understanding after reading assignments.

**Listening**

Listening skills are as important in college as reading skills. College students are expected to listen to their instructors in class and remember and understand what is said. In discussion classes, listening is important also for participating well in discussions.
If your personal learning style favors listening, then you may already be good at understanding class lectures. Chapter 4 "Listening, Taking Notes, and Remembering" provides tips to help you pay close attention, take good notes, and recall the information and ideas you have heard. Here are some more tips:

- Sit where you can best hear the instructor, away from other distractions.
- Study with other students and listen to what they say about the course material. Hearing them talk from their class notes may be more helpful than reviewing your own written notes.
- Record lectures and listen to them again later when reviewing material before a test.
- When studying, read your notes aloud. Review previous tests by reading the questions aloud and speaking your answers. If a section in your textbook seems confusing, read it aloud.
- Talk with your instructor if you feel you are not understanding course readings.
- Use rhymes or acronyms to recall verbal information. For more information, see Chapter 4 "Listening, Taking Notes, and Remembering".
- Explore supplemental learning aids, such as audio and video podcasts (even from other colleges and universities) on the course’s subject matter.

Seeing

A “seeing” learner learns more effectively through seeing than through reading or listening. Some college courses include demonstrations and physical processes that can be observed. If you are a visual learner, work on developing your reading and listening skills, too, because you will need to learn in these ways as well. Here are some tips to improve learning related to seeing:

- Pay special attention in class to visual presentations, such as charts, diagrams, and images.
- Take lecture notes using a visual approach. Do the same when taking notes on class readings. Use diagrams, different colors, lists, and sketches to help you remember. For more information, see Chapter 4 "Listening, Taking Notes, and Remembering".
- Use video podcasts or other visual aids for reviewing lectures.
- Pay special attention to your textbooks’ illustrations and diagrams.
- If your instructor or textbook uses few visuals to help you understand and recall information and ideas, try to imagine how you would present this information visually to others if you were giving a class presentation. In your notes, create sketches for a PowerPoint slideshow capturing the highlights of the material.
• Study with other students who may learn better by reading or listening, and watch how they explain the material.

**Doing**

People who learn best by doing are often attracted to careers with a strong physical or hands-on component, which can vary from athletics to engineering. But these students may need to use other learning skills as well. Here are some tips to help maximize your learning related to doing:

• Try to engage all your senses when learning. Even when reading about something, try to imagine what it would feel like if you touched it, how it might smell, how you could physically manipulate it, and so forth.

• Think about how you yourself would teach the topic you are presently learning. What visuals could you make to demonstrate the idea or information? Imagine a class lecture as a train of boxcars and think about what things you would put in those cars to represent the lecture topics.

• When it becomes difficult to concentrate when reading while sitting in a quiet place, get up and move around while studying; make gestures as you read aloud.

• Use your hands to create a range of study aids rather than just taking notes: make charts, posters, flash cards, and so on.

• When taking notes, sketch familiar shapes around words and phrases to help you remember them. Try to associate abstract ideas with concrete examples.

• The act of writing—handwriting more than typing at a keyboard—may increase retention; write key things several times.

• Study with other students who may learn better by reading or listening.

**Feeling**

Feeling learners focus on the emotional side of information and learn through personal connections. Too often they may feel that a college textbook or a class is “dry” or “boring” if it focuses exclusively on written information. In addition to improving their reading and listening skills, students with this style can enrich their learning by focusing on what they and others feel about the information and ideas being learned. Here are some tips to help maximize your learning related to feeling:

• Try to establish an emotional connection with the topic you are learning. In a history class, for example, imagine yourself as someone living in the period you are studying: what would you feel
about the forces at work in your life? In a science class, think about what the implications of a particular scientific principle or discovery might mean for you as a person or how you yourself might have felt if you had been the scientist making that discovery.

- Talk with your instructor during office hours. Express your enthusiasm and share your feelings about the subject. Even instructors who may seem “dry” in a lecture class often share their feelings toward their subject in conversation.
- Do supplemental reading about the people involved in a subject you’re studying. For example, reading an online biographical sketch of a historical figure, scientist, or theorist may open your eyes to a side of the subject you hadn’t seen before and increase your learning.
- Study with other students who may learn better by reading or listening. Talk with them in a personal way about what the material means to them. Try teaching them about the topic while explaining your feelings about it.
- Also try the strategies listed for the “doing” learning style.

**Your Style, Your Instructor’s Style**

Many college classes tend to focus on certain learning styles. Instructors in large lecture classes, for example, generally emphasize listening carefully and reading well. Don’t worry, however, if these are not your particular strengths, for much of this book focuses on learning study skills and other college skills related to these activities. Take responsibility for your own learning, rather than expecting the instructor to help you through the subject in your own personal way. For example, if you are a visual learner but your instructor simply stands at a podium and lectures, then provide your own visual stimulation by sketching concept maps in your notes or by visualizing how information being presented might look in a pie chart or graph. For more information, see Chapter 4 "Listening, Taking Notes, and Remembering". As you move further into your college curriculum, you will likely have more small classes with class discussions, demonstrations, group presentations, and other learning activities. Once you are in classes closely related to a career path that interests you, you will find your personal style more relevant to the kinds of material you will be learning.

Much learning in college also comes from interactions with others, who often have different learning styles. Be open to interacting with other students and instructors who are different from you, and you will find yourself learning in ways that may be new to you.
Finally, if a genuine mismatch is occurring between your learning style and your instructor’s teaching style to the extent that you may not succeed in a course, talk to your instructor privately during office hours. You can explain how you best learn and ask for suggestions about other resources that may help you.

**KEY TAKEAWAYS**

- People learn through a four-step process, and you can maximize your learning by conscientiously applying all steps throughout college.
- The first step of the learning cycle is to prepare in advance for classes, reading, tests, and other learning.
- The second step is to absorb information and ideas effectively during classes, reading, and other learning experiences.
- The third step, capturing, typically involves taking notes on the learning experience to increase understanding and retention.
- The fourth step is to review your notes, to help solidify the learning and to prepare for repeating the cycle in the next class or reading assignment.
- People have natural learning preferences, affecting how they learn best, such as learning by reading, by listening, by seeing, by doing, and by feeling.
- Students should learn how to use their own learning style to their best advantage while also becoming flexible and working to develop other learning styles.
- Because your learning style may not match your instructor’s teaching style, you need to be flexible and work to develop new learning strategies essential for college success.

**CHECKPOINT EXERCISES**

1. Number each the following actions to put them in the correct order of the four steps of the learning cycle:
   - Review your class notes to make sure you understand.
   - Listen carefully to what your instructor says.
   - Prepare for today’s class by looking over your notes on the reading you did for today.
   - Take effective notes.

2. How would you describe your personal learning style?
Name an activity from which you generally learn very well.

Name a type of learning experience you may have difficulty with.

For the activity above, list at least two strategies you can use to improve your learning effectiveness when in that situation next time.

3. If you experience a situation in which your personal learning style seems to clash hopelessly with an instructor’s teaching style, what is your best course of action?
   a. Ask the instructor to teach in a different way.
   a'. Drop the class.
   b. Adapt your style or study with other students.
   c. Complain to the dean.

1.4 What Is College, Really?

**LEARNING OBJECTIVES**

1. Describe differences between large and small college classes and discuss the implications for learning.
2. Understand courses within your own college program: core courses, electives, and major courses.
3. Describe different skills needed for online courses.
4. Know how to learn your college’s policies and understand their importance.
5. Know what resources your college makes available to students and how to access them.
Big Classes, Small Classes

While most high school classes are fairly small, many college classes are large—up to several hundred students in a large lecture class. Other classes you may take will be as small as high school classes. In large lecture classes you may feel totally anonymous—even invisible—in a very large class. This feeling can get some students in trouble, however. Here are some common mistaken assumptions and attitudes about large classes:

- The instructor won’t notice me sitting there, so I can check e-mail or read for a different class if I get bored.
- The instructor doesn’t know my name or recognize me, so I don’t even need to go to class as long as I can borrow someone’s notes to find out what happens.
- I hate listening to lectures, so I might as well think about something else because I’m not going to learn anything this way anyway.

These comments all share the same flawed attitude about college: it’s up to the instructor to teach in an entertaining way if I am to learn at all—and it’s actually the college’s or instructor’s fault that I’m stuck in this large class, so they’re to blame if I think about or do other things. But remember, in college, you take responsibility for your own learning. Sure, a student is free to try to sleep in a lecture class, or not attend the class at all—the same way a student is “free” to fail any class he or she chooses!

If you dislike large lecture classes but can’t avoid them, the best solution is to learn how to learn in such a situation. Later chapters will give you tips for improving this experience. Just remember that it’s up to you to stay actively engaged in your own learning while in college—it’s not the instructor’s job to entertain you enough to “make” you learn.

There is one thing you need to know right away. Even in a lecture hall holding three hundred students, your instructors do know who you are. They may not know your name right away or even by the end of the term, but they see you sitting there, doing whatever you are doing, looking wherever you are looking—and will form a distinct impression of you. Instructors do have academic integrity and won’t lower your grade on an exam because you slept once in class, but the impression you make just might affect how far instructors go out of their way to offer a helping hand. Interacting with instructors is a crucial part of education—and the primary way students learn. Successful interaction begins with good communication.
and mutual respect. If you want your instructors to respect you, then you need to show respect for them and their classes as well.

**Core Courses, Electives, Majors, and Credits**

Every college has its own course requirements for different programs and degrees. This information is available in a printed course catalog or online. While academic advisors are generally assigned to students to help them plot their path through college and take the most appropriate courses, you should also take this responsibility yourself to ensure you are registering for courses that fit well into your plan for a program completion or degree. In general there are three types of courses:

1. **Core courses**, sometimes called “general education requirements,” involve a range of courses from which you can choose to meet this general requirement. You may need to take one or more English classes and possibly math or foreign language requirements. You will need a certain number of credits or course hours in certain types of core courses, but you can often choose among various specific courses for how you meet these requirements.

2. **Required courses in your major** are determined by individual academic departments. Whether you choose to major in English, math, engineering, history, a health field, chemistry, business, or any other field, your individual department sets specific required courses you must take and gives you options for a required additional number of credits in the department. You may not need to declare a major for a while, but this is something you can start thinking about now.

3. **Electives** are courses you choose freely to complete the total number of college credits needed for your program or degree. How many electives you may take, how they “count” toward your total, and what kinds of courses are acceptable as electives all vary considerably among different schools and programs.

Most important is that you understand what courses you need and how each counts. Study the college catalog carefully and be sure to talk things over fully with your advisor. Don’t just sign up for courses that sound interesting—you might end up taking courses that don’t count toward your degree at all.

In addition, each term you may have to choose how many courses or hours to take. Colleges have rules about the maximum number of hours allowed for full-time students, but this maximum may in fact be more than you are prepared to manage—especially if you work or have other responsibilities. Taking a
light course load, while allowing more time for studying and other activities, could add up over time and result in an extra full year of college (or more!)—at significant additional expense. Part-time students often face decisions based more on time issues. Everyone’s situation is unique, however, and all students should talk this issue over with their advisor each year or term.

**Online Courses**

Most colleges now offer some online courses or regular courses with an online component. You experience an online course via a computer rather than a classroom. Many different variations exist, but all online courses share certain characteristics, such as working independently and communicating with the instructor (and sometimes other students) primarily through written computer messages. If you have never taken an online course, carefully consider what’s involved to ensure you will succeed in the course.

- You need to own or have frequent access to a recent model of computer with a high-speed Internet connection.
- Without the set hours of a class, you need to be self-motivating to schedule your time to participate regularly.
- Without an instructor or other students in the room, you need to be able to pay attention effectively to the computer screen. Learning on a computer is not as simple as passively watching television! Take notes.
- Without reminders in class and peer pressure from other students, you’ll need to take responsibility to complete all assignments and papers on time.
- Since your instructor will evaluate you primarily through your writing, you need good writing skills for an online course. If you believe you need to improve your writing skills, put off taking an online course until you feel better prepared.
- You must take the initiative to ask questions if you don’t understand something.
- You may need to be creative to find other ways to interact with other students in the course. You could form a study group and get together regularly in person with other students in the same course.

If you feel you are ready to take on these responsibilities and are attracted to the flexibility of an online course and the freedom to schedule your time in it, see what your college has available.
Class Attendance and Promptness

In some classes at some colleges, attendance is required and absences can affect one’s grade in the course. But even when attendance is not required, missing classes will inevitably affect your grade as well. You’re not learning if you’re not there. Reading another student’s notes is not the same.

Arriving to class promptly is also important. Walking into a class that has already begun is rude to the instructor (remember what we said earlier about the impression you may be making) and to other students. A mature student respects the instructor and other students and in turn receives respect back.

College Policies

A college campus is almost like a small town—or country—unto itself. The campus has its own police force, its own government, its own stores, its own ID cards, its own parking rules, and so on. Colleges also have their own policies regarding many types of activities and behaviors. Students who do not understand the rules can sometimes find themselves in trouble.

The most important academic policy is academic honesty. Cheating is taken very seriously. Some high school students may have only received a slap on the wrist if caught looking at another student’s paper during a test or turning in a paper containing sentences or paragraphs found online or purchased from a “term-paper mill.” In many colleges, academic dishonesty like this may result in automatic failure of the course—or even expulsion from college. The principle of academic honesty is simple: every student must do his or her own work. If you have any doubt of what this means for a paper you are writing, a project you are doing with other students, or anything else, check the college Web site for its policy statements or talk with your instructor.

Colleges also have policies about alcohol and drug use, sexual harassment, hazing, hate crimes, and other potential problems. Residence halls have policies about noise limits, visitors, hours, structural and cosmetic alterations of university property, and so on. The college registrar has policies about course add and drop dates, payment schedules and refunds, and the like. Such policies are designed to ensure that all students have the same right to a quality education—one not unfairly interrupted by the actions of others. You can find these policies on the college Web site or in the catalog.
College Resources

To be successful in college, you need to be fully informed and make wise decisions about the courses you register for, college policies, and additional resources. Always remember that your college wants you to succeed. That means that if you are having any difficulties or have any questions whose answers you are unsure about, there are college resources available to help you get assistance or find answers. This is true of both academic and personal issues that could potentially disrupt your college experience. Never hesitate to go looking for help or information—but realize that usually you have to take the first step.

The college catalog has already been mentioned as a great source of many kinds of information. You should have an updated catalog every year or know where to find it online.

The college’s Web site is the second place to look for help. Students are often surprised to see how much information is available online, including information about college programs, offices, special assistance programs, and so on, as well as helpful information such as studying tips, personal health, financial help, and other resources. Take some time to explore your college’s Web site and learn what is available—this could save you a lot of time in the future if you experience any difficulty.

In addition, many colleges have offices or individuals that can help in a variety of ways. Following are some of the resources your college may have. Learn more about your college’s resources online or by visiting the office of student services or the dean of students.

• **Academic advising office.** This office helps you choose courses and plan your program or degree. You should have a personal meeting at least once every term.

• **Counseling office.** This office helps with personal problems, including health, stress management, interpersonal issues, and so on.

• **Financial aid office.** If you are presently receiving financial aid or may qualify for assistance, you should know this office well.

• **Tutoring or skill centers.** The title of this resource varies among colleges, but most have special places where students can go for additional help for their courses. There may be a separate math center, writing center, or general study skills center.
• **Computer lab.** Before almost all students became skilled in computer use and had their own computers, colleges built labs where students could use campus computers and receive training or help resolving technical problems. Many campuses still maintain computer centers to assist students with technical issues.

• **Student health clinic.** In addition to providing some basic medical care and making referrals, most college student health centers also help with issues such as diet and exercise counseling, birth control services, and preventive health care.

• **Career guidance or placement office.** This center can help you find a student job or internship, plan for your career after graduation, and receive career counseling.

• **Office for students with disabilities.** This office may provide various services to help students with disabilities adapt within the college environment.

• **Housing office.** This office not only controls campus residential housing but often assists students to find off-campus private accommodations.

• **Diversity office.** This office promotes cultural awareness on campus, runs special programs, and assists diverse students with adjusting to campus culture.

• **Office of student affairs or student organizations.** Participating in a group of like-minded students often supports academic success.

• **Athletic center.** Most colleges have exercise equipment, pools, courts and tracks, and other resources open to all students. Take advantage of this to improve or maintain your personal health, which promotes academic success.

• **Other specialized offices for student populations.** These may include an office supporting students who speak English as a second language, adult students returning to college, international students, religious students, students with children (possibly a child-care center), veterans of the armed services, students preparing for certain types of careers, and so on.

• **Your instructors.** It never hurts to ask a friendly instructor if he or she knows of any additional college resources you haven’t yet discovered. There may be a brand new program on campus, or a certain department may offer a service not widely promoted through the college Web site.
Everyone needs help at some time—you should never feel embarrassed or ashamed to seek help. Remember that a part of your tuition and fees are going to these offices, and you have every right to take advantage of them.

**KEY TAKEAWAYS**

- Even in large lecture classes, attendance is important, along with forming a good impression and paying attention.
- Study the college catalog and talk with your advisor to ensure you understand the role of core classes, electives, and major courses in your program or degree requirements.
- Online courses offer another option in many colleges but require a certain preparedness and a heightened sense of responsibility.
- To avoid inadvertently finding yourself in trouble, know your college’s policies for academic issues and campus behavior.
- Taking advantage of the many resources your college offers to help you with a wide range of academic and personal matters is essential for success in college.

**CHECKPOINT EXERCISES**

1. For each of the following statements, circle T for true or F for false:

<table>
<thead>
<tr>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>If your instructor in a large lecture class is boring, there’s nothing you can do except to try to stay awake and hope you never have him or her for another class.</td>
<td>T</td>
</tr>
<tr>
<td>In a large lecture hall, if you sit near the back and pretend to listen, you can write e-mails or send text messages without your instructor noticing.</td>
<td>F</td>
</tr>
</tbody>
</table>

2. List three things a college student should be good at in order to succeed in an online course.

   - 
   - 
   - 

3. Use your imagination and describe three different actions that would violate of your college’s academic honesty policy.
4. Where on campus would you first go for help choosing your courses for next term?

<table>
<thead>
<tr>
<th>For help with your math class?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a problem coping with a lot of stress?</td>
</tr>
<tr>
<td>To learn about your options for student loans?</td>
</tr>
<tr>
<td>To find a better apartment?</td>
</tr>
</tbody>
</table>

**1.5 Let’s Talk about Success**

**LEARNING OBJECTIVES**

1. Understand that success in college means much more in the long term than simply passing or getting good grades.
2. Describe situations in which grades do matter—and why it’s important to do as well as you can.
3. Describe why it is so important to be successful in your first year of college.
4. List steps you can begin taking immediately to ensure your success.

Success in college is the theme of this book—and you’ll be learning more about everything involved in success in the following chapters. Let’s first define what success really means so that you can get started, right now, on the right foot.
Understand first that no book can “make” you be successful—it can only offer the tools for you to use if you want. What are you thinking right now as you read these words? Are you reading this right now only because you have to, because it is assigned reading in a course you have to take—and your mind keeps drifting to other things because you’re feeling bored? Or are you interested because you’ve decided you want to succeed in college?

We hope it’s the latter, that you’re feeling motivated—and excited, too—to do a great job in college. But even if you aren’t much concerned at present about these issues, we hope you’ll keep reading and do some thinking about why you’re in college and how to get motivated to do well.

“Success” and “Failure”

So what does “success” actually mean in college? Good grades? That’s what many students would say—at least toward the beginning of their time in college.

When you ask people about their college experience a few years later, grades are seldom one of the first things mentioned. College graduates reflecting back typically emphasize the following:

- The complete college experience (often described as “the best years of my life”)
- Exploring many different subjects and discovering one’s own interests
- Meeting a lot of interesting people, learning about different ways to live
- Learning how to make decisions and solve problems that are now related to a career
- Gaining the skills needed to get the job—and life—one desires

When you are achieving what you want in life and when you are happy and challenged and feel you are living life to its fullest and contributing to the world, then you likely feel successful. When you reach this point, your grades in college are about the last thing you’ll think of.

This is not to say that grades don’t matter—just that getting good grades is not the ultimate goal of college or the best way to define personal success while in college. Five or ten years from now, no one is going to care much about what grade you got in freshman English or Biology 101. A successful college experience does include acceptable grades, of course, but in the end—in your long-range goals—grades are only one component of a larger picture.

How Much Do Grades Matter?
As you begin your college experience, it’s good to think about your attitude toward grades, since grades often motivate students to study and do well on assignments. Valuing grades too highly, or not highly enough, can cause problems. A student who is determined to get only the highest grades can easily be frustrated by difficult college classes. Expectations that are too high may lead to disappointment—possibly depression or anxiety—and may become counterproductive. At the other extreme, a student who is too relaxed about grades, who is content simply with passing courses, may not be motivated to study enough even to pass—and may be at risk for failing courses.

What is a good attitude to have toward grades? The answer to that depends in part on how grades do matter generally—and specifically in your own situation. Here are some ways grades clearly do matter:

- At most colleges, all students must maintain a certain grade point average (GPA) to be allowed to continue taking courses and to graduate.
- Financial aid and scholarship recipients must maintain a certain grade in all courses, or a minimum GPA overall, to continue receiving their financial award.
- In some programs, the grade in certain courses must be higher than simply passing in order to count toward the program or major.

After graduation, it may be enough in some careers just to have completed the program or degree. But in most situations, how well one did in college may still affect one’s life. Employers often ask how well you did in college (new graduates at least—this becomes less important after one has gained more job experience). Students who are proud of their grades usually include their GPA on their résumés. Students with a low GPA may avoid including it on their resume, but employers may ask on the company’s application form or in an interview (and being caught in a lie can lead to being fired). An employer who asks for a college transcript will see all your grades, not just the overall GPA.

In addition to the importance for jobs, grades matter if you plan to continue to graduate school, professional school, or other educational programs—all of which require your transcript. Certainly grades are not the only way people are judged, but along with all forms of experience (work, volunteer, internship, hobbies) and personal qualities and the recommendations of others, they are an important consideration. After all, an employer may think, if this person goofed off so much in college that he got low grades, how can I expect him not to goof off on the job?
How to Calculate Your GPA

Because of various requirements for maintaining a GPA at a certain level, you may need to know how to calculate your GPA before grades come out at the end of the term. The math is not difficult, but you need to consider both the grade in every course and the number of credit hours for that course in order to calculate the overall GPA. Here is how you would do the calculation in the traditional four-point scale.

First, translate each letter grade to a numerical score:
A = 4B = 3C = 2D = 1

Then multiply each grade’s numerical score by the number of units or hours for that course:
B in Math 101 × 5 hours = 3 × 5 = 15B in English 4 × 3 hours = 3 × 3 = 9C in Humanities 1 × 5 hours = 2 × 5 = 10A in College Success × 3 hours = 4 × 3 = 12

Then add together those numbers for each course:
15 + 9 + 10 + 12 = 46.

Then divide that total by the total number of credit hours:
46 / 16 = 2.87 = GPA of 2.87.

Consult your college’s policies regarding the numeric weighting of + and − grades.

The best attitude to take toward grades in college is simply to do the best you can do. You don’t need to kill yourself, but if you’re not going to make an effort then there’s not much reason to be there in the first place. Almost everything in this book—from time management to study skills to social skills and staying healthy—will contribute to your overall success and, yes, to getting better grades.

If you have special concerns about grades, such as feeling unprepared in certain classes and at risk of failing, talk with your academic advisor. If a class requires more preparation than you have from past courses and experience, you might be urged to drop that class and take another—or to seek extra help. Your advisor can help you work through any individual issues related to doing well and getting the best grade you can.

Can You Challenge a Grade?

Yes and no. College instructors are very careful about how they assign grades, which are based on clear-cut standards often stated in the course syllabus. The likelihood of an instructor changing your grade if you challenge it is very low. On the other hand, we’re all human—mistakes can occur, and if you truly feel
a test or other score was miscalculated, you can ask your instructor to review the grade. Just be sure to be polite and respectful.

Most situations in which students want to challenge a grade, however, result from a misunderstanding regarding the expectations of the grading scale or standards used. Students may simply feel they deserve a higher grade because they think they understand the material well or spent a lot of time studying or doing the assignment. The instructor’s grade, however, is based on your actual responses on a test, a paper or other assignment. The instructor is grading not what he or she thinks is in your head, but what you actually wrote down.

If you are concerned that your grade does not accurately reflect your understanding or effort, you should still talk with your instructor—but your goal should be not to argue for a grade change but to gain a better understanding of the course’s expectations so that you’ll do better next time. Instructors do respect students who want to improve. Visit the instructor during office hours or ask for an appointment and prepare questions ahead of time to help you better understand how your performance can improve and better indicate how well you understand the material.

A major aspect of college for some students is learning how to accept criticism. Your college instructors hold you to high standards and expect you to have the maturity to understand that a lower grade is not a personal attack on you and not a statement that you’re not smart enough to do the work. Since none of us is perfect, we all can improve in almost everything we do—and the first step in that direction is accepting evaluation of our work. If you receive a grade lower than you think you have earned, take the responsibility to learn what you need to do to earn a higher grade next time.

**Succeeding in Your First Year**

The first year of college is almost every student’s most crucial time. Statistics show a much higher dropout rate in the first year than thereafter. Why? Because for many students, adjusting to college is not easy. Students wrestle with managing their time, their freedom, and their other commitments to family, friends, and work. It’s important to recognize that it may not be easy for you.

On the other hand, when you do succeed in your first year, the odds are very good that you’ll continue to succeed and will complete your program or degree.
Getting Started on the Right Foot Right Now

- Make an appointment to talk with your academic advisor if you have any doubt about the courses you have already enrolled in or about the direction you’re taking. Start examining how you spend your time and ensure you make enough time to keep up with your courses.

- Check for tutoring assistance if you feel you may need it and make an appointment or schedule time to visit tutoring centers on your college campus to see what help you can get if needed.

- Like yourself. You’ve come a long way to reach this point, you have succeeded in taking this first step toward meeting your college goal, and you are fully capable of succeeding the rest of the way. Avoid the trap of feeling down on yourself if you’re struggling with any classes.

- Pay attention to your learning style and your instructors’ teaching styles. Begin immediately applying the guidelines discussed earlier for situations in which you do not feel you are learning effectively.

- Plan ahead. Check your syllabus for each class and highlight the dates of major assignments and tests. Write on your calendar the important dates coming up.

- Look around your classroom and plan to introduce yourself right away to one or two other students. Talking with other students is the first step in forming study groups that will help you succeed.

- Introduce yourself to your instructors, if you haven’t already. In a large lecture, go up to the instructor after class and ask a question about anything in the lecture or about an upcoming assignment.

- Participate in your classes. If you’re normally a quiet person who prefers to observe others asking questions or joining class discussions, you need to take the first step toward becoming a participating student—another characteristic of the successful student. Find something of particular interest to you and write down a question for the instructor. Then raise your hand at the right time and ask. You’ll find it a lot easier than you may think!

- Vow to pay more attention to how you spend your money. Some students have to drop out because they get into debt.
• Take good care of your body. Good health makes you a better student. Vow to avoid junk food, to get enough sleep, and to move around more. When you’re done reading this chapter, take a walk!

Excellent! Start doing these few things, and already you’ll be a step or two ahead—and on your way to a successful first year!

KEY TAKEAWAYS

• While success in college involves many benefits and experiences, grades remain one important measure of success.

• Acceptable grades are important for continuing your college program and financial aid, for graduate school or other future educational opportunities, and for obtaining a good job in most careers.

• Succeeding is especially important in one’s first year of college because this is the most critical period to avoid the factors that lead to many students dropping out.

• You can launch yourself on a path of success immediately by taking the first steps for help with studies, developing a positive attitude, taking advantage of your personal learning style, starting to practice time management, meeting your instructors and other students, participating actively in your classes, and taking control of your personal health and finances.

CHECKPOINT EXERCISES

1. In your college or your specific program, do you need to maintain a minimum GPA in order to continue in the program? (If you don’t know, check your college catalog or Web site.) What is that minimum GPA?

____________________

What was your cumulative GPA in high school?

____________________

Because college classes are usually more difficult than high school classes, figure—purely as a starting point—that with the same effort, your college GPA could be a full point (or more) lower than your high school GPA. Does that give you any cause for concern? If so, what do you think you should work on most to ensure you succeed in college?

____________________
2. For each of the following statements about success in college, circle T for true or F for false:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>F</td>
<td>See your academic advisor only when it’s time to register for courses or when the college requires you to.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>The best way to get help with a class is to pick whoever looks like the smartest student in class and offer to pay that person for tutoring.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>A positive attitude about yourself as a college student helps you stay motivated to work on succeeding in your classes.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>Understanding one’s own learning style makes it easier to understand how to apply one’s strengths when studying and to overcome obstacles to learning by adapting in other ways.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>Meeting other students in your classes is important early on because you can skip classes once you arrange to borrow other people’s notes.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>Participating in class is a key to being successful in that class.</td>
</tr>
</tbody>
</table>

1.6 Chapter Activities

Chapter Takeaways

• The first year of college is the most critical. Make the commitment to overcome any obstacles to a successful transition and stay committed and motivated to succeed.

• Although college students differ in many ways, all successful students share certain common traits, including a positive attitude, effective critical thinking skills, good time management skills, effective study skills, interactions with instructors and other students, and good habits for personal health and financial stability.

• You can learn to maximize your learning by attending to each step of the learning process: preparing, absorbing, capturing, and reviewing.

• It is important to understand your personal learning style and use it well in classes, while also making the effort to learn in new ways and work with other students for a more effective overall learning experience.
• Working with your academic advisor and taking advantage of the many resources available at your college are key actions to ensure success.
• Understanding the larger characteristics of college success leads to a richer college experience, supplementing the value of good grades.
• While it may take a few weeks to develop all the skills needed for success in college, there are many steps you can begin taking today to get moving in the right direction.

### CHAPTER REVIEW

Check off every action on the following list that you plan to use in your first year of college to help you be as successful as you can be.

<table>
<thead>
<tr>
<th>Action</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach classes and homework exactly as I did in high school</td>
<td></td>
</tr>
<tr>
<td>View college as a vital experience preparing me for the rest of my life</td>
<td></td>
</tr>
<tr>
<td>Decide immediately what I want to major in and never change my mind as I move forward through my courses</td>
<td></td>
</tr>
<tr>
<td>Manage my time well so that I have enough time to study and start on assignments well ahead of the due dates</td>
<td></td>
</tr>
<tr>
<td>Attend classes when I think something important will be said and I can’t find someone to borrow class notes from</td>
<td></td>
</tr>
<tr>
<td>Adopt a positive attitude and work on staying motivated to succeed</td>
<td></td>
</tr>
<tr>
<td>Give up everything else in life while in college</td>
<td></td>
</tr>
<tr>
<td>Talk to my advisor so that I take only those classes where the teacher’s style matches my own learning style</td>
<td></td>
</tr>
<tr>
<td>Form study groups with other students different from me so I can take advantage of how they learn as well</td>
<td></td>
</tr>
<tr>
<td>Be sure to tell all my instructors what I think they want to hear, not what I might really think</td>
<td></td>
</tr>
<tr>
<td>Sit in the back row where I won’t be noticed or get asked a question I might not be able to answer</td>
<td></td>
</tr>
<tr>
<td>Make good friendships and interact with a wide range of people on campus</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Pay very close attention in class so that I don’t have to be concerned with reviewing the course material later</td>
<td></td>
</tr>
<tr>
<td>Prepare for each class every day</td>
<td></td>
</tr>
<tr>
<td>If I read too slowly, look for a Cliffs Notes summary of the reading so I don’t lose time reading whole textbook chapters</td>
<td></td>
</tr>
<tr>
<td>Talk to other students to find out what classes and instructors are easiest to keep my GPA up</td>
<td></td>
</tr>
<tr>
<td>Take as many online courses as I can so that I can sleep late and get help from friends doing online assignments</td>
<td></td>
</tr>
<tr>
<td>To save time, go first to a friendly instructor to learn about any resources the college may have to help me</td>
<td></td>
</tr>
<tr>
<td>Take it easy my first year in college, not worrying about grades, to avoid burnout</td>
<td></td>
</tr>
<tr>
<td>Check out tutoring services only as a last resort at the end of the term if I’m in danger of failing</td>
<td></td>
</tr>
<tr>
<td>Check the class syllabus for important assignments and exam dates and begin scheduling study periods well ahead of time</td>
<td></td>
</tr>
<tr>
<td>Get to know my instructors and other students in the class right away</td>
<td></td>
</tr>
</tbody>
</table>

**OUTSIDE THE BOOK**

1. Go online to the free CareerLink Inventory Web site at [http://www.mpcfaculty.net/CL/cl.htm](http://www.mpcfaculty.net/CL/cl.htm) and spend a few minutes taking this free assessment of your interests and personality. Completion of the questionnaire leads to a statement of Career Inventory Results, with different career clusters matched to your assessment.

   Click on the “cluster title” for several of your best-matched career areas to view specific career possibilities. Clicking on specific career titles will then provide a wealth of career information from the United States Department of Labor, Bureau of Labor Statistics, including data about the following:
2. Go to [http://www.businessballs.com/howardgardnermultipleintelligences.htm#multiple%20intelligences%20tests](http://www.businessballs.com/howardgardnermultipleintelligences.htm#multiple%20intelligences%20tests) and scroll down to the link for “free Multiple Intelligences test (based on Howard Gardner’s model)—in Microsoft Excel self-calculating format, and other versions.” You need Microsoft Excel on your computer to take this free online assessment of your learning style.

Clicking the link will download an Excel spreadsheet with 74 questions. Answer each as directed on the 1 to 4 scale. Your score totals are then shown for each of the “multiple intelligences” learning styles presented earlier in this chapter.

What are your two strongest “intelligence types”?


What are your two weakest “intelligence types”?


Based on this evaluation, what aspects of college learning might you want to give more attention to? (Refer to Chapter 1 "You and Your College Experience", Section 1.3 "How You Learn" for ideas to think about.)


- The nature of the work
- Education and training required
- Employment possibilities and future job outlook
- Earnings
- Related occupations

This information will get you started thinking about possible careers that may match your interests. For a more complete survey of your interests, personality, and strengths, visit your college’s career counseling center.
3. Visit your college’s Web site and spend at least thirty minutes exploring available resources. Usually there is a section called “Students” or “Present Students” or “Student Resources” or something similar—apart from all the other information for prospective future students, parents, faculty, courses, and so on. Jot down some of the topics here that you might want to consult again in the future if you were to experience a problem involving money, personal health, academic success, emotional health, social problems, discrimination, or other issues.

MAKE AN ACTION LIST

Attitude

My most negative attitude toward college is

Here’s what I’ll do to be more positive:
Values

My personal values most closely related to a college education are

I may have to put these values on hold while in college:

Transitioning to College

The most likely problems I’ll have (as a traditional or returning student) transitioning to college are

Here’s what I’ll do to stay focused in my first year:

Learning Process

In the past, I have paid too little attention to these steps of the learning process:

Here’s what I will begin doing now in my classes to fully use all steps of the process:
Learning Style

This is my preferred learning style:

I will begin working to strengthen my learning through these other styles:

Lecture Classes

When I’m bored in a large lecture hall, I frequently do this:

To pay closer attention, I will try the following:

College Resources

I have not paid much attention to these available resources on my campus:

In the coming weeks, I will check online or in person for information about these offices that may be able to help me succeed:
College Grades

My grades generally suffer when I

To ensure I do well in all my classes, I will now begin to focus on

Immediate Steps to Success

I have not used my time as well as I might because I’ve been doing the following:

I will immediately start taking these steps to ensure I succeed in my classes:
# Chapter 2

## Staying Motivated, Organized, and On Track

### Where Are You Now?

Assess your present knowledge and attitudes.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Unsure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have clear, realistic, attainable goals for the short and long term, including for my educational success.</td>
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<tr>
<td>2. I have a good sense of priorities that helps ensure I always get the important things done, including my studies, while balancing my time among school, work, and social life.</td>
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<tr>
<td>3. I have a positive attitude toward being successful in college.</td>
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<tr>
<td>4. I know how to stay focused and motivated so I can reach my goals.</td>
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<tr>
<td>5. When setbacks occur, I work to solve the problems effectively and then move on.</td>
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<tr>
<td>6. I have a good space for studying and use my space to avoid distractions.</td>
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<tr>
<td>7. I do not attempt to multitask when studying.</td>
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<tr>
<td>8. I schedule my study periods at times when I am at my best.</td>
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<tr>
<td>9. I use a weekly or daily planner to schedule study periods and other tasks in advance and to manage my time well.</td>
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<tr>
<td>10. I am successful at not putting off my studying and other important activities or being distracted by other things.</td>
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### Where Do You Want to Go?
Think about how you answered the questions above. Be honest with yourself. On a scale of 1 to 10, how would you rate how well you stay focused on your goals and use your time?

<table>
<thead>
<tr>
<th>Need to improve</th>
<th>Very successful</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
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<td>5</td>
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<td>7</td>
<td>8</td>
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<tr>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

In the following list, circle the three most important areas in which you think you need to improve:

- Setting goals
- Staying focused on goals
- Keeping strong priorities
- Maintaining a positive attitude
- Staying motivated for academic work
- Solving and preventing problems
- Having an organized space for studies
- Avoiding the distractions of technology
- Preventing distractions caused by other people
- Managing time well when studying
- Overcoming a tendency to put things off
- Using a planner to schedule study periods
- Using a to-do list to ensure all tasks are done
- Finding enough time to do everything

Are there other areas in which you can improve your time management skills so that you can study effectively in the time you have, while still managing other aspects of your life? Write down other things you feel you need to work on.

How to Get There

Here's what we'll work on in this chapter:
• Setting and focusing on goals that are specific, realistic, and attainable
• Setting priorities for managing your time
• Adapting a positive attitude for college success and overcoming fear of failure or negativity
• Developing and practicing strategies for staying focused
• Preventing or solving problems that might threaten your success in college
• Choosing a study space and using it to your advantage for most efficient studying and avoiding distractions
• Understanding why multitasking, such as using your computer or cell phone while studying, is inefficient and actually wastes time
• Using your “time personality” to perform at your best and to plan ahead
• Using an academic planner to schedule study periods, get started on projects well in advance, and manage your time well
• Developing and practicing strategies for overcoming any tendency to procrastinate

**Goals and Time Management**

Since you’re reading this now, chances are very good you’re already in college or about to start. That means you’ve already set at least one goal for yourself—to get a college education—and that you’ve been motivated to come this far. You should feel good about that, because lots of people don’t make it this far. You’re off to a great first step!

But did you know that in many colleges in the United States, almost half of first-year college students will not make it to graduation? This varies widely among different colleges. Ask your instructor if he or she knows the graduation rate at your college, or you research this topic on your own. Knowing this can be important, because peer pressure (whether to succeed or to be lax and possibly drop out later) can be an important factor in your success.

If you want to be among the students who do succeed, it’s important to accept that college is not easy for most students. But we’re not trying to scare or depress you! The evidence shows that the huge majority of those who really want to finish college can do so successfully, if they stay motivated and learn how to
succeed. That’s what this book is all about. But it may take some effort. Succeeding in college involves paying attention to your studies in ways you may not have had to in your former life.

The two most common reasons why students drop out are financial difficulties and falling behind in studying. While no one is guaranteed to easily find the money needed for college, there are many ways you can cut costs and make it easier to get through. Chapter 11 “Taking Control of Your Finances” has lots of tips for how to make it financially.

This chapter looks at the other big issue: how to make sure that you succeed in your courses. The first step is to be committed to your education. You’ve been motivated to start college—now you need to keep that motivation going as you target specific goals for success in your classes. Much of this has to do with attitude. Success also requires managing your time effectively.

In fact, time management skills can make the difference between those who graduate from college and those who drop out. Time management is actually all about managing yourself: knowing what you want, deciding how to get what you want, and then efficiently and effectively getting it. That applies to fun things, too. In fact, you may want to think of the goal of this chapter as not just managing your time for studying but ensuring that even as you do well in your studies, you’re still enjoying your life while in college!

### 2.1 Setting and Reaching Goals

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
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<tbody>
<tr>
<td>1. Make short-, mid-, and long-term goals that are realistic and specific and commit to them.</td>
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<tr>
<td>2. Set priorities for reaching your goals as a basis for time management.</td>
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<tr>
<td>3. Develop an attitude for success.</td>
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<tr>
<td>4. Learn to use strategies for staying focused and motivated.</td>
</tr>
<tr>
<td>5. Network with other students to help ensure academic success.</td>
</tr>
<tr>
<td>6. Solve problems and overcome setbacks that threaten your goals.</td>
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Some people are goal oriented and seem to easily make decisions that lead to achieving their goals, while others seem just to “go with the flow” and accept what life gives them. While the latter may sound pleasantly relaxed, moving through life without goals may not lead anywhere at all. The fact that you’re in college now shows you already have the major goal to complete your college program.
A goal is a result we intend to reach mostly through our own actions. Things we do may move us closer to or farther away from that result. Studying moves us closer to success in a difficult course, while sleeping through the final examination may completely prevent reaching that goal. That’s fairly obvious in an extreme case, yet still a lot of college students don’t reach their goal of graduating. The problem may be a lack of commitment to the goal, but often students have conflicting goals. One way to prevent problems is to think about all your goals and priorities and to learn ways to manage your time, your studies, and your social life to best reach your goals. Consider these four students:

To help his widowed mother, Juan went to work full time after high school but now, a few years later, he’s dissatisfied with the kinds of jobs he has been able to get and has begun taking computer programming courses in the evening. He’s often tired after work, however, and his mother would like him to spend more time at home. Sometimes he cuts class to stay home and spend time with her.

In her senior year of college, Becky has just been elected president of her sorority and is excited about planning a major community service project. She knows she should be spending more time on her senior thesis, but she feels her community project may gain her contacts that can help her find a better job after graduation. Besides, the sorority project is a lot more fun, and she’s enjoying the esteem of her position. Even if she doesn’t do well on her thesis, she’s sure she’ll pass.

After an easy time in high school, James is surprised his college classes are so hard. He’s got enough time to study for his first-year courses, but he also has a lot of friends and fun things to do. Sometimes he’s surprised to look up from his computer to see it’s midnight already, and he hasn’t started reading that chapter yet. Where does the time go? When he’s stressed, however, he can’t study well, so he tells himself he’ll get up early and read the chapter before class, and then he turns back to his computer to see who’s online.

Sachito was successful in cutting back her hours at work to give her more time for her engineering classes, but it’s difficult for her to get much studying done at home. Her husband has been wonderful about taking care of their young daughter, but he can’t do everything, and lately he’s been hinting more about asking her sister to babysit so that the two of them can go out in the evening the way they used to. Lately, when she’s had to study on a weekend, he leaves with his friends, and Sachito ends up spending the day with her daughter—and not getting much studying done.
What do these very different students have in common? Each has goals that conflict in one or more ways. Each needs to develop strategies to meet their other goals without threatening their academic success. And all of them have time management issues to work through: three because they feel they don’t have enough time to do everything they want or need to do and one because even though he has enough time, he needs to learn how to manage it more effectively. For all four of them, motivation and attitude will be important as they develop strategies to achieve their goals.

It all begins with setting goals and thinking about priorities.

As you think about your own goals, think about more than just being a student. You’re also a person with individual needs and desires, hopes and dreams, plans and schemes. Your long-term goals likely include graduation and a career but may also involve social relationships with others, a romantic relationship, family, hobbies or other activities, where and how you live, and so on. While you are a student you may not be actively pursuing all your goals with the same fervor, but they remain goals and are still important in your life.

Goals also vary in terms of time. Short-term goals focus on today and the next few days and perhaps weeks. Midterm goals involve plans for this school year and the time you plan to remain in college. Long-term goals may begin with graduating college and everything you want to happen thereafter.

Often your long-term goals (e.g., the kind of career you want) guide your midterm goals (getting the right education for that career), and your short-term goals (such as doing well on an exam) become steps for reaching those larger goals. Thinking about your goals in this way helps you realize how even the little things you do every day can keep you moving toward your most important long-term goals.

Write out your goals in Activity 1. You should literally write them down, because the act of finding the best words to describe your goals helps you think more clearly about them. Follow these guidelines:

- **Goals should be realistic.** It’s good to dream and to challenge yourself, but your goals should relate to your personal strengths and abilities.

- **Goals should be specific.** Don’t write, “I will become a great musician”; instead, write, “I will finish my music degree and be employed in a symphony orchestra.”
• **Goals should have a time frame.** You won’t feel very motivated if your goal is vaguely “to finish college someday.” If you’re realistic and specific in your goals, you should also be able to project a time frame for reaching the goal.

• **You should really want to reach the goal.** We’re willing to work hard to reach goals we really care about, but we’re likely to give up when we encounter obstacles if we don’t feel strongly about a goal. If you’re doing something only because your parents or someone else wants you to, then it’s not your own personal goal—and you may have some more thinking to do about your life.

**ACTIVITY 1: PERSONAL GOALS**

Write your goals in the following blanks. Be sure to consider all areas of your life—consider *everything important* that you want to do between this moment and old age. (While you might aim for three to eight goals in each section, remember that everyone is unique, and you may be just as passionate about just one or two goals or more than eight.)

Short-term goals (today, this week, and this month):


Midterm goals (this year and while in college):


Long-term goals (from college on):

Priorities

Thinking about your goals gets you started, but it’s also important to think about priorities. We often use the word “priorities” to refer to how important something is to us. We might think, *This* is a really important goal, and *that* is less important. Try this experiment: go back to the goals you wrote in Activity 1 and see if you can rank each goal as a 1 (top priority), 2 (middle priority), or 3 (lowest priority).

It sounds easy, but do you actually feel comfortable doing that? Maybe you gave a priority 1 to passing your courses and a priority 3 to playing your guitar. So what does that mean—that you never play guitar again, or at least not while in college? Whenever you have an hour free between class and work, you have to study because that’s the higher priority? What about all your other goals—do you have to ignore
everything that’s not a priority 1? And what happens when you have to choose among different goals that are both number 1 priorities?

In reality, priorities don’t work quite that way. It doesn’t make a lot of sense to try to rank goals as always more or less important. The question of priority is really a question of what is more important at a specific time. It is important to do well in your classes, but it’s also important to have a social life and enjoy your time off from studying. You shouldn’t have to choose between the two—except at any given time. Priorities always involve time: what is most important to do right now. As we’ll see later, time management is mostly a way to juggle priorities so you can meet all your goals.

When you manage your time well, you don’t have to ignore some goals completely in order to meet other goals. In other words, you don’t have to give up your life when you register for college—but you may need to work on managing your life more effectively.

But time management works only when you’re committed to your goals. Attitude and motivation are very important. If you haven’t yet developed an attitude for success, all the time management skills in the world won’t keep you focused and motivated to succeed.

### An Attitude for Success

What’s your attitude right now—what started running through your mind as you saw the “An Attitude for Success” heading? Were you groaning to yourself, thinking, “No, not the attitude thing again!” Or, at the other extreme, maybe you were thinking, “This is great! Now I’m about to learn everything I need to get through college without a problem!” Those are two attitude extremes, one negative and skeptical, the other positive and hopeful. Most students are somewhere in between—but everyone has an attitude of one sort or another.

Everything people do and how they do it starts with attitude. One student gets up with the alarm clock and cheerfully prepares for the day, planning to study for a couple hours between classes, go jogging later, and see a friend at dinner. Another student oversleeps after partying too late last night, decides to skip his first class, somehow gets through later classes fueled by fast food and energy drinks while dreading tomorrow’s exam, and immediately accepts a friend’s suggestion to go out tonight instead of studying. Both students could have identical situations, classes, finances, and academic preparation. There could be just one significant difference—but it’s the one that matters.
Here are some characteristics associated with a positive attitude:

- Enthusiasm for and enjoyment of daily activities
- Acceptance of responsibility for one’s actions and feeling good about success
- Generally upbeat mood and positive emotions, cheerfulness with others, and satisfaction with oneself
- Motivation to get the job done
- Flexibility to make changes when needed
- Ability to make productive, effective use of time

And here are some characteristics associated with a negative attitude:

- Frequent complaining
- Blaming others for anything that goes wrong
- Often experiencing negative emotions: anger, depression, resentment
- Lack of motivation for work or studies
- Hesitant to change or seek improvement
- Unproductive use of time, procrastination

We started this chapter talking about goals, because people’s goals and priorities have a huge effect on their attitude. Someone who really wants to succeed in college is better motivated and can develop a more positive attitude to succeed. But what if you are committed to succeeding in college but still feel kind of doubtful or worried or even down on yourself—what can you do then? Can people really change their attitude? Aren’t people just “naturally” positive or negative or whatever?

While attitude is influenced by one’s personality, upbringing, and past experiences, there is no “attitude gene” that makes you one way or another. It’s not as simple as taking a pill, but attitude can be changed. If you’re committed to your goals, you can learn to adjust your attitude. The following are some things you can start doing.

**Be More Upbeat with Yourself**

We all have conversations with ourselves. I might do badly on a test, and I start thinking things like, “I’m just not smart enough” or “That teacher is so hard no one could pass that test.” The problem when we talk to ourselves this way is that we listen—and we start believing what we’re hearing. Think about what you’ve been saying to yourself since your first day at college. Have you been negative or making excuses, maybe
because you’re afraid of not succeeding? You are smart enough or you wouldn’t be here. Even if you did poorly on a test, you can turn that around into a more positive attitude by taking responsibility. “OK, I goofed off too much when I should have been studying. I learned my lesson—now it’s time to buckle down and study for the next test. I’m going to ace this one!” Hear yourself saying that enough and guess what—you soon find out you can succeed even in your hardest classes.

Choose Whom You Spend Time With

We all know negative and positive people. Sometimes it’s fun to hang out with someone with a negative attitude, especially if their sarcasm is funny. And if we’ve just failed a test, we might enjoy being with someone else who also blames the instructor or “the system” for whatever goes wrong. As they say, misery loves company. But often being with negative people is one of the surest ways to stay negative yourself. You not only hear your own self-talk making excuses and blaming others and putting yourself down, but you hear other people saying it, too. After a while you’re convinced it’s true. You’ve developed a negative attitude that sets you up for failure.

College offers a great opportunity to make new friends. Friendships and other social relationships are important to all humans—and maybe to college students most of all, because of the stresses of college and the changes you’re likely experiencing. Later chapters in this book have some tips for making new friends and getting actively involved in campus life, if you’re not already there. Most important, try to choose friends with a positive attitude. It’s simply more fun to be with people who are upbeat and enjoying life, people whom you respect—and who, like you, are committed to their studies and are motivated. A positive attitude can really be contagious.

Overcome Resistance to Change

While it’s true that most people are more comfortable when their situation is not always changing, many kinds of change are good and should be welcomed. College is a big change from high school or working. Accepting that reality helps you be more positive about the differences. Sure, you have to study more, and the classes are harder. You may be working more and have less time for your personal life. But dwelling on those differences only reinforces a negative attitude. Look instead at the positive changes: the exciting
and interesting people you’re meeting, the education you’re getting that will lead to a bright future, and the mental challenges and stimulation you’re feeling every day.

The first step may be simply to see yourself succeeding in your new life. Visualize yourself as a student taking control, enjoying classes, studying effectively, getting good grades. This book will help you do that in many ways. It all begins with the right attitude.

**Overcome Fears**

One of the most common fears of college students is a fear of failure—of not being able to make the grade. We all know that life is not all roses and that we’re not going to succeed at everything we try. Everyone experiences some sort of failure at some time—and everyone has fears. The question is what you do about it.

Again, think about your goals. You’ve enrolled in college for good reasons, and you’ve already shown your commitment by coming this far. If you still have any fear of failure, turn it around and use it in a positive way. If you’re afraid you may not do well on an upcoming exam, don’t mope around—sit down and schedule times to start studying well ahead of time. It’s mostly a matter of attitude adjustment.

**Stay Focused and Motivated**

Okay, you’ve got a positive attitude. But you’ve got a lot of reading for classes to do tonight, a test tomorrow, and a paper due the next day. Maybe you’re a little bored with one of your reading assignments. Maybe you’d rather play a computer game. Uh oh—now what? Attitude can change at almost any moment. One minute you’re enthusiastically starting a class project, and then maybe a friend drops by and suddenly all you want to do is close the books and relax a while, hang out with friends.

One of the characteristics of successful people is accepting that life is full of interruptions and change—and planning for it. Staying focused does not mean you become a boring person who does nothing but go to class and study all the time. You just need to make a plan.

Planning ahead is the single best way to stay focused and motivated to reach your goals. Don’t wait until the night before an exam. If you know you have a major exam in five days, start by reviewing the material and deciding how many hours of study you need. Then schedule those hours spread out over the next few days—at times when you are most alert and least likely to be distracted. Allow time for other activities,
too, to reward yourself for successful studying. Then when the exam comes, you’re relaxed, you know the material, you’re in a good mood and confident, and you do well.

Planning is mostly a matter of managing your time well, as we’ll see later. Here are some other tips for staying focused and motivated:

• If you’re not feeling motivated, think about the results of your goals, not just the goals themselves. If just thinking about finishing college doesn’t sound all that exciting, then think instead about the great, high-paying career that comes afterward and the things you can do with that income.

• Say it aloud—to yourself or a friend with a positive attitude: “I’m going to study now for another hour before I take a break—and I’m getting an A on that test tomorrow!” It’s amazing how saying something aloud puts commitment in it and affirms that it can be true.

• Remember your successes, even small successes. As you begin a project or approach studying for a test, think about your past success on a different project or test. Remember how good it feels to succeed. Know you can succeed again.

• Focus on the here and now. For some people, looking ahead to goals, or to anything else, may lead to daydreaming that keeps them from focusing on what they need to do right now. Don’t worry about what you’re doing tomorrow or next week or month. If your mind keeps drifting off, however, you may need to reward or even trick yourself to focus on the here and now. For example, if you can’t stop thinking about the snack you’re going to have when you finish studying in a couple hours, change the plan. Tell yourself you’ll take a break in twenty minutes if you really need it—but only if you really work well first.

• If you just can’t focus in on what you should be doing because the task seems too big and daunting, break the task into smaller, manageable pieces. Don’t start out thinking, “I need to study the next four hours,” but think, “I’ll spend the next thirty minutes going through my class notes from the last three weeks and figure out what topics I need to spend more time on.” It’s a lot easier to stay focused when you’re sitting down for thirty minutes at a time.

• Never, ever multitask while studying! You may think that you can monitor e-mail and send text messages while studying, but in reality, these other activities lower the quality of your studying.

• Imitate successful people. Does a friend always seem better able to stick with studying or work until they get it done? What are they doing that you’re not? We all learn from observing others, and we can
speed up that process by deliberately using the same strategies we see working with others. *Visualize yourself* studying in the same way and getting that same high grade on the test or paper.

- Separate yourself from unsuccessful people. This is the flip side of imitating successful people. If a roommate or a friend is always putting off things until the last minute or is distracted with other interests and activities, tell yourself how different you are. When you hear other students complaining about how hard a class is or bragging about not studying or attending class, visualize yourself as not being like them at all.

- Reward yourself when you complete a significant task—but only when you are done. Some people seem able to stay focused only when there’s a reward waiting.

- While some people work harder for the reward, others are motivated more by the price of failing.

- Get the important things done first. We’ll talk about managing your academic planner and to-do lists later in the chapter, but for now, to stay focused and motivated, concentrate on the things that matter most. You’re about to sit down to read a chapter in a book you’re not much enjoying, and you suddenly notice some clothing piled up on a chair. “I really should clean up this place,” you think. “And I’d better get my laundry done before I run out of things to wear.” Don’t try to fool yourself into feeling you’re accomplishing something by doing laundry rather than studying. Stay focused!

**Network for Success**

Making friends with people with positive attitudes not only helps you maintain a positive attitude yourself, but it gets you started networking with other students in ways that will help you succeed. Did you study alone or with friends in high school? Because college classes are typically much more challenging, many college students discover they do better, and find it much more enjoyable, if they study with other students taking same course. This might mean organizing a study group or just getting together with a friend to review material before a test. It’s good to start thinking right away about networking with other students in your classes.

If you consider yourself an independent person and prefer studying and doing projects on your own rather than with others, think for a minute about how most people function in their careers and
professions, what the business world is like. Most work today is done by teams or individuals working together in a collaborative way. Very few jobs involve a person always being and working alone. The more you learn to study and work with other students now, the more skills you are mastering for a successful career.

Studying with other students has immediate benefits. You can quiz each other to help ensure that everyone understands the course material; if you’re not clear about something, someone else can help teach it to you. You can read and respond to each other’s writing and other work. You can divide up the work in group projects. And through it all, you can often have more fun than if you were doing it on your own.

Studying together is also a great way to start networking—a topic we’ll discuss more in coming chapters. Networking has many potential benefits for your future. College students who feel they are part of a network on campus are more motivated and more successful in college.

**Tips for Success: Staying Motivated**

• Keep your eye on your long-term goals while working toward immediate goals.
• Keep your priorities straight—but also save some time for fun.
• Work on keeping your attitude positive.
• Keep the company of positive people; imitate successful people.
• Don’t let past habits drag you down.
• Plan ahead to avoid last-minute pressures.
• Focus on your successes.
• Break large projects down into smaller tasks or stages.
• Reward yourself for completing significant tasks.
• Avoid multitasking.
• Network with other students; form a study group.

**Problem Solving: When Setbacks Happen**

Even when you have clear goals and are motivated and focused to achieve them, problems sometimes happen. Accept that they will happen, since inevitably they do for everyone. The difference between those
who succeed by solving the problem and moving on and those who get frustrated and give up is partly attitude and partly experience—and knowing how to cope when a problem occurs.

Lots of different kinds of setbacks may happen while you’re in college—just as to everyone in life. Here are a few examples:

- A financial crisis
- An illness or injury
- A crisis involving family members or loved ones
- Stress related to frequently feeling you don’t have enough time
- Stress related to relationship problems

Some things happen that we cannot prevent—such as some kinds of illness, losing one’s job because of a business slowdown, or crises involving family members. But many other kinds of problems can be prevented or made less likely to occur. You can take steps to stay healthy, as you’ll learn in Chapter 10 "Taking Control of Your Health". You can take control of your finances and avoid most financial problems common among college students, as you’ll learn in Chapter. You can learn how to build successful social relationships and get along better with your instructors, with other students, and in personal relationships. You can learn time management techniques to ensure you use your time effectively for studying. Most of the chapters in this book also provide study tips and guidelines to help you do well in your classes with effective reading, note-taking, test-taking, and writing skills for classes. Preventing the problems that typically keep college students from succeeding is much of what this book is all about.

Not all problems can be avoided. Illness or a financial problem can significantly set one back—especially when you’re on a tight schedule and budget. Other problems, such as a social or relationship issue or an academic problem in a certain class, may be more complex and not easily prevented. What then?

First, work to resolve the immediate problem:

1. Stay motivated and focused. Don’t let frustration, anxiety, or other negative emotions make the problem worse than it already is.

2. Analyze the problem to consider all possible solutions. An unexpected financial setback doesn’t automatically mean you have to drop out of school—not when alternatives such as student loans, less expensive living arrangements, or other possible solutions may be available. Failing a midterm exam doesn’t automatically mean you’re going to fail the course—not when you make the effort to
determine what went wrong, work with your instructor and others on an improved study plan, and use better strategies to prepare for the next test.

3. Seek help when you need to. None of us gets through life alone, and it’s not a sign of weakness to see your academic advisor or a college counselor if you have a problem.

4. When you’ve developed a plan for resolving the problem, work to follow through. If it will take a while before the problem is completely solved, track your progress in smaller steps so that you can see you really are succeeding. Every day will move you one step closer to putting it behind you.

After you’ve solved a problem, be sure to avoid it again in the future:

1. Be honest with yourself: how did you contribute to the problem? Sometimes it’s obvious: a student who drank heavily at a party the night before a big test failed the exam because he was so hung over he couldn’t think straight. Sometimes the source of the problem is not as obvious but may become clearer the more you think about it. Another student did a lot of partying during the term but studied all day before the big test and was well rested and clearheaded at test time but still did poorly; he may not yet have learned good study skills. Another student has frequent colds and other mild illnesses that keep him from doing his best: how much better would he feel if he ate well, got plenty of exercise, and slept enough every night? If you don’t honestly explore the factors that led to the problem, it’s more likely to happen again.

2. Take responsibility for your life and your role in what happens to you. Earlier we talked about people with negative attitudes, who are always blaming others, fate, or “the system” for their problems. It’s no coincidence that they keep on having problems. Unless you want to keep having problems, don’t keep blaming others.

3. Taking responsibility doesn’t mean being down on yourself. Failing at something doesn’t mean you are a failure. We all fail at something, sometime. Adjust your attitude so you’re ready to get back on track and feel happy that you’ll never make that mistake again!

4. Make a plan. You might still have a problem on that next big test if you don’t make an effective study plan and stick to it. You may need to change your behavior in some way, such as learning time management strategies. (Read on!)

**KEY TAKEAWAYS**

- Goals should be realistic, specific, and time oriented, and you must be committed to them.
• Setting priorities helps keep you focused on your goals but doesn’t determine how you use your time at all times.

• Attitude is often the major reason students succeed or fail in college. Everyone can work on developing a more positive, motivating attitude.

• Planning, the essence of time management, is necessary to stay focused and continue moving toward your goals.

• Networking with other students helps you stay motivated as well as making studying more effective.

• Since problems and setbacks are inevitable, knowing how to solve problems is important for reaching goals. With a good attitude, most common student problems can be prevented.

### CHECKPOINT EXERCISES

1. Which of the following goal statements is written in a way that shows the person has carefully considered what he or she wants to achieve?
   
   a. I will do better in my math course.

   b. I will earn at least a B on my next English paper.

   c. I will study more this term.

List ways in which a negative attitude can prevent students from being successful in college.

Think about your friends in college or other students you have observed in one of your classes. Choose one who usually seems positive and upbeat and one who sometimes or frequently shows a negative attitude about college. Visualize both their faces—side by side—as if you are talking to both of them. Now imagine yourself sitting down to study with one of them for a final exam. Describe how you would imagine that study session going.
Look back at the four students described at the beginning of the chapter. Each of them is experiencing some sort of problem that could interrupt their progress toward their goals. Think about each student and write down a solution for each problem that you would try to work out, if you were that person.

For Juan:

For Becky:

For James:

For Sachito:

List a few things you can do if you’re having trouble getting motivated to sit down to study.
2.2 Organizing Your Space

**LEARNING OBJECTIVES**

1. Recognize the importance of organizing your space to your best advantage for studying.
2. Avoid distractions in the space where you are studying.
3. Understand the myth of multitasking and prevent distractions from your personal technology.

Now that you've worked up an attitude for success and are feeling motivated, it's time to get organized. You need to organize both your space and your time.

Space is important for many reasons—some obvious, some less so. People's moods, attitudes, and levels of work productivity change in different spaces. Learning to use space to your own advantage helps get you off to a good start in your studies. Here are a few of the ways space matters:

- **Everyone needs his or her own space.** This may seem simple, but everyone needs some physical area, regardless of size, that is really his or her own—even if it's only a small part of a shared space. Within your own space, you generally feel more secure and in control.

- **Physical space reinforces habits.** For example, using your bed primarily for sleeping makes it easier to fall asleep there than elsewhere and also makes it not a good place to try to stay awake and alert for studying.

- **Different places create different moods.** While this may seem obvious, students don't always use places to their best advantage. One place may be bright and full of energy, with happy students passing through and enjoying themselves—a place that puts you in a good mood. But that may actually make it more difficult to concentrate on your studying. Yet the opposite—a totally quiet, austere place devoid of color and sound and pleasant decorations—can be just as unproductive if it makes you associate studying with something unpleasant. Everyone needs to discover what space works best for himself or herself—and then let that space reinforce good study habits.

**Use Space to Your Advantage and to Avoid Distractions**

Begin by analyzing your needs, preferences, and past problems with places for studying. Where do you usually study? What are the best things about that place for studying? What distractions are most likely to occur there?
The goal is to find, or create, the best place for studying, and then to use it regularly so that studying there becomes a good habit.

• **Choose a place you can associate with studying.** Make sure it’s not a place already associated with other activities (eating, watching television, sleeping, etc.). Over time, the more often you study in this space, the stronger will be its association with studying, so that eventually you’ll be completely focused as soon as you reach that place and begin.

• **Your study area should be available whenever you need it.** If you want to use your home, apartment, or dorm room but you never know if another person may be there and possibly distract you, then it’s probably better to look for another place, such as a study lounge or an area in the library. Look for locations open at the hours when you may be studying. You may also need two study spaces— one in or near where you live, another on campus. Maybe you study best at home but have an hour free between two classes, and the library is too far away to use for only an hour? Look for a convenient empty classroom.

• **Your study space should meet your study needs.** An open desk or table surface usually works best for writing, and you’ll tire quickly if you try to write notes sitting in an easy chair (which might also make you sleepy). You need good light for reading, to avoid tiring from eyestrain. If you use a laptop for writing notes or reading and researching, you need a power outlet so you don’t have to stop when your battery runs out.

• **Your study space should meet your psychological needs.** Some students may need total silence with absolutely no visual distractions; they may find a perfect study carrel hidden away on the fifth floor in the library. Other students may be unable to concentrate for long without looking up from reading and momentarily letting their eyes move over a pleasant scene. Some students may find it easier to stay motivated when surrounded by other students also studying; they may find an open space in the library or a study lounge with many tables spread out over an area. Experiment to find the setting that works best for you—and remember that the more often you use this same space, the more comfortable and effective your studying will become.

• **You may need the support of others to maintain your study space.** Students living at home, whether with a spouse and children or with their parents, often need the support of family members to maintain an effective study space. The kitchen table probably isn’t best if others pass by frequently.
Be creative, if necessary, and set up a card table in a quiet corner of your bedroom or elsewhere to avoid interruptions. Put a “do not disturb” sign on your door.

- **Keep your space organized and free of distractions.** You want to prevent sudden impulses to neaten up the area (when you should be studying), do laundry, wash dishes, and so on. Unplug a nearby telephone, turn off your cell phone, and use your computer only as needed for studying. If your e-mail or message program pops up a notice every time an e-mail or message arrives, turn off your Wi-Fi or detach the network cable to prevent those intrusions.

- **Plan for breaks.** Everyone needs to take a break occasionally when studying. Think about the space you’re in and how to use it when you need a break. If in your home, stop and do a few exercises to get your blood flowing. If in the library, take a walk up a couple flights of stairs and around the stacks before returning to your study area.

- **Prepare for human interruptions.** Even if you hide in the library to study, there’s a chance a friend may happen by. At home with family members or in a dorm room or common space, the odds increase greatly. Have a plan ready in case someone pops in and asks you to join them in some fun activity. Know when you plan to finish your studying so that you can make a plan for later—or for tomorrow at a set time.

**The Distractions of Technology**

Multitasking is the term commonly used for being engaged in two or more different activities at the same time, usually referring to activities using devices such as cell phones, smartphones, computers, and so on. Many people claim to be able to do as many as four or five things simultaneously, such as writing an e-mail while responding to an instant message (IM) and reading a tweet, all while watching a video on their computer monitor or talking on the phone. Many people who have grown up with computers consider this kind of multitasking a normal way to get things done, including studying. Even people in business sometimes speak of multitasking as an essential component of today’s fast-paced world.

It is true that some things can be attended to while you’re doing something else, such as checking e-mail while you watch television news—but only when none of those things demands your full attention. You can concentrate 80 percent on the e-mail, for example, while 20 percent of your attention is listening for something on the news that catches your attention. Then you turn to the television for a minute, watch that segment, and go back to the e-mail. But you’re not actually watching the television at the same
time you’re composing the e-mail—you’re rapidly going back and forth. In reality, the mind can focus only on one thing at any given moment. Even things that don’t require much thinking are severely impacted by multitasking, such as driving while talking on a cell phone or texting. An astonishing number of people end up in the emergency room from just trying to walk down the sidewalk while texting, so common is it now to walk into a pole or parked car while multitasking!

“Okay,” you might be thinking, “why should it matter if I write my paper first and then answer e-mails or do them back and forth at the same time?” It actually takes you longer to do two or more things at the same time than if you do them separately—at least with anything that you actually have to focus on, such as studying. That’s true because each time you go back to studying after looking away to a message or tweet, it takes time for your mind to shift gears to get back to where you were. Every time your attention shifts, add up some more “downtime”—and pretty soon it’s evident that multitasking is costing you a lot more time than you think. And that’s assuming that your mind does fully shift back to where you were every time, without losing your train of thought or forgetting an important detail. It doesn’t always.

The other problem with multitasking is the effect it can have on the attention span—and even on how the brain works. Scientists have shown that in people who constantly shift their attention from one thing to another in short bursts, the brain forms patterns that make it more difficult to keep sustained attention on any one thing. So when you really do need to concentrate for a while on one thing, such as when studying for a big test, it becomes more difficult to do even if you’re not multitasking at that time. It’s as if your mind makes a habit of wandering from one thing to another and then can’t stop.

So stay away from multitasking whenever you have something important to do, like studying. If it’s already a habit for you, don’t let it become worse. Manipulate your study space to prevent the temptations altogether. Turn your computer off—or shut down e-mail and messaging programs if you need the computer for studying. Turn your cell phone off—if you just tell yourself not to answer it but still glance at it each time to see who sent or left a message, you’re still losing your studying momentum and have to start over again. For those who are really addicted to technology (you know who you are!), go to the library and don’t take your laptop or cell phone.

In the later section in this chapter on scheduling your study periods, we recommend scheduling breaks as well, usually for a few minutes every hour. If you’re really hooked on checking for messages, plan to do that at scheduled times.
What about listening to music while studying? Some don’t consider that multitasking, and many students say they can listen to music without it affecting their studying. Studies are inconclusive about the positive or negative effects of music on people’s ability to concentrate, probably because so many different factors are involved. But there’s a huge difference between listening to your favorite CD and spontaneously singing along with some of the songs and enjoying soft background music that enhances your study space the same way as good lighting and pleasant décor. Some people can study better with low-volume instrumental music that relaxes them and does not intrude on their thinking, while others can concentrate only in silence. And some are so used to being immersed in music and the sounds of life that they find total silence more distracting—such people can often study well in places where people are moving around. The key thing is to be honest with yourself: if you’re actively listening to music while you’re studying, then you’re likely not studying as well as you could be. It will take you longer and lead to less successful results.

**Family and Roommate Issues**

Sometimes going to the library or elsewhere is not practical for studying, and you have to find a way to cope in a shared space.

Part of the solution is time management. Agree with others on certain times that will be reserved for studying; agree to keep the place quiet, not to have guests visiting, and to prevent other distractions. These arrangements can be made with a roommate, spouse, and older children. If there are younger children in your household and you have child-care responsibility, it’s usually more complicated. You may have to schedule your studying during their nap time or find quiet activities for them to enjoy while you study. Try to spend some time with your kids before you study, so they don’t feel like you’re ignoring them. (More tips are offered later in this chapter.)

The key is to plan ahead. You don’t want to find yourself, the night before an exam, in a place that offers no space for studying.

Finally, accept that sometimes you’ll just have to say no. If your roommate or a friend often tries to engage you in conversation or suggests doing something else when you need to study, just say no. Learn to be firm but polite as you explain that you just really have to get your work done first. Students who live at
home may also have to learn how to say no to parents or family members—just be sure to explain the importance of the studying you need to do! Remember, you can’t be everything to everyone all the time.

**KEY TAKEAWAYS**

- Where you study can have a huge impact on the effectiveness of your study efforts. Choose and organize your space to your advantage.
- How you control your study space can help you prevent distractions, especially those caused by other people or your personal technology.
- Attempting to multitask while studying diminishes the quality of your study time and results in a loss of time.
- Control your study space to prevent or manage potential interruptions from family members or roommates.

**CHECKPOINT EXERCISES**

1. For each of the following statements, circle T for true or F for false:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>T</td>
<td>Y our bed is usually a good place to study if you can keep the room quiet.</td>
</tr>
<tr>
<td>T</td>
<td>T o study well, use the most drab, boring place you can find.</td>
</tr>
<tr>
<td>T</td>
<td>A n empty classroom can be a good place to get some studying done if you happen to have an hour free between classes.</td>
</tr>
<tr>
<td>T</td>
<td>T o maintain a clear focus while studying, limit the time you spend checking for e-mail and text messages to every ten minutes or so. Put your cell phone on vibrate mode and keep it in your pocket where you can more easily ignore it.</td>
</tr>
<tr>
<td>T</td>
<td>I t’s OK to have the television or radio on while you study as long as you don’t give it your full attention.</td>
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<tr>
<td>T</td>
<td>T he key to avoiding interruptions and distractions from family members or roommates is to plan ahead for when and where you’ll study.</td>
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</table>

2. Class discussion exercise: Share stories about distractions caused by roommates and others that you and other students have experienced. Brainstorm together how to handle similar situations next time they arise.
2.3 Organizing Your Time

LEARNING OBJECTIVES

1. Discover your time personality and know where your time goes.
2. Understand the basic principles of time management and planning.
3. Learn and practice time management strategies to help ensure your academic success.
4. Know how to combat procrastination when it threatens to prevent getting your academic work done.
5. Use a calendar planner and daily to-do list to plan ahead for study tasks and manage your time effectively.
6. Learn effective time management techniques for students who work, students with family, and student athletes.

This is the most important part of this chapter. When you know what you want to do, why not just sit down and get it done? The millions of people who complain frequently about “not having enough time” would love it if it were that simple!

Time management isn’t actually difficult, but you do need to learn how to do it well.

Time and Your Personality

People’s attitudes toward time vary widely. One person seems to be always rushing around but actually gets less done than another person who seems unconcerned about time and calmly goes about the day.

Since there are so many different “time personalities,” it’s important to realize how you approach time.

Start by trying to figure out how you spend your time during a typical week, using Activity 2.

ACTIVITY 2: WHERE DOES THE TIME GO?

See if you can account for a week’s worth of time. For each of the activity categories listed, make your best estimate of how many hours you spend in a week. (For categories that are about the same every day, just estimate for one day and multiply by seven for that line.)

<table>
<thead>
<tr>
<th>Category of activity</th>
<th>Number of hours per week</th>
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<tbody>
<tr>
<td>Sleeping</td>
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<td>Eating (including preparing food)</td>
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<td>Personal hygiene (i.e., bathing, etc.)</td>
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<tr>
<td>Category of activity</td>
<td>Number of hours per week</td>
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<tr>
<td>Working (employment)</td>
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<td>Volunteer service or internship</td>
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<td>Chores, cleaning, errands, shopping, etc.</td>
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<td>Attending class</td>
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<td>Studying, reading, and researching (outside of class)</td>
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<td>Transportation to work or school</td>
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<tr>
<td>Getting to classes (walking, biking, etc.)</td>
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<tr>
<td>Organized group activities (clubs, church services, etc.)</td>
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<tr>
<td>Time with friends (include television, video games, etc.)</td>
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<tr>
<td>Attending events (movies, parties, etc.)</td>
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<tr>
<td>Time alone (include television, video games, surfing the Web, etc.)</td>
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<tr>
<td>Exercise or sports activities</td>
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<tr>
<td>Reading for fun or other interests done alone</td>
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<tr>
<td>Talking on phone, e-mail, Facebook, etc.</td>
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<td>Other—specify:</td>
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<td>Other—specify:</td>
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Now use your calculator to total your estimated hours. Is your number larger or smaller than 168, the total number of hours in a week? If your estimate is higher, go back through your list and adjust numbers to be more realistic. But if your estimated hours total fewer than 168, don’t just go back and add more time in.
Think about your time analysis in Activity 2. People who estimate too high often feel they don’t have enough time. They may have time anxiety and often feel frustrated. People at the other extreme, who often can’t account for how they use all their time, may have a more relaxed attitude. They may not actually have any more free time, but they may be wasting more time than they want to admit with less important things. Yet they still may complain about how much time they spend studying, as if there’s a shortage of time.

People also differ in how they respond to schedule changes. Some go with the flow and accept changes easily, while others function well only when following a planned schedule and may become upset if that schedule changes. If you do not react well to an unexpected disruption in your schedule, plan extra time for catching up if something throws you off. This is all part of understanding your time personality. Another aspect of your time personality involves time of day. If you need to concentrate, such as when writing a class paper, are you more alert and focused in the morning, afternoon, or evening? Do you concentrate best when you look forward to a relaxing activity later on, or do you study better when you’ve finished all other activities? Do you function well if you get up early—or stay up late—to accomplish a task? How does that affect the rest of your day or the next day? Understanding this will help you better plan your study periods.

While you may not be able to change your “time personality,” you can learn to manage your time more successfully. The key is to be realistic. How accurate is the number of hours you wrote down in Activity 2? The best way to know how you spend your time is to record what you do all day in a time log, every day for a week, and then add that up. Make copies of the time log in Figure 2.4 "Daily Time Log" and carry it with you. Every so often, fill in what you have been doing. Do this for a week before adding up the times; then enter the total hours in the categories in Activity 2. You might be surprised that you spend a lot more time than you thought just hanging out with friends—or surfing the Web or playing around with Facebook or any of the many other things people do. You might find that you study well early in the morning even though you thought you are a night person, or vice versa. You might learn how long you can continue at a specific task before needing a break.

*Figure 2.4 Daily Time Log*
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If you have work and family responsibilities, you may already know where many of your hours go. Although we all wish we had “more time,” the important thing is what we do with the time we have. Time management strategies can help us better use the time we do have by creating a schedule that works for our own time personality.

**Time Management**

Time management for successful college studying involves these factors:

- Determining how much time you need to spend studying
- Knowing how much time you actually have for studying and increasing that time if needed
- Being aware of the times of day you are at your best and most focused
- Using effective long- and short-term study strategies
- Scheduling study activities in realistic segments
- Using a system to plan ahead and set priorities
- Staying motivated to follow your plan and avoid procrastination

For every hour in the classroom, college students should spend, on average, about two hours on that class, counting reading, studying, writing papers, and so on. If you’re a full-time student with fifteen hours a week in class, then you need another thirty hours for rest of your academic work. That forty-five hours is about the same as a typical full-time job. If you work part time, time management skills are even more essential. These skills are still more important for part-time college students who work full time and commute or have a family. To succeed in college, virtually everyone has to develop effective strategies for dealing with time.

Look back at the number of hours you wrote in Activity 2 for a week of studying. Do you have two hours of study time for every hour in class? Many students begin college not knowing this much time is needed, so don’t be surprised if you underestimated this number of hours. Remember this is just an average amount of study time—you may need more or less for your own courses. To be safe, and to help ensure your success, add another five to ten hours a week for studying.

To reserve this study time, you may need to adjust how much time you spend in other activities. Activity 3 will help you figure out what your typical week should look like.

**ACTIVITY 3: WHERE SHOULD YOUR TIME GO?**

Plan for the ideal use of a week’s worth of time. Fill in your hours in this order:
1. Hours attending class

2. Study hours (2 times the number of class hours plus 5 or more hours extra)

3. Work, internships, and fixed volunteer time

4. Fixed life activities (sleeping, eating, hygiene, chores, transportation, etc.)

   **Now subtotal your hours so far and subtract that number from 168. How many hours are left?**

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   Then portion out the remaining hours for “discretionary activities” (things you don’t have to do for school, work, or a healthy life).

5. Discretionary activities

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<th>Category of activity</th>
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<td>Chores, cleaning, errands, shopping, etc.</td>
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<td>Transportation to work or school</td>
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<td>Getting to classes (walking, biking, etc.)</td>
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**Subtotal:**

**Discretionary activities:**

Organized group activities (clubs, church services, etc.)
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<th>Category of activity</th>
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<td>Time with friends (include television, video games, etc.)</td>
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<td>Attending events (movies, parties, etc.)</td>
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<td>Time alone (include television, video games, surfing the Web, etc.)</td>
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<td>Exercise or sports activities</td>
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<td>Reading for fun or other interests done alone</td>
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<td>Talking on phone, e-mail, Facebook, etc.</td>
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**Note:** If you find you have almost no time left for discretionary activities, you may be overestimating how much time you need for eating, errands, and the like. Use the time log in Figure 2.4 "Daily Time Log" to determine if you really have to spend that much time on those things.

Activity 3 shows most college students that they do actually have plenty of time for their studies without losing sleep or giving up their social life. But you may have less time for discretionary activities than in the past. *Something, somewhere has to give.* That’s part of time management—and why it’s important to keep your goals and priorities in mind. The other part is to learn how to use the hours you do have as effectively as possible, especially the study hours. For example, if you’re a typical college freshman who plans to study for three hours in an evening but then procrastinates, gets caught up in a conversation, loses time to checking e-mail and text messages, and listens to loud music while reading a textbook, then maybe you actually spent four hours “studying” but got only two hours of actual work done. So you end up behind and feeling like you’re still studying way too much. The goal of time management is to actually get three hours of studying done in three hours and have time for your life as well.

**Special note for students who work.** You may have almost no discretionary time at all left in Activity 3 after all your “must-do” activities. If so, you may have overextended yourself—a situation that inevitably
will lead to problems. You can’t sleep two hours less every night for the whole school year, for example, without becoming ill or unable to concentrate well on work and school. It is better to recognize this situation now rather than set yourself up for a very difficult term and possible failure. If you cannot cut the number of hours for work or other obligations, see your academic advisor right away. It is better to take fewer classes and succeed than to take more classes than you have time for and risk failure.

**Time Management Strategies for Success**

Following are some strategies you can begin using immediately to make the most of your time:

- **Prepare to be successful.** When planning ahead for studying, think yourself into the right mood. Focus on the positive. “When I get these chapters read tonight, I’ll be ahead in studying for the next test, and I’ll also have plenty of time tomorrow to do X.” Visualize yourself studying well!

- **Use your best—and most appropriate—time of day.** Different tasks require different mental skills. Some kinds of studying you may be able to start first thing in the morning as you wake, while others need your most alert moments at another time.

- **Break up large projects into small pieces.** Whether it’s writing a paper for class, studying for a final exam, or reading a long assignment or full book, students often feel daunted at the beginning of a large project. It’s easier to get going if you break it up into stages that you schedule at separate times — and then begin with the first section that requires only an hour or two.

- **Do the most important studying first.** When two or more things require your attention, do the more crucial one first. If something happens and you can’t complete everything, you’ll suffer less if the most crucial work is done.

- **If you have trouble getting started, do an easier task first.** Like large tasks, complex or difficult ones can be daunting. If you can’t get going, switch to an easier task you can accomplish quickly. That will give you momentum, and often you feel more confident tackling the difficult task after being successful in the first one.

- **If you’re feeling overwhelmed and stressed because you have too much to do, revisit your time planner.** Sometimes it’s hard to get started if you keep thinking about other things you need to get done. Review your schedule for the next few days and make sure everything important is scheduled, then relax and concentrate on the task at hand.
• **If you’re really floundering, talk to someone.** Maybe you just don’t understand what you should be doing. Talk with your instructor or another student in the class to get back on track.

• **Take a break.** We all need breaks to help us concentrate without becoming fatigued and burned out. As a general rule, a short break every hour or so is effective in helping recharge your study energy. Get up and move around to get your blood flowing, clear your thoughts, and work off stress.

• **Use unscheduled times to work ahead.** You’ve scheduled that hundred pages of reading for later today, but you have the textbook with you as you’re waiting for the bus. Start reading now, or flip through the chapter to get a sense of what you’ll be reading later. Either way, you’ll save time later. You may be amazed how much studying you can get done during downtimes throughout the day.

• **Keep your momentum.** Prevent distractions, such as multitasking, that will only slow you down. Check for messages, for example, only at scheduled break times.

• **Reward yourself.** It’s not easy to sit still for hours of studying. When you successfully complete the task, you should feel good and deserve a small reward. A healthy snack, a quick video game session, or social activity can help you feel even better about your successful use of time.

• **Just say no.** Always tell others nearby when you’re studying, to reduce the chances of being interrupted. Still, interruptions happen, and if you are in a situation where you are frequently interrupted by a family member, spouse, roommate, or friend, it helps to have your “no” prepared in advance: “No, *Ideally* have to be ready for this test” or “That’s a great idea, but let’s do it tomorrow—I *just can’t* today.” You shouldn’t feel bad about saying no—especially if you told that person in advance that you needed to study.

• **Have a life.** Never schedule your day or week so full of work and study that you have no time at all for yourself, your family and friends, and your larger life.

• **Use a calendar planner and daily to-do list.** We’ll look at these time management tools in the next section.

**Battling Procrastination**

Procrastination is a way of thinking that lets one put off doing something that should be done now. This can happen to anyone at any time. It’s like a voice inside your head keeps coming up with these brilliant ideas for things to do right now other than studying: “I really ought to get this room cleaned up before I
study” or “I can study anytime, but tonight’s the only chance I have to do X.” That voice is also very good at rationalizing: “I really don’t need to read that chapter now; I’ll have plenty of time tomorrow at lunch....”

Procrastination is very powerful. Some people battle it daily, others only occasionally. Most college students procrastinate often, and about half say they need help avoiding procrastination. Procrastination can threaten one’s ability to do well on an assignment or test.

People procrastinate for different reasons. Some people are too relaxed in their priorities, seldom worry, and easily put off responsibilities. Others worry constantly, and that stress keeps them from focusing on the task at hand. Some procrastinate because they fear failure; others procrastinate because they fear success or are so perfectionistic that they don’t want to let themselves down. Some are dreamers. Many different factors are involved, and there are different styles of procrastinating.

Just as there are different causes, there are different possible solutions for procrastination. Different strategies work for different people. The time management strategies described earlier can help you avoid procrastination. Because this is a psychological issue, some additional psychological strategies can also help:

• Since procrastination is usually a habit, accept that and work on breaking it as you would any other bad habit: one day at a time. Know that every time you overcome feelings of procrastination, the habit becomes weaker—and eventually you’ll have a new habit of being able to start studying right away.

• Schedule times for studying using a daily or weekly planner. Carry it with you and look at it often. Just being aware of the time and what you need to do today can help you get organized and stay on track.

• If you keep thinking of something else you might forget to do later (making you feel like you “must” do it now), write yourself a note about it for later and get it out of your mind.

• Counter a negative with a positive. If you’re procrastinating because you’re not looking forward to a certain task, try to think of the positive future results of doing the work.

• Counter a negative with a worse negative. If thinking about the positive results of completing the task doesn’t motivate you to get started, think about what could happen if you keep procrastinating. You’ll have to study tomorrow instead of doing something fun you had planned. Or you could fail the test. Some people can jolt themselves right out of procrastination.
• On the other hand, fear causes procrastination in some people—so don’t dwell on the thought of failing. If you’re studying for a test, and you’re so afraid of failing it that you can’t focus on studying and you start procrastinating, try to put things in perspective. Even if it’s your most difficult class and you don’t understand everything about the topic, that doesn’t mean you’ll fail, even if you may not receive an A or a B.

• Study with a motivated friend. Form a study group with other students who are motivated and won’t procrastinate along with you. You’ll learn good habits from them while getting the work done now.

• Keep a study journal. At least once a day write an entry about how you have used your time and whether you succeeded with your schedule for the day. If not, identify what factors kept you from doing your work. (Use the form at the end of this chapter.) This journal will help you see your own habits and distractions so that you can avoid things that lead to procrastination.

• Get help. If you really can’t stay on track with your study schedule, or if you’re always putting things off until the last minute, see a college counselor. They have lots of experience with this common student problem and can help you find ways to overcome this habit.

Calendar Planners and To-Do Lists

Calendar planners and to-do lists are effective ways to organize your time. Many types of academic planners are commercially available (check your college bookstore), or you can make your own. Some people like a page for each day, and some like a week at a time. Some use computer calendars and planners. Almost any system will work well if you use it consistently.

Some college students think they don’t need to actually write down their schedule and daily to-do lists. They’ve always kept it in their head before, so why write it down in a planner now? Some first-year students were talking about this one day in a study group, and one bragged that she had never had to write down her calendar because she never forgot dates. Another student reminded her how she’d forgotten a preregistration date and missed taking a course she really wanted because the class was full by the time she went online to register. “Well,” she said, “except for that time, I never forget anything!” Of course, none of us ever forgets anything—until we do.

Calendars and planners help you look ahead and write in important dates and deadlines so you don’t forget. But it’s just as important to use the planner to schedule your own time, not just deadlines. For
example, you’ll learn later that the most effective way to study for an exam is to study in several short periods over several days. You can easily do this by choosing time slots in your weekly planner over several days that you will commit to studying for this test. You don’t need to fill every time slot, or to schedule every single thing that you do, but the more carefully and consistently you use your planner, the more successfully will you manage your time.

But a planner cannot contain every single thing that may occur in a day. We’d go crazy if we tried to schedule every telephone call, every e-mail, every bill to pay, every trip to the grocery store. For these items, we use a to-do list, which may be kept on a separate page in the planner.

Check the example of a weekly planner form in Figure 2.5 “Weekly Planner”. (You can copy this page and use it to begin your schedule planning. By using this first, you will find out whether these time slots are big enough for you or whether you’d prefer a separate planner page for each day.) Fill in this planner form for next week. First write in all your class meeting times; your work or volunteer schedule; and your usual hours for sleep, family activities, and any other activities at fixed times. Don’t forget time needed for transportation, meals, and so on. Your first goal is to find all the blocks of “free time” that are left over.

Remember that this is an academic planner. Don’t try to schedule in everything in your life—this is to plan ahead to use your study time most effectively.

Next, check the syllabus for each of your courses and write important dates in the planner. If your planner has pages for the whole term, write in all exams and deadlines. Use red ink or a highlighter for these key dates. Write them in the hour slot for the class when the test occurs or when the paper is due, for example. (If you don’t yet have a planner large enough for the whole term, use Figure and write any deadlines for your second week in the margin to the right. You need to know what’s coming next week to help schedule how you’re studying this week.)
**Figure 2.5 Weekly Planner**

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Remember that for every hour spent in class, plan an average of two hours studying outside of class. These are the time periods you now want to schedule in your planner. These times change from week to week, with one course requiring more time in one week because of a paper due at the end of the week and a different course requiring more the next week because of a major exam. Make sure you block out enough hours in the week to accomplish what you need to do. As you choose your study times, consider what times of day you are at your best and what times you prefer to use for social or other activities.

Don’t try to micromanage your schedule. Don’t try to estimate exactly how many minutes you’ll need two weeks from today to read a given chapter in a given textbook. Instead, just choose the blocks of time you will use for your studies. Don’t yet write in the exact study activity—just reserve the block. Next, look at the major deadlines for projects and exams that you wrote in earlier. Estimate how much time you may need for each and work backward on the schedule from the due date. For example, you have a short paper due on Friday. You determine that you’ll spend ten hours total on it, from initial brainstorming and planning through to drafting and revising. Since you have other things also going on that week, you want to get an early start; you might choose to block an hour a week ahead on Saturday morning, to brainstorm your topic, and jot some preliminary notes. Monday evening is a good time to spend two hours on the next step or prewriting activities. Since you have a lot of time open Tuesday afternoon, you decide that’s the best time to reserve to write the first draft; you block out three or four hours. You make a note on the schedule to leave time open that afternoon to see your instructor during office hours in case you have any questions on the paper; if not, you’ll finish the draft or start revising.

Thursday, you schedule a last block of time to revise and polish the final draft due tomorrow.

If you’re surprised by this amount of planning, you may be the kind of student who used to think, “The paper’s due Friday—I have enough time Thursday afternoon, so I’ll write it then.” What’s wrong with that? First, college work is more demanding than many first-year students realize, and the instructor expects higher-quality work than you can churn out quickly without revising. Second, if you are tired on Thursday because you didn’t sleep well Wednesday night, you may be much less productive than you hoped—and without a time buffer, you’re forced to turn in a paper that is not your best work.

Figure 2.6 "Example of a Student’s Weekly Planner Page with Class Times and Important Study Sessions" shows what one student’s schedule looks like for a week. This is intended only to show you one way to block out time—you’ll quickly find a way that works best for you.
Here are some more tips for successful schedule planning:

- Studying is often most effective immediately after a class meeting. If your schedule allows, block out appropriate study time after class periods.
- Be realistic about time when you make your schedule. If your class runs to four o’clock and it takes you twenty minutes to wrap things up and reach your study location, don’t figure you’ll have a full hour of study between four o’clock and five o’clock.
• Don’t overdo it. Few people can study four or five hours nonstop, and scheduling extended time periods like that may just set you up for failure.
• Schedule social events that occur at set times, but just leave holes in the schedule for other activities. Enjoy those open times and recharge your energies!
• Try to schedule some time for exercise at least three days a week.
• Plan to use your time between classes wisely. If three days a week you have the same hour free between two classes, what should you do with those three hours? Maybe you need to eat, walk across campus, or run an errand. But say you have an average forty minutes free at that time on each day. Instead of just frittering the time away, use it to review your notes from the previous class or for the coming class or to read a short assignment. Over the whole term, that forty minutes three times a week adds up to a lot of study time.
• If a study activity is taking longer than you had scheduled, look ahead and adjust your weekly planner to prevent the stress of feeling behind.
• If you maintain your schedule on your computer or smartphone, it’s still a good idea to print and carry it with you. Don’t risk losing valuable study time if you’re away from the device.
• If you’re not paying close attention to everything in your planner, use a colored highlighter to mark the times blocked out for really important things.
• When following your schedule, pay attention to starting and stopping times. If you planned to start your test review at four o’clock after an hour of reading for a different class, don’t let the reading run long and take time away from studying for the test.

Your Daily To-Do List

People use to-do lists in different ways, and you should find what works best for you. As with your planner, consistent use of your to-do list will make it an effective habit. Some people prefer not to carry their planner everywhere but instead copy the key information for the day onto a to-do list. Using this approach, your daily to-do list starts out with your key scheduled activities and then adds other things you hope to do today.

Some people use their to-do list only for things not on their planner, such as short errands, phone calls or e-mail, and the like. This still includes important things—but they’re not scheduled out for specific times.
Although we call it a daily list, the to-do list can also include things you may not get to today but don’t want to forget about. Keeping these things on the list, even if they’re a low priority, helps ensure that eventually you’ll get to it.

Start every day with a fresh to-do list written in a special small notebook or on a clean page in your planner. Check your planner for key activities for the day and check yesterday’s list for items remaining. Some items won’t require much time, but other activities such as assignments will. Include a time estimate for these so that later you can do them when you have enough free time. If you finish lunch and have twenty-five minutes left before your next class, what things on the list can you do now and check off? Finally, use some system to prioritize things on your list. Some students use a 1, 2, 3 or A, B, C rating system for importance. Others simply highlight or circle items that are critical to get done today. Figure 2.7 "Examples of Two Different Students’ To-Do Lists" shows two different to-do lists—each very different but each effective for the student using it.

Figure 2.7 Examples of Two Different Students’ To-Do Lists
Use whatever format works best for you to prioritize or highlight the most important activities.

Here are some more tips for effectively using your daily to-do list:

• Be specific: “Read history chapter 2 (30 pages)”—not “History homework.”
• Put important things high on your list where you’ll see them every time you check the list.
• Make your list at the same time every day so that it becomes a habit.
• Don’t make your list overwhelming. If you added everything you eventually need to do, you could end up with so many things on the list that you’d never read through them all. If you worry you might forget something, write it in the margin of your planner’s page a week or two away.
• Use your list. Lists often include little things that may take only a few minutes to do, so check your list any time during the day you have a moment free.
• Cross out or check off things after you’ve done them—doing this becomes rewarding.
• Don’t use your to-do list to procrastinate. Don’t pull it out to find something else you just “have” to do instead of studying!

Time Management Tips for Students Who Work

If you’re both working and taking classes, you seldom have large blocks of free time. Avoid temptations to stay up very late studying, for losing sleep can lead to a downward spiral in performance at both work and school. Instead, try to follow these guidelines:

• If possible, adjust your work or sleep hours so that you don’t spend your most productive times at work. If your job offers flex time, arrange your schedule to be free to study at times when you perform best.
• Try to arrange your class and work schedules to minimize commuting time. If you are a part-time student taking two classes, taking classes back-to-back two or three days a week uses less time than spreading them out over four or five days. Working four ten-hour days rather than five eight-hour days reduces time lost to travel, getting ready for work, and so on.
• If you can’t arrange an effective schedule for classes and work, consider online courses that allow you to do most of the work on your own time.
• Use your daily and weekly planner conscientiously. Any time you have thirty minutes or more free, schedule a study activity.
• Consider your “body clock” when you schedule activities. Plan easier tasks for those times when you’re often fatigued and reserve alert times for more demanding tasks.

• Look for any “hidden” time potentials. Maybe you prefer the thirty-minute drive to work over a forty-five-minute train ride. But if you can read on the train, that’s a gain of ninety minutes every day at the cost of thirty minutes longer travel time. An hour a day can make a huge difference in your studies.

• Can you do quick study tasks during slow times at work? Take your class notes with you and use even five minutes of free time wisely.

• Remember your long-term goals. You need to work, but you also want to finish your college program. If you have the opportunity to volunteer for some overtime, consider whether it’s really worth it. Sure, the extra money would help, but could the extra time put you at risk for not doing well in your classes?

• Be as organized on the job as you are academically. Use your planner and to-do list for work matters, too. The better organized you are at work, the less stress you’ll feel—and the more successful you’ll be as a student also.

• If you have a family as well as a job, your time is even more limited. In addition to the previous tips, try some of the strategies that follow.

**Time Management Tips for Students with Family**

Living with family members often introduces additional time stresses. You may have family obligations that require careful time management. Use all the strategies described earlier, including family time in your daily plans the same as you would hours spent at work. Don’t assume that you’ll be “free” every hour you’re home, because family events or a family member’s need for your assistance may occur at unexpected times. Schedule your important academic work well ahead and in blocks of time you control. See also the earlier suggestions for controlling your space: you may need to use the library or another space to ensure you are not interrupted or distracted during important study times.

Students with their own families are likely to feel time pressures. After all, you can’t just tell your partner or kids that you’ll see them in a couple years when you’re not so busy with job and college! In addition to all the planning and study strategies discussed so far, you also need to manage your family relationships.
and time spent with family. While there’s no magical solution for making more hours in the day, even with this added time pressure there are ways to balance your life well:

- Talk everything over with your family. If you’re going back to school, your family members may not have realized changes will occur. Don’t let them be shocked by sudden household changes. Keep communication lines open so that your partner and children feel they’re together with you in this new adventure. Eventually you will need their support.

- Work to enjoy your time together, whatever you’re doing. You may not have as much time together as previously, but cherish the time you do have—even if it’s washing dishes together or cleaning house. If you’ve been studying for two hours and need a break, spend the next ten minutes with family instead of checking e-mail or watching television. Ultimately, the important thing is being together, not going out to movies or dinners or the special things you used to do when you had more time. Look forward to being with family and appreciate every moment you are together, and they will share your attitude.

- Combine activities to get the most out of time. Don’t let your children watch television or play video games off by themselves while you’re cooking dinner, or you may find you have only twenty minutes family time together while eating. Instead, bring the family together in the kitchen and give everyone something to do. You can have a lot of fun together and share the day’s experiences, and you won’t feel so bad then if you have to go off and study by yourself.

- Share the load. Even children who are very young can help with household chores to give you more time. Attitude is everything: try to make it fun, the whole family pulling together—not something they “have” to do and may resent, just because Mom or Dad went back to school. (Remember, your kids will reach college age someday, and you want them to have a good attitude about college.) As they get older, they can do their own laundry, cook meals, and get themselves off to school, and older teens can run errands and do the grocery shopping. They will gain in the process by becoming more responsible and independent.

- Schedule your study time based on family activities. If you face interruptions from young children in the early evening, use that time for something simple like reviewing class notes. When you need more quiet time for concentrated reading, wait until they’ve gone to bed.

- Be creative with child care. Usually options are available, possibly involving extended family members, sitters, older siblings, cooperative child care with other adult students, as well as child-care
centers. After a certain age, you can take your child along to campus when you attend an evening course, if there is somewhere the child can quietly read. At home, let your child have a friend over to play with. Network with other older students and learn what has worked for them. Explore all possibilities to ensure you have time to meet your college goals. And don’t feel guilty: “day care babies” grow up just as healthy psychologically as those raised in the home full time.

**Time Management Tips for Student Athletes**

Student athletes often face unique time pressures because of the amount of time required for training, practice, and competition. During some parts of the year, athletics may involve as many hours as a full-time job. The athletic schedule can be grueling, involving weekend travel and intensive blocks of time. You can be exhausted after workouts or competitions, affecting how well you can concentrate on studies thereafter. Students on athletic scholarships often feel their sport is their most important reason for being in college, and this priority can affect their attitudes toward studying. For all of these reasons, student athletes face special time management challenges. Here are some tips for succeeding in both your sport and academics:

- Realize that even if your sport is more important to you, you risk everything if you don’t also succeed in your academics. Failing one class in your first year won’t get you kicked out, but you’ll have to make up that class—and you’ll end up spending more time on the subject than if you’d studied more to pass it the first time.

- It’s critical to plan ahead. If you have a big test or a paper due the Monday after a big weekend game, start early. Use your weekly planner to plan well in advance, making it a goal, for example, to have the paper done by Friday—instead of thinking you can magically get it done Sunday night after victory celebrations. Working ahead will also free your mind to focus better on your sport.

- Accept that you have two priorities—your sport and your classes—and that both come before your social life. That’s just how it is—what you have accepted in your choice to be a college athlete. If it helps, think of your classes as your job; you have to “go to study” the same as others “go to work.”

- Use your planner to take advantage of any downtime you have during the day between classes and at lunch. Other students may seem to have the luxury of studying during much of the afternoon when you’re at practice, and maybe they can get away with hanging out between classes, but you don’t have
that time available, at least not during the season. You need to use all the time you can find to keep up with your studying.

- Stay on top of your courses. If you allow yourself to start slipping behind, maybe telling yourself you’ll have more time later on to catch up, just the opposite will happen. Once you get behind, you’ll lose momentum and find it more difficult to understand what’s going on the class. Eventually the stress will affect your athletic performance also.

- Get help when you need it. Many athletic departments offer tutoring services or referrals for extra help. But don’t wait until you’re at risk for failing a class before seeking help. A tutor won’t take your test or write your paper for you—they can only help you focus in to use your time productively in your studies. You still have to want to succeed.

**KEY TAKEAWAYS**

- People “use” time very differently. To develop strategies for managing your time, discover your time personality and observe how much time you spend in different activities in the course of a week.

- Plan your schedule with two hours of study time for each hour in class. Use your most alert times of day, break up large tasks into smaller pieces and stages, take breaks to help you stay focused, avoid distractions, and reward yourself for successful accomplishments.

- Procrastination has many different causes for different people but is a problem for most students. Different techniques can help you battle procrastination so you can get the job done.

- Use a weekly calendar planner to block out study times and plan well ahead for examinations and key assignments to achieve success in school.

- Use a daily to-do list along with your weekly planner to avoid overlooking even smaller tasks and to make the most of your time throughout the day.

- Students who work, live with family, or are athletes often face significant time pressures and must make a special effort to stay organized and plan ahead for efficient studying.

**CHECKPOINT EXERCISES**

1. What time(s) of day are you at your most alert?

   _______________________

   What time(s) of day are you at your least alert?
2. What category of discretionary activity (not sleeping, working, studying, etc.) represents your largest use of time?

Can you reduce the time you spend in that activity if you need more time for your coursework?

3. For each of the following statements about time management, circle T for true or F for false:

<table>
<thead>
<tr>
<th>T</th>
<th>F</th>
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<tbody>
<tr>
<td>T</td>
<td>F</td>
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<tr>
<td>T</td>
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<td>T</td>
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</tr>
<tr>
<td>T</td>
<td>F</td>
</tr>
</tbody>
</table>
There's no reason to keep a weekly calendar if all your instructors have provided you with a syllabus that gives the dates for all assignments and tests.

Studying for a particular class is most effective immediately after that class meets.

4. Without looking at your planner, to-do list, or anything else in writing, quickly write a list of everything you need to do in the next few days. Then look through your planner, to-do list, and any other class notes for anything you missed. What might you have forgotten or delayed if you weren’t keeping a planner and to-do list?

5. Without looking at your weekly or daily schedule, think about your typical week and the times you have free when not in class, working, studying, eating, socializing, and so on. List at least three "downtimes" when you don’t usually study that you can use for coursework when necessary.

2.4 Chapter Activities

Chapter Takeaways

- It's important to have short-, mid-, and long-term goals that are specific, realistic, time oriented, and attainable. Goals help you set priorities and remain motivated and committed to your college success.
- Attitude is the largest factor determining success in college. Work to stay positive and surround yourself with positive people, and you'll find you are motivated to carry out the activities that will help you succeed in your courses.
- Planning ahead, and then following your plan, is the essence of time management. Organize both your space and your time to develop the best study habits. Learning strategies to stay on track, avoid distractions of people and technology, and to prevent procrastination will pay off not only in college but also in your career thereafter.
• Plan your use of time based on your “time personality” after assessing how you typically use your free time. Then use an academic weekly and daily planner to schedule blocks of time most efficiently. Start well ahead of deadlines to prevent last-minute stresses and problems completing your work.
• Because many college students have significant time commitments with work, family, athletics, or other activities, time management techniques are among the most important skills you can learn to help ensure your success.

CHAPTER REVIEW

1. Describe the characteristics of well-written goals.

2. List at least four or five things you can do to develop a positive attitude.

3. What have you personally found helps motivate you to sit down and start studying?

4. Describe the most important characteristics of an effective study space.
5. How can you prepare for unplanned interruptions while studying?

6. After you have analyzed how you typically spend time and have blocked out study periods for the week, you may still have difficulty using that study time well. List additional time management strategies that can help you make the most of the time that you do have.

7. If you find yourself procrastinating, what can you do to get back on track?

8. What can go wrong if you try to micromanage every minute of the day?

What should you do, instead?
9. Realizing that any action repeated consistently and frequently will soon become a habit, what should you do with your academic planner every day and every week to establish a strong habit that will help ensure your success in all your college courses to come?

OUTSIDE THE BOOK

Make seven copies of the “Study Journal” page following. Near the end of the day, every day for the next week, spend a few minutes reviewing your day and writing answers to those questions. At the end of the week, review what you have written and summarize what you observe about your study tendencies by answering these questions:

1. Did you usually get as much, more, or less schoolwork done as you had scheduled for the day?

If you got less done, was the problem due to scheduling more time than you actually had, or not making effective use of the scheduled blocks of time?

2. List the steps you will follow to make your scheduling process work better next week.
3. What other things did you do repeatedly during the week when you should have been studying?

4. What were the most common distractions (people or other interruptions) during the week when you were studying?

5. List ways you can control your study space to avoid these activities and prevent these distractions next week.

6. Do you see a pattern in the activities you least enjoyed and had difficulty getting started on?

7. Review Chapter 2 "Staying Motivated, Organized, and On Track", Section 2.2 "Organizing Your Space" and Chapter 2 "Staying Motivated, Organized, and On Track", Section 2.3 "Organizing Your Time" for specific strategies to use to stay focused and motivated. Make a list here of five or more things you will do differently next week if studying becomes difficult or less enjoyable.
Study Journal for Date: __________

a. My daily planner had scheduled _____ hours of academic time today (not counting time in class). It turned out that I actually spent about _____ hours on my studies.

   At some times I was scheduled to study or do academic work, I was doing this instead:

   

   

b. The academic time I most enjoyed today was doing ________________

   

   I enjoyed this most because ________________

   

c. The academic time I least most enjoyed today was doing ________________

   

   I enjoyed this least because ________________

   

d. I had the most difficulty getting started on this study activity:

   

   Why?

   

e. I did my studying and other academic work in these places:
During the time I was studying, I was interrupted by these people:

Other interruptions included the following (phone calls, e-mail, etc.):

---

**MAKE AN ACTION LIST**

**Goals**

I have not yet set realistic, specific, and time-oriented goals for the following:

---

In the coming weeks and months, I will think about and clarify these goals:

---

**Planning Ahead**

Too often in the past, I have not started early enough on these kinds of school assignments and studying:

---

To ensure I successfully plan ahead to complete all work on time in the future, I will do the following:
Attitude

I have most difficulty maintaining a positive attitude at the following times:

I can do the following things to “adjust” my attitude at these times to help ensure my success:

Focus and Motivation

When I’m not feeling motivated to work on my studies, I often do these things instead:

I will try to use these strategies to keep motivated and focused on my studies in the future:

Study Space

I have the following problems with the places where I usually study now:

I will make the following changes in my study space (or I will try these new places) to help prevent distractions:
Time Management

I often feel I don’t have enough time for my college work for the following reasons:

I will start using these techniques to make sure I use my available time well:
Chapter 3
Thinking about Thought

Where Are You Now?
Assess your present knowledge and attitudes.

<table>
<thead>
<tr>
<th>1. I am a good problem solver.</th>
<th>Yes</th>
<th>Unsure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I am considered creative by my friends.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. I have good judgment.</td>
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<tr>
<td>4. I find it easy to make decisions quickly.</td>
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<tr>
<td>5. My decisions usually turn out to be good decisions.</td>
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<tr>
<td>6. I like to think things through before speaking.</td>
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<tr>
<td>7. I am not shy about asking questions when I don’t understand something.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8. I enjoy good discussions and arguments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I regularly practice an art form (music, acting, painting, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I enjoy hearing other people’s points of view, even when I disagree with them.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>11. I usually question information presented as fact on the Internet or television.</td>
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</tbody>
</table>

Where Do You Want to Go?
Think about how you answered the questions above. Be honest with yourself. On a scale of 1 to 10, how would you rate your level of thinking skills at this time?

<table>
<thead>
<tr>
<th>Poor thinking skills</th>
<th>Excellent thinking skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor thinking skills</td>
<td>Excellent thinking skills</td>
</tr>
<tr>
<td>----------------------</td>
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<tr>
<td>1</td>
<td>6</td>
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<td>2</td>
<td>7</td>
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<td>3</td>
<td>8</td>
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<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

In the following list, circle the three most important areas in which you think you can improve:

- Applying information
- Analyzing information
- Thinking critically
- Asking questions about information
- Evaluating information
- Coming up with new ideas
- Solving problems
- Making decisions
- Identifying weaknesses in ideas
- Choosing sources for research

Are there other areas in which you can improve your thinking skills? Write down other things you feel you need to work on.

---

**How to Get There**

Here’s what we’ll work on in this chapter:

- Understanding what makes thinking in college different from thinking in high school
- Learning how to think
- Knowing the types of thinking
- Recognizing why all types of thinking are important
- Understanding what critical thinking is
- Recognizing and avoiding logical fallacies and faulty assumptions
- Establishing critical thinking habits
- Researching and thinking critically
• Understanding what creative thinking is
• Developing creative thinking habits
• Solving problems
• Making decisions
• Brainstorming

It’s All in Your Head

Throughout this book, we make the case that college is really quite different from high school. Sure, the social life is different, and there are different pressures in college, perhaps a family to support or a job schedule to coordinate with studies. But the two most fundamental differences involve expectations—the expectation that you will be independent and take responsibility for your actions and the expectation that you will think for yourself.

Remember the heavy “thinking” you did in high school? Most of it was recalling facts or information you had previously committed to memory. Perhaps in some courses you were asked to support a statement or hypothesis using content from your textbook or class. Your thinking in high school was very structured and tied closely to reflecting what was taught in class.

In college, you are expected to think for yourself; to access and evaluate new approaches and ideas; to contribute to your knowledge base; and to develop or create new, fresh ideas. You will be required to develop and use a variety of thinking skills—higher-order thinking skills—which you seldom used in high school. In college, your instructors’ roles will be not only to supply a base of new information and ideas, as good instructors will challenge you to stretch your skills and knowledge base through critical and creative thinking. Much of their teaching involves the questions they ask, not the directions they give. Your success in college education—and in life beyond college—is directly linked to becoming a better and more complete thinker. Becoming a better and more complete thinker requires mastering some skills and consistent practice.
3.1 Types of Thinking

LEARNING OBJECTIVES

1. Understand that there are different types of thinking.
2. Identify how each type of thinking contributes to learning.

So what are the various types of thinking skills, and what kind things are we doing when we apply them? In the 1950s, Benjamin Bloom developed a classification of thinking skills that is still helpful today; it is known as Bloom’s taxonomy. He lists six types of thinking skills, ranked in order of complexity: knowledge, comprehension, application, analysis, synthesis, and evaluation. Figure 3.2 "Types of Thinking Skills" outlines each skill and what is involved in that type of thinking, as updated by Lorin Anderson and David Krothwohl. [1]
### Figure 3.2 Types of Thinking Skills

<table>
<thead>
<tr>
<th>Thinking Skill</th>
<th>What It Involves</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remembering and Recalling</td>
<td>Retrieving or repeating information or ideas from memory. This is the first and most basic thinking skill you develop (starting as a toddler with learning numbers, letters, and colors).</td>
</tr>
<tr>
<td>2. Understanding</td>
<td>Interpreting, constructing meaning, inferring, or explaining material from written, spoken, or graphic sources. Reading is the most common understanding skill; these skills are developed starting with early education.</td>
</tr>
<tr>
<td>3. Applying</td>
<td>Using learned material or implementing material in new situations. This skill is commonly used starting in middle school (in some cases earlier).</td>
</tr>
<tr>
<td>4. Analyzing</td>
<td>Breaking material or concepts into key elements and determining how the parts relate to one another or to an overall structure or purpose. Mental actions included in this skill are examining, contrasting or differentiating, separating, categorizing, experimenting, and deducing. You most likely started developing this skill in high school (particularly in science courses) and will continue to practice it in college.</td>
</tr>
<tr>
<td>5. Evaluating</td>
<td>Assessing, making judgments, and drawing conclusions from ideas, information, or data. Critiquing the value and usefulness of material. This skill encompasses most of what is commonly referred to as critical thinking; this skill will be called on frequently during your college years and beyond. Critical thinking is the first focus of this chapter.</td>
</tr>
<tr>
<td>6. Creating</td>
<td>Putting parts together or reorganizing them in a new way, form, or product. This process is the most difficult mental function. This skill will make you stand out in college and is in very high demand in the workforce. Creative thinking is the second focus of this chapter.</td>
</tr>
</tbody>
</table>

All of these thinking skills are important for college work (and life in the “real world,” too). You’ve likely had a great deal of experience with the lower-level thinking skills (yellow section). The midlevel skills are skills you will get a lot of practice with in college, and you may be well on your way to mastering them.
already. The higher-level thinking skills (red section) are the most demanding, and you will need to invest focused effort to develop them.

**EXERCISE: THOUGHT INVENTORY**

Think about Figure 3.2 "Types of Thinking Skills". Are you using all six thinking skills? Reflect on your schoolwork in the past three weeks and identify specific examples where you used each of the thinking skills. Use the comment column to write notes about the skills that are second nature to you and those you would like to develop further.

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>How You Used It in the Past Three Weeks</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remembering and Recalling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
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<tr>
<td>Applying</td>
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<tr>
<td>Analyzing</td>
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</tr>
<tr>
<td>Evaluating</td>
<td></td>
<td></td>
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</tbody>
</table>
Look at the lists of things you actually did in each case. Notice that there are certain verbs that apply to each skill set. When you see those verbs as a prompt in an assignment or an exam, you will know what kind of thinking the instructor expects from you. Table 3.1 "Thinking Verbs" lists some of the most common verbs associated with each thinking skill.

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>How You Used It in the Past Three Weeks</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remembering and Recalling</td>
<td>Bookmark, count, describe, draw, enumerate, find, google, identify, label, list, match, name, quote, recall, recite, search, select, sequence, tell, write</td>
</tr>
<tr>
<td>2. Understanding</td>
<td>Blog, conclude, describe, discuss, explain, generalize, identify, illustrate, interpret, paraphrase, predict, report, restate, review, summarize, tell, tweet</td>
</tr>
<tr>
<td>3. Applying</td>
<td>Apply, articulate, change, chart, choose, collect, compute, control, demonstrate, determine, do, download, dramatize, imitate, implement, interview, install (as in software), participate, prepare, produce, provide, report, role-play, run (software), select, share, show, solve, transfer, use</td>
</tr>
<tr>
<td>4. Analyzing</td>
<td>Analyze, break down, characterize, classify, compare, contrast, debate, deduce, diagram, differentiate, discriminate, distinguish, examine, infer, link, outline, relate, research, reverse-engineer, separate, subdivide, tag</td>
</tr>
<tr>
<td>5. Evaluating</td>
<td>Appraise, argue, assess, beta test, choose, collaborate, compare, contrast, conclude, critique, criticize, decide, defend, “friend/de-friend,” evaluate, judge, justify, network, post, predict, prioritize, prove, rank, rate, review, select, support</td>
</tr>
<tr>
<td>6. Creating</td>
<td>Adapt, animate, blog, combine, compose, construct, create, design, develop, devise, film, formulate, integrate, invent, make, model, modify, organize, perform, plan,</td>
</tr>
</tbody>
</table>
Throughout this book, we give tips that will help you develop your thinking skills. You have read about the learning cycle and the importance of applying your knowledge. You will learn tips for remembering information from your notes and classes. Preparing for class requires you to analyze what you know and what you need to learn. The sections on listening and reading will help you develop your understanding skills. Look for those tips and practice them.

In this chapter, we will focus on critical thinking (evaluating) and creative thinking. They deserve specific focus because they are likely to be the skills you have least practice with. These are the skills most helpful for success in college and in “real life.” Creative thinking will help you come up with possible solutions for problems and new ideas. Critical thinking will help you decide which of those ideas have most merit and deserve to be implemented.

**KEY TAKEAWAYS**

- We use different types of thinking skills to address different requirements, and these skills are classified in Bloom’s taxonomy.
- You have been using many thinking skills since childhood.
- Two very important thinking skills you will need to develop for success in college and in life are critical (or evaluative) thinking and creative thinking.

**CHECKPOINT EXERCISES**

1. List three verbs that are associated with application skills.

   ____________________________

   ____________________________

   ____________________________

2. What is another name for “evaluation” thinking skills?

   ____________________________

3. What thinking skills are associated with each of the following?

   ____________________________
a. Compose and design: ________________________________
b. Tweet and describe: ________________________________
c. Break down and discriminate: _________________________
d. Rank and beta test: ________________________________
e. Enumerate and google: ________________________________


3.2 It’s Critical

**LEARNING OBJECTIVES**

1. Understand what critical thinking is and why it’s important.
2. Identify logical pitfalls.
3. Discover assumptions and biases.
4. Practice problem solving and decision making.
5. Know the power of questions.
6. Evaluate information (on and off the Internet).

**Americans Have Access to...**

- 1 million *new* books each year
- 5,500 magazines
- 10,500 radio stations
- 65,000 iPhone apps
- 1,000,000,000,000 Web pages

In today’s environment, it is not so critical to “know” a great deal of information. The list above indicates how much information we can easily access. In fact, the abundance of information might be the greater challenge. Your success will depend on what you can do with the information, not just on what you know. How we filter and use that abundance of data is the reason critical thinking has become so important today.
Critical thinking is the ability to discover the value of an idea, a set of beliefs, a claim, or an argument. It requires you to use logic and reasoning to evaluate evidence or information to make a decision or reach a conclusion. Critical thinking is

• a foundation for effective communication,
• the principal skill used in effective decision making,
• at the core of creating new knowledge,
• a way to uncover bias and prejudices.

Critical thinking is a part of everyday life, too. Decisions you make can have a lasting impact on your life, and these decisions benefit from critical thinking. Did you ever decide to quit smoking or to lose weight? Were you successful? How did you decide to attend the college you are in? Was that the right choice for you? In any of these cases, could you have made a better decision if you had better or more information?

The Critical Thinking Process

The critical thinking process is really nothing more than asking the right questions to understand a problem or issue and then gathering the data you need to complete the decision or take sides on an issue.

What is the problem or issue I am considering really about? Understanding this is key to successful critical thinking. What is the objective? A position? A decision? Are you deciding what candidate in an election will do a better overall job, or are you looking to strengthen the political support for a particular cause? Are you really against a recommendation from your dad, or are you using the issue to establish your independence?

Do you understand the terms related to the issue? Are you in agreement with the proponent’s definitions? For example, if you are evaluating a quotation on the health-care system for use in a paper, your objective might be to decide to use the quotation or not, but before you can make that decision you need to understand what the writer is really saying. If a term like “family” is used, for example, does it mean direct relations or extended family?

What are my options? What are choices that are available to you (if you are making a decision), or what are the “sides” (in the case of a position) you might choose to agree with? What are their differences? What are the likely consequences of each option? In making a decision, it might be helpful to ask yourself,
“What is the worst thing that might happen in each scenario?” Examining different points of view is very important; there may be dozens of alternative viewpoints to a particular issue—and the validity of each can change depending on circumstances. A position that is popular or politically correct today may not have been a year ago, and there is no guarantee it will be right in the future. Likewise, a solution to a personal problem that was successful for your roommate may not apply to you. Remember also that sometimes the best option might be a combination of the options you identify initially.

**What do I know about each option?** First, make sure you have all the information about each option. Do you have all the information to support each of your likely options? What is still missing? Where can you get the information you need? Keep an open mind and don’t dismiss supporting information on any position before you evaluate it carefully.

**How good is my information?** Now it’s time to evaluate the quality of the support of each option or point of view. Evaluate the strengths and the weaknesses of each piece of supporting evidence. Are all the relevant facts presented? Are some facts presented in misleading ways? Are enough examples presented to support the premise? Consider the source of the supporting information. Who is the expert presenting the facts? That “expert” may have a vested interest in the position. Consider that bias, more for understanding the point of view than for rejecting it. Consider your own opinions (especially when working with emotional issues); are your emotional ties to a point of view getting in your way of clear thinking (your own biases)? If you really like a particular car model, are you giving the financial implications of buying that car a fair consideration? Are there any errors or fallacies in your logic? (See Table 3.2 "Fallacies and How to Avoid Them").

Fallacies are defects in logic that weaken arguments. You should learn to identify them in your own thinking so you can strengthen your positions, as well as in the arguments of others when evaluating their strength.

<table>
<thead>
<tr>
<th>Fallacy</th>
<th>Description</th>
<th>Examples</th>
<th>How to Avoid It in Your Own Thinking</th>
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<tbody>
<tr>
<td>Generalizations</td>
<td>Making assumptions about a whole group of people based on an interests.</td>
<td>Engineering students are nerds.</td>
<td>What kind of sample are you using? Is it large enough to support the conclusions? You may want to increase your sample size</td>
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<tr>
<td>Fallacy</td>
<td>Description</td>
<td>Examples</td>
<td>How to Avoid It in Your Own Thinking</td>
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<tr>
<td>False Cause</td>
<td>inadequate sample.</td>
<td>My economics class is boring, and my friend says her economic class is boring, too—therefore all economics classes are boring.</td>
<td>or draw a more modest conclusion by using the word “some” or “many.”</td>
</tr>
<tr>
<td>False Cause</td>
<td>Drawing improper conclusions through sequencing. If A comes before B, then A causes B.</td>
<td>I studied biology last term, and this term I’m taking organic chem, which is very confusing. Biology makes chemistry confusing.</td>
<td>When making causal statements, be sure you can explain the process through which A causes B beyond their mere sequence.</td>
</tr>
<tr>
<td>Personalizations</td>
<td>Also known by their Latin names (ad hominem, or “against the man,” and tu quoque, or “you too”). Inserting personalities inappropriately into an argument. Common in political arguments.</td>
<td>Against the man: I won’t support Senator Smith’s education bill. He’s had a mistress and marital problems.</td>
<td>Focus on the merits and supporting data of an argument, not on the personality or behavior of the people making the arguments.</td>
</tr>
<tr>
<td>Everyone Does It</td>
<td>Also known by its Latin name (ad populum, or “against many”). Justifying an issue based solely on the number of people involved.</td>
<td>You too: A parent explains the evidence of the risks of binge drinking. The child rejects the arguments, saying, “When you were my age, you drank too.” It’s healthy to drink only soda; millions of American kids do.</td>
<td>The popular position is not always the right one. Be wary of arguments that rely exclusively on one set of numbers.</td>
</tr>
<tr>
<td>Fallacy</td>
<td>Description</td>
<td>Examples</td>
<td>How to Avoid It in Your Own Thinking</td>
</tr>
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<tr>
<td>Appealing to Authority</td>
<td>Using an endorsement from someone as a primary reason for supporting a point of view.</td>
<td>We should oppose higher taxes; Curt Schilling does. Pitcher Curt Schilling may be a credible authority on baseball, but is he an authority on taxes?</td>
<td>Quoting authorities is a valuable tool to build an argument; make sure the authorities you quote are truly subject matter experts on the issue you are discussing.</td>
</tr>
<tr>
<td>Weak Analogy</td>
<td>Using irrelevant similarities in two objects to draw a conclusion.</td>
<td>Cars and motorcycles are both driven at high speeds on the highway. Car drivers aren’t required to wear helmets, so motorcycle riders shouldn’t have to either.</td>
<td>You can draw an analogy between just about any two objects or ideas. If you are using an analogy, make sure you identify the properties relevant to the argument you are making and see if both share those properties. (In the example, the motorcycle does not provide protection to the rider, but the car does. Equating the two vehicles based on traveling speed is not relevant to the argument.)</td>
</tr>
<tr>
<td>False Dichotomy</td>
<td>Setting up a situation in which it looks like there are only two possible options. If one option is discredited, the other must be accepted.</td>
<td>The classic example here is “America, love it or leave it.”</td>
<td>Examine your own thinking. Are there really only two options? Look for the third option. If you were asked to develop a compromise between the two positions, what would it look like? What would its strengths and weaknesses be?</td>
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</table>

You will need to use critical thinking throughout your college years and beyond. Here are some common critical thinking situations and the kinds of questions you should ask to apply critical thinking. Note that critical thinking is central to themes covered in detail throughout this book.

- **Personal choices.** Examples include “What should I major in?” and “Should I buy a new car?” What do you know about each of your options? What is the quality of that information? Where can you get
more (reliable) information? How do those options relate to your financial and emotional needs?

What are the pros and cons of each option? Are you open to the points of view of others who may be involved? (See Chapter 11 "Taking Control of Your Finances" and Chapter 12 "Taking Control of Your Future").

- **Reading, listening, note taking, and studying.** What are the core messages of the instructor or author? Why are they important? How do these messages relate to one another or differ? (This is covered in much more detail in Chapter 4 "Listening, Taking Notes, and Remembering" and Chapter 5 "Reading to Learn").

- **Research papers.** What evidence do you need to support your thesis? What sources are available for that evidence? Are they reliable sources? Are there any fallacies in your argument? (This is covered in more detail in Chapter.)

- **Essay questions on exams.** What is the professor really asking you to do? What do you know about the question? What is your personal belief about the question? What are the beliefs or biases of the professor or quoted authors? What are the arguments against your point of view? What are the most important pieces of evidence you should offer to support your answer? (This covered in more detail in Chapter 6 "Preparing for and Taking Tests").

**Tips for Critical Thinking**

- Consider all points of view; seriously consider more than two (look for grey areas).
- Keep an open mind.
- Answer three questions about your supporting data:
  1. Is it enough support?
  2. Is it the right support?
  3. Is it credible?
- Look for evidence that contradicts your point of view. Pretend to disagree with the position you are supporting. What parts of your argument are weak? Do you have the supporting facts to overcome that evidence?
- Create a set of criteria you will use to evaluate the strength of information you want to use to support your argument. Ask questions like these:
What is the source of this information?

Is the author well respected in the field?

When was this information developed? Is that important? Why?

Does the author or publisher have an agenda for publishing the information? How does that agenda affect the credibility of the information?

Create a table on which you list your main points, then for each one, list the evidence you have to support it. This method will help you visually identify where you have weak evidence and what points actually lack evidence.

Be willing to admit that you lack information to support a point of view or make a decision. Ask questions or do some focused research to get what you still need.

Make sure that your assumptions and points of view are supported by facts, not opinions.

Learn what types of fallacies you use habitually, and then be on the lookout for them. Writers will often rely on certain types of arguments as a matter of habit. Review some of your old papers to identify which fallacies you need to avoid.

Question your characterizations of others. Are those authorities truly competent in the area you are considering? Are you attacking the opponents of your point of view rather than attacking their arguments?

Be careful of broad generalizations. Claims that use absolute words like “all,” “none,” “always,” “never,” “no one,” and “everyone” require much more proof than claims that use words like “most,” “some,” “often,” “rarely,” “sometimes,” and so on.

Where Did That Come From?

One of the most consistent uses for critical thinking in your college work is in considering the value of research material and deciding how to use it. The Internet gives you access to an almost unlimited amount of data, and you must choose what to use carefully. Following are some guidelines.

1. Look at the URL, the Web address. It can give you important information about the reliability and intentions of the site. Start with the page publisher. Have you heard of this source before? If so, would you consider it a reliable source for the kind of material you are about to read? Now consider the domain type in the URL, which follows the period after the publisher: “.com” and “.biz” are used by commercial enterprises, “.org” is normally used by nonprofit organizations, and “.edu” is reserved for
educational institutions. None of these is necessarily bad or good, but they may give you a sense behind the motivation for publishing this material. Are you dealing with a company or the Web site of an individual—and how might that affect the quality of the information on that site?

2. What can you learn from poking around with navigation tabs or buttons, and what do they tell you about the objective of the Web site? Look for a tab labeled “About Us” or “Biography.”

3. Consider what others are saying about the site. Does the author offer references, reviews, or quotations about the material? What do they say? Check the blogosphere to see what other people think of the author or Web site.

4. Trust your own impressions about the material. Is the information consistent with what you already know?

5. Ask yourself why the Web site was written. (To inform? To provide data or facts? To sell something? To promote a cause? To parody?)

Based on what you learned, ask yourself if the information from this Web site is reliable for your needs. These steps are covered in more detail in Chapter 5 "Reading to Learn".

**KEY TAKEAWAYS**

- Critical thinking is evaluating the strength of your arguments, data, and information.

  - Three questions to ask about the support for an argument or position:
    1. Is it enough support?
    2. Is it the right support?
    3. Is it credible?

- Weaknesses in arguments are most commonly logical fallacies. Recognizing them will help evaluate the strength of an argument effectively.

**CHECKPOINT EXERCISES**

*Figure 3.3 Crossword: Full of Fallacies*
3.3 Searching for “Aha!”

**LEARNING OBJECTIVES**

1. Use creative thinking: the competitive advantage in the twenty-first century.
2. Understand the difference between creative thinking and free-form thinking.
3. Practice guidelines for creating ideas.
4. Use rules and directions to create effectively.
5. Understand group creativity: how to conduct effective brainstorming.

America still has the right stuff to thrive. We still have the most creative, diverse, innovative culture and open society—in a world where the ability to imagine and generate new ideas with speed and to implement them through global collaboration is the most important competitive advantage.

Thomas Friedman

Let’s face it: many jobs are subject to outsourcing. The more menial or mechanical the job, the greater the likelihood that there will be someone overseas ready to do the job for a lot less pay. But generating new ideas, fostering innovation, and developing processes or plans to implement them are something that cannot be easily farmed out, and these are strengths of the American collegiate education. Businesses want problem solvers, not just doers. Developing your creative thinking skills will position you for lifelong success in whatever career you choose.

Creative thinking is the ability to look at things from a new perspective, to come up with fresh solutions to problems. It is a deliberate process that allows you to think in ways that improve the likelihood of generating new ideas or thoughts.

Let’s start by killing a couple of myths:

- **Creativity is an inherited skill.** Creativity is not something people are born with but is a skill that is developed over time with consistent practice. It can be argued that people you think were “born” creative because their parents were creative, too, are creative simply because they have been practicing creative thinking since childhood, stimulated by their parents’ questions and discussions.

- **Creativity is free-form thinking.** While you may want to free yourself from all preconceived notions, there is a recognizable structure to creative thinking. Rules and requirements do not limit creative thinking—they provide the scaffolding on which truly creative solutions can be built. Free-form thinking often lacks direction or an objective; creative thinking is aimed at producing a defined outcome or solution.

Creative thinking involves coming up with new or original ideas; it is the process of seeing the same things others see but seeing them differently. You use skills such as examining associations and
relationships, flexibility, elaboration, modification, imagery, and metaphorical thinking. In the process, you will stimulate your curiosity, come up with new approaches to things, and have fun!

**Tips for Creative Thinking**

- **Feed your curiosity.** Read. Read books, newspapers, magazines, blogs—anything at any time. When surfing the Web, follow links just to see where they will take you. Go to the theatre or movies. Attend lectures. Creative people make a habit of gathering information, because they never know when they might put it to good use. Creativity is often as much about rearranging known ideas as it is about creating a completely new concept. The more “known ideas” you have been exposed to, the more options you’ll have for combining them into new concepts.

- **Develop your flexibility** by looking for a second right answer. Throughout school we have been conditioned to come up with the right answer; the reality is that there is often more than one “right” answer. Examine all the possibilities. Look at the items in Figure 3.4. Which is different from all the others?

*Figure 3.4*

- a. Apple
- b. Olives
- c. Board
- d. Clams
If you chose C, you’re right; you can’t eat a board. Maybe you chose D; that’s right, too—clams are the only animal on the chart. B is right, as it’s the only item you can make oil from, and A can also be right; it’s the only red item.

Each option can be right depending on your point of view. Life is full of multiple answers, and if we go along with only the first most obvious answer, we are in danger of losing the context for our ideas. The value of an idea can only be determined by comparing it with another. Multiple ideas will also help you generate new approaches by combining elements from a variety of “right” answers. In fact, the greatest danger to creative thinking is to have only one idea. Always ask yourself, “What’s the other right answer?”

- **Combine old ideas in new ways.** When King C. Gillette registered his patent for the safety razor, he built on the idea of disposable bottle caps, but his venture didn’t become profitable until he toyed with a watch spring and came up with the idea of how to manufacture inexpensive (therefore disposable) blades. Bottle caps and watch springs are far from men’s grooming materials, but Gillette’s genius was in combining those existing but unlikely ideas. Train yourself to think “out of the box.” Ask yourself questions like, “What is the most ridiculous solution I can come up with for this problem?” or “If I were transported by a time machine back to the 1930s, how would I solve this problem?” You may enjoy watching competitive design, cooking, or fashion shows (Top Chef, Chopped, Project Runway, etc.); they are great examples of combining old ideas to make new, functional ones.

- **Think metaphorically.** Metaphors are useful to describe complex ideas; they are also useful in making problems more familiar and in stimulating possible solutions. For example, if you were a partner in a company about to take on outside investors, you might use the pie metaphor to clarify your options (a smaller slice of a bigger pie versus a larger slice of a smaller pie). If an organization you are a part of is lacking direction, you may search for a “steady hand at the tiller,” communicating quickly that you want a consistent, nonreactionary, calm leader. Based on that ship-steering metaphor, it will be easier to see which of your potential leaders you might want to support. Your ability to work comfortably with metaphors takes practice. When faced with a problem, take time to think about metaphors to describe it, and the desired solution. Observe how metaphors are used throughout communication and think about why those metaphors are effective. Have you ever noticed that the financial business uses water-based metaphors (cash flow, frozen assets, liquidity) and that
meteorologists use war terms (*fronts*, wind *force*, storm *surge*)? What kinds of metaphors are used in your area of study?

- **Ask.** A creative thinker always questions the way things are: Why are we doing things this way? What were the objectives of this process and the assumptions made when we developed the process? Are they still valid? What if we changed certain aspects? What if our circumstances changed? Would we need to change the process? How? Get in the habit of asking questions—lots of questions.

### Key Takeaways

- Creative thinking is a requirement for success.
- Creative thinking is a deliberate process that can be learned and practiced.
- Creative thinking involves, but is not limited to, curiosity, flexibility, looking for the second right answer, combining things in new ways, thinking metaphorically, and questioning the way things are.

### Checkpoint Exercises

1. **Feed your curiosity.** List five things you will do in the next month that you have never done before (go to the ballet, visit a local museum, try Moroccan food, or watch a foreign movie). Expand your comfort “envelope.” Put them on your calendar.

   a. 
   b. 
   c. 
   d. 
   e. 

   **How many ways can you use it?** Think of as many uses for the following common items as possible. Can you name more than ten?

<table>
<thead>
<tr>
<th>Peanut Butter (PBJ counts as one, regardless of the flavor of jelly)</th>
<th>Paper Clips</th>
<th>Honors Level: Pen Caps</th>
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<tr>
<td>Peanut Butter (PBJ counts as one, regardless of the flavor of jelly)</td>
<td>Paper Clips</td>
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A metaphor for life. In the movie Forrest Gump, Forrest states, “Life was like a box of chocolates; you never know what you’re gonna get.” Write your own metaphor for life and share it with your classmates.

He has eyes in the back of his head. What if we really had eyes in the backs of our heads? How would life be different? What would be affected? Would we walk backward? Would we get dizzy if we spun in circles? Would it be easy to put mascara on the back eyes? Generate your own questions and answers; let the creative juices flow!


3.4 Problem Solving and Decision Making

Learning Objectives

1. Learn to understand the problem.
2. Learn to combine creative thinking and critical thinking to solve problems.
3. Practice problem solving in a group.

Much of your college and professional life will be spent solving problems; some will be complex, such as deciding on a career, and require time and effort to come up with a solution. Others will be small, such as deciding what to eat for lunch, and will allow you to make a quick decision based entirely on
your own experience. But, in either case, when coming up with the solution and deciding what to do, follow the same basic steps.

• **Define the problem.** Use your analytical skills. What is the real issue? Why is it a problem? What are the root causes? What kinds of outcomes or actions do you expect to generate to solve the problem? What are some of the key characteristics that will make a good choice: Timing? Resources? Availability of tools and materials? For more complex problems, it helps to actually write out the problem and the answers to these questions. Can you clarify your understanding of the problem by using metaphors to illustrate the issue?

• **Narrow the problem.** Many problems are made up of a series of smaller problems, each requiring its own solution. Can you break the problem into different facets? What aspects of the current issue are “noise” that should not be considered in the problem solution? (Use critical thinking to separate facts from opinion in this step.)

• **Generate possible solutions.** List all your options. Use your creative thinking skills in this phase. Did you come up with the second “right” answer, and the third or the fourth? Can any of these answers be combined into a stronger solution? What past or existing solutions can be adapted or combined to solve this problem?

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**GROUP THINK: EFFECTIVE BRAINSTORMING**

Brainstorming is a process of generating ideas for solutions in a group. This method is very effective because ideas from one person will trigger additional ideas from another. The following guidelines make for an effective brainstorming session:

• Decide who should moderate the session. That person may participate, but his main role is to keep the discussion flowing.
• Define the problem to be discussed and the time you will allow to consider it.
• Write all ideas down on a board or flip chart for all participants to see.
• Encourage everyone to speak.
• Do not allow criticism of ideas. All ideas are good during a brainstorm. Suspend disbelief until after the session. Remember a wildly impossible idea may trigger a creative and feasible solution to a problem.

• **Choose the best solution.** Use your critical thinking skills to select the most likely choices. List the pros and cons for each of your selections. How do these lists compare with the requirements you
identified when you defined the problem? If you still can’t decide between options, you may want to seek further input from your brainstorming team.

Decisions, Decisions

You will be called on to make many decisions in your life. Some will be personal, like what to major in, or whether or not to get married. Other times you will be making decisions on behalf of others at work or for a volunteer organization. Occasionally you will be asked for your opinion or experience for decisions others are making. To be effective in all of these circumstances, it is helpful to understand some principles about decision making.

First, define who is responsible for solving the problem or making the decision. In an organization, this may be someone above or below you on the organization chart but is usually the person who will be responsible for implementing the solution. Deciding on an academic major should be your decision, because you will have to follow the course of study. Deciding on the boundaries of a sales territory would most likely be the sales manager who supervises the territories, because he or she will be responsible for producing the results with the combined territories. Once you define who is responsible for making the decision, everyone else will fall into one of two roles: giving input, or in rare cases, approving the decision.

Understanding the role of input is very important for good decisions. Input is sought or given due to experience or expertise, but it is up to the decision maker to weigh the input and decide whether and how to use it. Input should be fact based, or if offering an opinion, it should be clearly stated as such. Finally, once input is given, the person giving the input must support the other’s decision, whether or not the input is actually used.

Consider a team working on a project for a science course. The team assigns you the responsibility of analyzing and presenting a large set of complex data. Others on the team will set up the experiment to demonstrate the hypothesis, prepare the class presentation, and write the paper summarizing the results. As you face the data, you go to the team to seek input about the level of detail on the data you should consider for your analysis. The person doing the experiment setup thinks you should be very detailed, because then it will be easy to compare experiment results with the data. However, the person preparing the class presentation wants only high-level data to be considered because that will make for a clearer
presentation. If there is not a clear understanding of the decision-making process, each of you may think
the decision is yours to make because it influences the output of your work; there will be conflict and
frustration on the team. If the decision maker is clearly defined upfront, however, and the input is
thoughtfully given and considered, a good decision can be made (perhaps a creative compromise?) and
the team can get behind the decision and work together to complete the project.

Finally, there is the approval role in decisions. This is very common in business decisions but often occurs
in college work as well (the professor needs to approve the theme of the team project, for example).

Approval decisions are usually based on availability of resources, legality, history, or policy.

KEY TAKEAWAYS

- Effective problem solving involves critical and creative thinking.

- The four steps to effective problem solving are the following:
  1. Define the problem
  2. Narrow the problem
  3. Generate solutions
  4. Choose the solution

- Brainstorming is a good method for generating creative solutions.

- Understanding the difference between the roles of deciding and providing input makes for better
decisions.

CHECKPOINT EXERCISES

1. Gather a group of three or four friends and conduct three short brainstorming sessions (ten
   minutes each) to generate ideas for alternate uses for peanut butter, paper clips, and pen caps.
   Compare the results of the group with your own ideas. Be sure to follow the brainstorming
guidelines. Did you generate more ideas in the group? Did the quality of the ideas improve? Were
the group ideas more innovative? Which was more fun? Write your conclusions here.
2. Using the steps outlined earlier for problem solving, write a plan for the following problem: You are in your second year of studies in computer animation at Jefferson Community College. You and your wife both work, and you would like to start a family in the next year or two. You want to become a video game designer and can benefit from more advanced work in programming. Should you go on to complete a four-year degree?

a. Define the problem: What is the core issue? What are the related issues? Are there any requirements to a successful solution? Can you come up with a metaphor to describe the issue?

b. Narrow the problem: Can you break down the problem into smaller manageable pieces? What would they be?

c. Generate solutions: What are at least two “right” answers to each of the problem pieces?
d. Choose the right approach: What do you already know about each solution? What do you still need to know? How can you get the information you need? Make a list of pros and cons for each solution.

3.5 Chapter Activities

Chapter Takeaways

• Your ability to think critically and creatively is a key to your success in college and in life. You should develop and practice these skills.

• Bloom’s taxonomy provides a framework to describe the many kinds of thinking we need to do. Up to this point, you probably have practiced most of the lower-level thinking skills but have not had much experience with the higher-level skills (critical thinking and creative thinking).

• Critical thinking involves evaluating the strength of ideas or concepts by asking questions about them. Critical thinking will also allow you to identify and weed out logical fallacies that weaken the value of an idea.

• Creative thinking is the process of generating new ideas, concepts, or solutions. This often involves adapting existing ideas or combining them in new ways to create a new solution.
Problem solving is effectively achieved by applying both critical thinking and creative thinking to generate viable solutions and decisions.

### CHAPTER REVIEW

1. List the six levels of thinking described in Bloom’s taxonomy.

   - 
   - 
   - 
   - 
   - 
   - 

2. Which thinking skill is most important for short answer quizzes? Why?

   - 
   - 
   - 

3. List five verbs that describe the application level of thought.

   - 
   - 
   - 
   - 

4. What thinking skills are you using if you are blogging? How do you use each one?

   - 
   - 
   - 
   - 

5. What is critical thinking?
6. Why is it important to pose some questions about the source of the material you read? What kinds of questions should you ask?

7. What is a logical fallacy? Give an example of two types.

8. List six words that signal a broad generalization and a recommended alternative that would resolve that problem of each.

9. What are some ways in which you can feed your curiosity?
10. Why is brainstorming more effective at generating new ideas than individual work?

11. List the four steps of problem solving.
   a. ________________________________
   b. ________________________________
   c. ________________________________
   d. ________________________________

How do you use critical thinking and creative thinking in solving problems?

______________________________

**MAKE AN ACTION LIST**

<table>
<thead>
<tr>
<th>Two things I will do to practice</th>
<th>Action</th>
<th>By when I expect to take the action</th>
<th>The expected results of that action</th>
</tr>
</thead>
<tbody>
<tr>
<td>My critical thinking</td>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My creative thinking</td>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My problem solving</td>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Chapter 4
### Listening, Taking Notes, and Remembering

### Where Are You Now?
Assess your present knowledge and attitudes.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Unsure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am satisfied with my grades.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I usually feel well prepared for classes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I usually understand what is going on in class.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I find it easy to stay focused in class.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I am not shy or self-conscious about asking questions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I learn from recorded lectures and podcasts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I take useful notes in class.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I go to the instructor’s office when I have a question about an assignment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I can successfully study for a test from the notes I have taken.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I use different note-taking methods in different classes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I do not have trouble remembering facts and ideas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I retain useful information after an exam.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Where Do You Want to Go?
Think about how you answered the questions above. Be honest with yourself. On a scale of 1 to 10, how would you rate your level of academic achievement at this time?

<table>
<thead>
<tr>
<th>A poor student</th>
<th>An excellent student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

In the following list, circle the three most important areas in which you think you can improve:

- Preparing for class
- Taking notes on your laptop
- Listening in class
- Using different systems for note taking
- Using seat selection to your advantage
- Remembering facts and figures
- Listening to podcasts
- Remembering ideas and concepts
- Asking good questions
- Choosing a memory method that’s right for you
- Taking notes on paper
- Using a memory system

Are there other areas in which you can improve your academic performance? Write down other things you feel you need to work on.

---

**How to Get There**

Here’s what we’ll work on in this chapter:

- Setting yourself up for success by following the learning cycle
- Listening actively
- Listening in class
• Asking good questions
• Taking effective notes
• Learning the principal note-taking methods
• Modifying your note-taking methods to meet your learning style and your instructor's approach to the material
• Understanding how your memory works
• Using your memory effectively
• Learning memory-building tips

This Is Not Like High School; This Is Not Like Work

As you embark on your college career, you have found yourself in an environment like no other. You soon will discover the new social structure, you may be invigorated by a new freedom, and you may be daunted by the number of options you have for activities. We cover these nonacademic aspects of college life starting in Chapter 9 “The Social World of College”. But for now, consider some of the differences between college classes and what you likely were used to in high school. These differences are important because they demand you change your behavior if you want to be a successful student.

Table 4.1 Differences between High School and College Classes

<table>
<thead>
<tr>
<th>In High School</th>
<th>In College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your teacher would guide you and let you know when you were falling behind.</td>
<td>You are expected to take responsibility for your academic success.</td>
</tr>
<tr>
<td>Your teacher would take attendance and report you when you were absent; the teacher would help you make up the material you missed.</td>
<td>Your instructor rarely takes attendance but expects you to be in class and understand the material.</td>
</tr>
<tr>
<td>Your teacher would write assignments on the board and remind you to complete them.</td>
<td>It is up to you to read, save, and follow the course syllabus and to know what material you must read and understand and by when. Since the syllabus makes this clear, instructors will rarely remind you of assignment due dates.</td>
</tr>
<tr>
<td>In High School</td>
<td>In College</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Each class would typically meet three to five times each week with minimal homework each night.</td>
<td>Each class meets less frequently but requires much more work from each student. You should generally count on doing two to three hours of studying for each hour of class. What seems like an eight-hour work day may quickly become fourteen hours or more of academic work. Take responsibility for budgeting your time and not falling behind. In college it is much harder to catch up if you do get behind.</td>
</tr>
<tr>
<td>High school teachers are passionate about guiding their students and teaching them to learn.</td>
<td>College instructors are often more passionate about their subject matter than they are about their teaching. But you can tap into their passion for what they are talking about and guide your own learning by asking questions, seeking advice during office hours, and participating in class discussions.</td>
</tr>
<tr>
<td>Daily homework assignments and unit quizzes contributed heavily to your grade. Oftentimes a teacher would offer extra credit opportunities to give students a chance to make up for lapses along the way.</td>
<td>Your grade in a course may be determined primarily by one or two exams and a long-term project or paper. A subpar performance on a single exam or paper can really drag your grades down. Identify the assignments on the syllabus and get to work on them early and consistently. Don’t put off assignments or studying for tests until the last minute! In college, extra credit is not an option to fall back on!</td>
</tr>
<tr>
<td>You were told what you should study and when. You followed a predetermined curriculum set by state and local officials. Even your parents and guidance counselors had a major say in your “elective” choices.</td>
<td>You determine what you want to learn. It is your education—not someone else’s. Find your passion and follow it! You will be a much better student if you do.</td>
</tr>
</tbody>
</table>

4.1 Setting Yourself Up for Success

**LEARNING OBJECTIVE**

1. Identify the roles of listening and note taking in the learning cycle.

Too many students try to get the grade just by going to class, maybe a little note taking, and then cramming through the text right before an exam they feel unprepared for. Sound familiar? This approach may have worked for you in high school where tests and quizzes were more frequent and
teachers prepared study guides for you, but colleges require you to take responsibility for your learning and to be better prepared.

Most students simply have not learned how to study and don’t understand how learning works. As we discussed in , learning is actually a cycle of four steps: preparing, absorbing, capturing, and reviewing. When you get in the habit of paying attention to this cycle, it becomes relatively easy to study well. But you must use all four steps.

This chapter focuses on listening, a key skill for learning new material, and note taking, the most important skill in the capturing phase of the cycle. These skills are closely related. Good listening skills make you a better note taker, and taking good notes can help you listen better. Both are key study skills to help you do better in your classes.

*Figure 4.2 The Learning Cycle*
4.2 Are You Ready for Class?

**LEARNING OBJECTIVES**

1. Prepare for listening in class and taking notes.
2. Use a syllabus.

A professional athlete wouldn’t take the field without warming up first. An effective student won’t go to a class without preparing for it first. To get the most out of a class, you need to get yourself in the right frame of mind. This does not take a lot of time, but it greatly increases your ability to listen actively and take good notes.

Like a good athlete, first you need to get psyched. Clearly visualize your goals. Thinking about the following questions may help:

- What do I want to get out of the class?
- What is the main idea the class will cover?
- How will today’s class help me do better in this course?

Go to class with confidence. The best way to achieve this is to start early and be sure you’ve completed any assignment the instructor gave you in the last class. Think about how today’s material will tie into what you’ve already learned. You should also review the course syllabus to see what the instructor expects to cover in the class and how it relates to what you have learned so far.

Be physically prepared, too:

- Make sure you are getting enough sleep and eating nutritious meals, including breakfast. It’s hard to focus on learning when you’re hungry.
- Make sure you have all materials you’ll need for class (paper, pens, laptop, books, etc.).
- Be punctual. Give yourself plenty of time to get into your seat and organize your space. If you are late, you’ll struggle to get into the right mind-set for listening, and you won’t feel in control of your
learning as you try to catch up with the class. If you’re tardy, you also create a distraction for your classmates—and the instructor, who will take notice!

- Clear away all other distractions before the instructor starts. Remember that putting your cell phone on “vibrate” may still distract you—so turn it off, all the way off.

Now, take a deep breath, focus on the instructor, and listen and learn!

### KEY TAKEAWAYS

- To get the most out of a class, get yourself in the right frame of mind.
- Clearly visualize your goals and approach the class with confidence.
- Be physically prepared: rested, punctual, and not distracted.

### 4.3 Are You Really Listening?

**LEARNING OBJECTIVES**

1. Listen actively in social situations and in class environments.
2. Apply strategies that make listening more effective.
3. Ask good questions.

Are you a good listener? Most of us like to think we are, but when we really think about it, we recognize that we are often only half listening. We’re distracted, thinking about other things, or formulating what we are going to say in reaction to what we are hearing before the speaker has even finished. Effective listening is one of the most important learning tools you can have in college. And it is a skill that will benefit you on the job and help your relationships with others. Listening is nothing more than purposefully focusing on what a speaker is saying with the objective of understanding.

This definition is straightforward, but there are some important concepts that deserve a closer look. “Purposefully focusing” implies that you are actively processing what the speaker is saying, not just letting the sounds of their voice register in your senses. “With the objective of understanding” means that you will learn enough about what the speaker is saying to be able to form your own thoughts about the speaker’s message. Listening is an active process, as opposed to hearing, which is passive. You listen to others in many situations: to interact with friends, to get instructions for a task, or to learn new material. There are two general types of listening situations: where you will be able to
interact freely with the speaker (everyday conversations, small discussion classes, business meetings) and where interaction is limited (lectures and Webcasts).

In interactive situations, you should apply the basic principles of active listening (see “Principles of Active Listening”). These are not hard to understand, but they are hard to implement and require practice to use them effectively.

**Principles of Active Listening**

1. Focus on what is being said. Give the speaker your undivided attention. Clear your mind of anything else. Don’t prejudge. You want to understand what the person is saying; you don’t need to agree with it.

2. Repeat what you just heard. Confirm with the speaker that what you heard is what he or she said.

3. Ask speaker to expand or clarify. If you are unsure you understand, ask questions; don’t assume.

4. Look for nonverbal signals as well as the words used. Nonverbal messages come from facial expressions, body positioning, arm gestures, and tone of voice. Confirm these body language messages just as you would verbal messages by saying, for example, “You seem very excited about this idea.”

5. Listen for requests. A speaker will often hide a request as a statement of a problem. If a friend says, “I hate math!” this may mean, “Can you help me figure out a solution to this problem?”

---

**ACTIVITY: LISTENING WITH YOUR WHOLE BODY**

Think of a person you consider an excellent listener. Picture that person clearly in your mind. Focus on what she does, not what she is saying. Describe what actions and postures she uses to show she is listening. Put this list on the left-hand side of the page.

Think of a person you consider a poor listener. Picture that person clearly in your mind. Focus on what he does, not what he is saying. Describe what actions and postures he uses to show he is not listening. Put this list on the right-hand side of the page.
Now compare these lists with your own behavior. How many of the body language signals from each side do you think you exhibit? How can you add more of the left column’s attitudes and actions to your own behaviors? How can you control those behaviors you recognize in yourself from the right column?

Listening in a classroom or lecture hall to learn can be challenging because you are limited by how—and how much—you can interact with an instructor during the class. The following strategies help make listening at lectures more effective and learning more fun.

1. **Get your mind in the right space.** Prepare yourself mentally to receive the information the speaker is presenting by following the previous prep questions and by doing your assignments (instructors build upon work presented earlier).

2. **Get yourself in the right space.** Sit toward the front of the room where you can make eye contact with the instructor easily. Most instructors read the body language of the students in the front rows to gauge how they are doing and if they are losing the class. Instructors also believe students who sit near the front of the room take their subject more seriously and are more willing to give them help when needed or to give them the benefit of the doubt when making a judgment call while assigning grades.

3. **Focus on what is being said.** Eliminate distractions. Turn your cell phone off and pack it away in your backpack. If you are using your laptop for notes, close all applications except the one that you use to take notes. Clear your mind and keep quiet. Listen for new ideas. Think like an investigative reporter: you don’t just want to accept what is being said passively—you want to question the material and be convinced that it makes sense.

4. **Look for signals.** Each instructor has a different way of telling you what is important. Some will repeat or paraphrase an idea; others will raise (or lower) their voices; still others will write related words on the board. Learn what signals your instructors tend to use and be on the lookout for them. When they use that tactic, the idea they are presenting needs to go in your notes and in your mind—and don’t be surprised if it appears on a test or quiz!

5. **Listen for what is not being said.** If an instructor doesn’t cover a subject, or covers it only minimally, this signals that that material is not as important as other ideas covered in greater length.
6. **Sort the information.** Decide what is important and what is not, what is clear and what is confusing, and what is new material and what is review. This mental organizing will help you remember the information, take better notes, and ask better questions.

7. **Take notes.** We cover taking notes in much greater detail later in this chapter, but for now think about how taking notes can help recall what your instructor said and how notes can help you organize your thoughts for asking questions.

8. **Ask questions.** Asking questions is one of the most important things you can do in class. Most obviously it allows you to clear up any doubts you may have about the material, but it also helps you take ownership of (and therefore remember) the material. Good questions often help instructors expand upon their ideas and make the material more relevant to students. Thinking through the material critically in order to prepare your questions helps you organize your new knowledge and sort it into mental categories that will help you remember it.

**A note about tape-recording lectures:** You may want to record a lecture to double-check what you heard in class, but it’s usually not a good idea. Depending on a recording may lead you to listen less effectively and think less actively. Additionally, many instructors do not allow students to record their lectures, so recording is usually not even an option.

**Dealing with Special Listening Challenges**

**What to Do If...**

- **Your instructor speaks too fast.** Crank up your preparation. The more you know about the subject, the more you’ll be able to pick up from the instructor. Exchange class notes with other students to fill in gaps in notes. Visit the instructor during office hours to clarify areas you may have missed. You might ask the instructor—very politely, of course—to slow down, but habits like speaking fast are hard to break!

- **Your instructor has a heavy accent.** Sit as close to the instructor as possible. Make connections between what the instructor seems to be saying and what he or she is presenting on the board or screen. Ask questions when you don’t understand. Visit the instructor during office hours; the more you speak with the instructor the more likely you will learn to understand the accent.
• **Your instructor speaks softly or mumbles.** Sit as close to the instructor as possible and try to hold eye contact as much as possible. Check with other students if they are having problems listening, too; if so, you may want to bring the issue up with the instructor. It may be that the instructor is not used to the lecture hall your class is held in and can easily make adjustments.

**Now That’s a Good Question...**

Are you shy about asking questions? Do you think that others in the class will ridicule you for asking a dumb question? Students sometimes feel this way because they have never been taught how to ask questions. Practice these steps, and soon you will be on your way to customizing each course to meet your needs and letting the instructor know you value the course.

• **Be prepared.** Doing your assignments for a class or lecture will give you a good idea about the areas you are having trouble with and will help you frame some questions ahead of time.

• **Position yourself for success.** Sit near the front of the class. It will be easier for you to make eye contact with the instructor as you ask the question. Also, you won’t be intimidated by a class full of heads turning to stare at you as you ask your question.

• **Don’t wait.** Ask your questions as soon as the instructor has finished a thought. Being one of the first students to ask a question also will ensure that your question is given the time it deserves and won’t be cut short by the end of class.

• **In a lecture class, write your questions down.** Make sure you jot your questions down as they occur to you. Some may be answered in the course of the lecture, but if the instructor asks you to hold your questions until the end of class, you’ll be glad you have a list of the items you need the instructor to clarify or expand on.

• **Ask specific questions.** “I don’t understand” is a statement, not a question. Give the instructor guidance about what you are having trouble with. “Can you clarify the use of the formula for determining velocity?” is a better way of asking for help. If you ask your question at the end of class, give the instructor some context for your question by referring to the part of the lecture that triggered the question. For example, “Professor, you said the Union troops were emboldened by Lincoln’s leadership. Was this throughout the Civil War, or only after Gettysburg?”

• **Don’t ask questions for the sake of asking questions.** If your question is not thought out, or if it appears that you are asking the question to try to look smart, instructors will see right through you!
KEY TAKEAWAYS

• In all interactive learning situations, apply the basic principles of active listening.
• Focus on what is being said, confirm that you heard the right message, ask for any clarification you need, watch for nonverbal messages, and listen for requests.
• Specific strategies are helpful for listening well in a lecture hall.
• Be ready to compensate if your instructor speaks too fast, has a heavy accent that makes understanding difficult for you, or speaks too softly.
• Don’t be shy about asking questions. Asking questions is easier when you are prepared and positioned for success.

CHECKPOINT EXERCISES

1. List two things you should do before the class to prepare yourself for active listening.

   ________________________________________________________________
   ________________________________________________________________

2. Where should you sit in the classroom? Why?

   ________________________________________________________________
   ________________________________________________________________

3. What are some of the ways instructors signal important material?

   ________________________________________________________________
   ________________________________________________________________

4.4 Got Notes?

LEARNING OBJECTIVES

1. Explain why taking notes is important.
2. Use the four primary methods of note taking: lists, outlines, concept maps, and the Cornell method.
3. Define which methods support your learning style and the instructor’s teaching style.
4. Apply strategies to make note taking more effective.
Everybody takes notes, or at least everybody claims to. But if you take a close look, many who are claiming to take notes on their laptops are actually surfing the Web, and paper notebooks are filled with doodles interrupted by a couple of random words with an asterisk next to them reminding you that “This is important!” In college, these approaches will not work. In college, your instructors expect you to make connections between class lectures and reading assignments; they expect you to create an opinion about the material presented; they expect you to make connections between the material and life beyond college. Your notes are your road maps for these thoughts. Do you take good notes? After learning to listen, note taking is the most important skill to ensure your success in a class.

Effective note taking is important because it
- supports your listening efforts,
- allows you to test your understanding of the material,
- helps you remember the material better when you write key ideas down,
- gives you a sense of what the instructor thinks is important,
- creates your “ultimate study guide.”

There are various forms of taking notes, and which one you choose depends on both your personal style and the instructor’s approach to the material. Each can be used in a notebook, index cards, or in a digital form on your laptop. No specific type is good for all students and all situations, so we recommend that you develop your own style, but you should also be ready to modify it to fit the needs of a specific class or instructor. To be effective, all of these methods require you to listen actively and to think; merely jotting down words the instructor is saying will be of little use to you.

**Table 4.2 Note-Taking Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>When to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lists</td>
<td>A sequential listing of ideas as they are presented. Lists may be short phrases or complete paragraphs</td>
<td>This method is what most students use as a fallback if they haven’t learned other</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
<td>When to Use</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Outlines</td>
<td>The outline method places most important ideas along the left margin, which</td>
<td>A good method to use when material presented by the instructor is well organized. Easy to use when taking notes on your computer.</td>
</tr>
<tr>
<td></td>
<td>are numbered with roman numerals. Supporting ideas to these main concepts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>are indented and are noted with capital letters. Under each of these ideas,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>further detail can be added, designated with an Arabic number, a lowercase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>letter, and so forth.</td>
<td></td>
</tr>
<tr>
<td>Concept Maps</td>
<td>When designing a concept map, place a central idea in the center of the page</td>
<td>Great method to show relationships among ideas. Also good if the instructor tends to hop from one idea to another and back.</td>
</tr>
<tr>
<td></td>
<td>and then add lines and new circles in the page for new ideas. Use arrows and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lines to connect the various ideas.</td>
<td></td>
</tr>
<tr>
<td>Cornell Method</td>
<td>The Cornell method uses a two-column approach. The left column takes up no more</td>
<td>The Cornell method can include any of the methods above and provides a useful format for calling out key concepts, prioritizing ideas, and organizing review work. Most colleges recommend using some form of the Cornell method.</td>
</tr>
<tr>
<td></td>
<td>than a third of the page and is often referred to as the “cue” or “recall” column.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The right column (about two-thirds of the page) is used for taking notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>using any of the methods described above or a combination of them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>After class or completing the reading, review your notes and write the key</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ideas and concepts or questions in the left column. You may also include a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>summary box at the bottom of the page, in which to write a summary of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>class or reading in your own words.</td>
<td></td>
</tr>
</tbody>
</table>

**The List Method**

*Figure 4.3 The List Method of Note Taking*
The list method is usually not the best choice because it is focused exclusively on capturing as much of what the instructor says as possible, not on processing the information. Most students who have not learned effective study skills use this method, because it’s easy to think that this is what note taking is all about. Even if you are skilled in some form of shorthand, you should probably also learn one of the other methods described here, because they are all better at helping you process and remember the material. You may want to take notes in class using the list method, but transcribe your notes to an outline or concept map method after class as a part of your review process. It is always important to review your notes as soon as possible after class and write a summary of the class in your own words.

**The Outline Method**

*Figure 4.4 The Outline Method of Note Taking*
The advantage of the outline method is that it allows you to prioritize the material. Key ideas are written to the left of the page, subordinate ideas are then indented, and details of the subordinate ideas can be indented further. To further organize your ideas, you can use the typical outlining numbering scheme (starting with roman numerals for key ideas, moving to capital letters on the first subordinate level, Arabic numbers for the next level, and lowercase letters following.) At first you may have trouble identifying when the instructor moves from one idea to another. This takes practice and experience with each instructor, so don’t give up! In the early stages you should use your syllabus to determine what key ideas the instructor plans to present. Your reading assignments before class can also give you guidance in identifying the key ideas.
If you’re using your laptop computer for taking notes, a basic word processing application (like Microsoft Word or Works) is very effective. Format your document by selecting the outline format from the format bullets menu. Use the increase or decrease indent buttons to navigate the level of importance you want to give each item. The software will take care of the numbering for you!

After class be sure to review your notes and then summarize the class in one or two short paragraphs using your own words. This summary will significantly affect your recall and will help you prepare for the next class.

The Concept Map Method

This is a very graphic method of note-taking that is especially good at capturing the relationships among ideas. Concept maps harness your visual sense to understand complex material “at a glance.” They also give you the flexibility to move from one idea to another and back easily (so they are helpful if your instructor moves freely through the material).

To develop a concept map, start by using your syllabus to rank the ideas you will listen to by level of detail (from high-level or abstract ideas to detailed facts). Select an overriding idea (high level or abstract) from the instructor’s lecture and place it in a circle in the middle of the page. Then create branches off that circle to record the more detailed information, creating additional limbs as you need them. Arrange the branches with others that interrelate closely. When a new high-level idea is presented, create a new circle with its own branches. Link together circles or concepts that are related. Use arrows and symbols to capture the relationship between the ideas. For example, an arrow may be used to illustrate cause or effect, a double-pointed arrow to illustrate dependence, or a dotted arrow to illustrate impact or effect.

As with all note-taking methods, you should summarize the chart in one or two paragraphs of your own words after class.

Figure 4.5 The Concept Map Method of Note Taking
The Cornell Method

*Figure 4.6 The Cornell Method of Note Taking*
The Cornell method was developed in the 1950s by Professor Walter Pauk at Cornell University. It is recommended by most colleges because of its usefulness and flexibility. This method is simple to use for capturing notes, is helpful for defining priorities, and is a very helpful study tool.

The Cornell method follows a very specific format that consists of four boxes: a header, two columns, and a footer.

The header is a small box across the top of the page. In it you write identification information like the course name and the date of the class. Underneath the header are two columns: a narrow one on the left (no more than one-third of the page) and a wide one on the right. The wide column, called the “notes” column, takes up most of the page and is used to capture your notes using any of the methods outlined earlier. The left column, known as the “cue” or “recall” column, is used to jot down main ideas, keywords, questions, clarifications, and other notes. It should be used both during the class and when reviewing your notes after class. Finally, use the box in the footer to write a summary of the class in your own words. This will help you make sense of your notes in the future and is a valuable tool to aid with recall and studying.

**Using Index Cards for the Cornell Method**

Some students like to use index cards to take notes. They actually lend themselves quite well to the Cornell method. Use the “back” or lined side of the card to write your notes in class. Use one card per key concept. The “front” unlined side of the card replaces the left hand “cue” column. Use it after class to write keywords, comments, or questions. When you study, the cards become flash cards with questions on one side and answers on the other. Write a summary of the class on a separate card and place it on the top of the deck as an introduction to what was covered in the class.

*I used to tape my lecture classes so I could fill in my sketchy notes afterward. Now that I’m using the Cornell system, my notes are complete and organized in much less time. And my regular five-minute reviews make learning almost painless. No more taping and listening twice.*

—a student at Southern Methodist University

You will have noticed that all methods end with the same step: reviewing your notes as soon as possible after class. Any review of your notes is helpful (reading them, copying them into your computer, or even recasting them using another note-taking method). But THINK! Make your review of notes a thoughtful activity, not a mindless process. When you review your notes, think about questions you still have and
determine how you will get the answers. (From the next class? Studying with a friend? Looking up material in your text or on the net?) Examine how the material applies to the course; make connections with notes from other class sessions, with material in your text, and with concepts covered in class discussions. Finally, it’s fun to think about how the material in your notes applies to real life. Consider this both at the very strategic level (as in “What does this material mean to me in relation to what I want to do with my life?”) as well as at a very mundane level (as in “Is there anything cool here I can work into a conversation with my friends?”).

**Instructor Handouts**

Some instructors hand out or post their notes or their PowerPoint slides from their lectures. These handouts should *never* be considered a substitute for taking notes in class. They are a very useful complement and will help you confirm the accuracy of your notes, but they do not involve you in the process of learning as well as your own notes do. After class, review your notes with highlighter in hand and mark keywords and ideas in your notes. This will help you write the summary of the class in your own words.

**General Tips on Note Taking**

Regardless of what note-taking method you choose, there are some note-taking habits you should get into for all circumstances and all courses:

1. **Be prepared.** Make sure you have the tools you need to do the job. If you are using a notebook, be sure you have it with you and that you have enough paper. Also be sure to have your pen (as well as a spare) and perhaps a pen with different colored ink to use for emphasis. If you are taking notes on your laptop, make sure the battery is charged! Select the application that lends itself best to your style of note taking. Microsoft Word works very well for outline notes, but you might find taking notes in Excel to work best if you are working within the Cornell method. (It’s easier to align your thoughts in the cue or recall column to your notes in the right column. Just be sure you keep one idea per row!)

2. **Write on only one side of the paper.** This will allow you to integrate your reading notes with your class notes.

3. **Label, number, and date all notes at the top of each page.** This will help you keep organized.
4. **When using a laptop, position it such that you can see the instructor and white board right over your screen.** This will keep the instructor in your field of vision even if you have to glance at your screen or keyboard from time to time. Make sure your focus remains with the instructor and not on your laptop. A word of caution about laptops for note taking: use them if you are very adept at keyboarding, but remember that not all note-taking methods work well on laptops because they do not easily allow you to draw diagrams and use special notations (scientific and math formulas, for example).

5. **Don’t try to capture everything that is said.** Listen for the big ideas and write them down. Make sure you can recognize the instructor’s emphasis cues and write down all ideas and keywords the instructor emphasizes. Listen for clues like “the four causes were...” or “to sum up....”

6. **Copy anything the instructor writes on the board.** It’s likely to be important.

7. **Leave space between ideas.** This allows you to add additional notes later (e.g., notes on the answer to a question you or one of your classmates asked).

8. **Use signals and abbreviations.** Which ones you use is up to you, but be consistent so you will know exactly what you mean by “att.” when you review your notes. You may find it useful to keep a key to your abbreviations in all your notebooks.

9. **Use some method for identifying your own thoughts and questions to keep them separate from what the instructor or textbook author is saying.** Some students use different color ink; others box or underline their own thoughts. Do whatever works for you.

10. **Create a symbol to use when you fall behind** or get lost in your note taking. Jot down the symbol, leave some space, and focus on what the instructor is covering now. Later you can ask a classmate or the professor to help you fill in what you missed, or you can find it in your textbook.

11. **Review your notes as soon after class as possible (the same day is best).** *This is the secret to making your notes work!* Use the recall column to call out the key ideas and organize facts. Fill in any gaps in your notes and clean up or redraw hastily drawn diagrams.

12. **Write a summary of the main ideas of the class in your own words.** This process is a great aid to recall. Be sure to include any conclusions from the lecture or discussion.
Choose one of your classes where you normally take notes. Make a conscious effort to use the Cornell method with either the outline or concept map method for taking your notes. Follow as many steps listed previously as possible. Now compare these notes with those you took in the previous class. Are your new notes more useful? What did you like about taking notes this way? What are some of the things you need to work on improving? (Remember this will get much easier with more practice.) Write your thoughts here.

What If You Miss Class?

Clearly the best way to learn class material is to be at the class and to take your own notes. In college, regular attendance is expected. But life happens. On occasion, you may have to miss a class or lecture. When this happens, here are some strategies you can use to make up for it:

• Check with the instructor to see if there is another section of the class you can attend. Never ask the instructor “Did I miss anything important?” (Think about what that’s saying and you’ll see it’s rather insulting.)

• If the instructor posts his or her lectures as a podcast, listen to the lecture online and take notes. If the instructor uses PowerPoint slides, request a copy (or download them if posted) and review them carefully, jotting down your own notes and questions. Review your notes with a classmate who did attend.
• You may want to borrow class notes from a classmate. If you do, don’t just copy them and insert them in your notebook. They will not be very helpful. When you borrow notes from a classmate, you should photocopy them and then review them carefully and mark your copy with your own notes and questions. Use your textbook to try to fill in the gaps. Finally, schedule a study session with the person who gave you the notes to review the material and confirm your understanding. (See studying with others in Chapter 6 "Preparing for and Taking Tests").

• If none of these options is available for you, use the course syllabus to determine what was covered in the class, then write a short paper (two pages or so) on the material using the class readings and reliable online sources. See your instructor during office hours to review your key findings and to answer any questions you still may have.

**Keeping Your Notes**

Class is over, and you have a beautiful set of notes in your spiral notebook or saved in your laptop. You have written the summary of the class in your own words. Now what?

Start by organizing your notes. We recommend you use a three-ring binder for each of your subjects. Print your notes if you used a computer. If you used note cards, insert them in plastic photo holders for binders. Group all notes from a class or unit together in a section; this includes class notes, reading notes, and instructor handouts. You might also want to copy the instructor’s syllabus for the unit on the first page of the section.

Next, spend some time linking the information across the various notes. Use the recall column in your notes to link to related information in other notes (e.g., “See class notes date/page”).

If you have had a quiz or test on the unit, add it to your binder, too, but be sure to write out the correct answer for any item you missed. Link those corrections to your notes, too.

Use this opportunity to write “notes on your notes.” Review your summary to see if it still is valid in light of your notes on the reading and any handouts you may have added to your notes package.

You don’t need to become a pack rat with your notes. It is fairly safe to toss them after the end of a course except in the following cases:
1. If the course you took is a prerequisite for another course, or when the course is part of a standard progression of courses that build upon each other (this is very common in math and science courses), you should keep them as a reference and review for the follow-up course.

2. If the course may pertain to your future major, keep your notes. You may not realize it now that they may have future value when you study similar topics or even the same topics in more depth.

3. If you are very interested in the course subject and would like to get into the material through a more advanced course, independent study, or even research, keep your notes as a prep tool for further work.

**KEY TAKEAWAYS**

- After effective listening, good note taking is the most important skill for academic success.
- Choose among effective note-taking styles for what works best for you and modify it to meet the needs of a specific class or instructor.
- List notes are generally less effective and not prioritized.
- Outlines work well for taking notes on a laptop when the instructor is well organized.
- Concept map notes are good for showing the relationships among ideas.
- The Cornell method is effective for calling out key concepts and organizing notes for review.
- Instructor handouts and PowerPoint presentations help with—but do not replace the need for—personal note taking.
- If you miss a class, explore your options for replacing your missing notes.
- Keep your notes organized in a way that makes it easy to study for tests and other uses in the future.

**CHECKPOINT EXERCISES**

1. Name two advantages of the Cornell system over the list method of note taking.

   -
   -

2. Describe the benefits of—and potential problems with—taking class notes on a laptop.

   -
   -
3. List at least three ways to make up for missing notes because you miss a class.

4.5 Remembering Course Materials

**LEARNING OBJECTIVES**

1. Identify what is important to remember.
2. Understand the difference between short- and long-term memory.
3. Use a variety of strategies to build your memory power.
4. Identify the four key types of mnemonic devices.
5. Use mnemonics to remember lists of information.

Up to now we have covered how to capture material in your notes. The rest of this chapter is dedicated to strategies for recording ideas and facts in your memory.

**The Role of Memorization in Learning**

Have you ever gone into an exam you have studied for and drawn a blank on a particular question? Have you ever walked into a room only to forget for a moment why you went there? Have you ever forgotten where you left your keys? How about finding yourself in a conversation with someone whose name you can’t remember? The fact is, memory fails everyone from time to time. It is not surprising that students, with a huge amount of information they must commit to memory (not to mention frequent distractions and interruptions), are often frustrated by their memory.

Let’s start by taking some of the pressure off you. You will not be required to memorize everything your instructor says in a class—nor should you try to. There is way too much to capture. People speak at a rate
of 100 to 150 words per minute. An average 50-minute lecture may contain around 7,500 words. By listening effectively and taking notes, your job is to distill the main ideas and a few keywords. These are the things you should choose to memorize.

In your early and high school education, memorization was a key aspect of learning. You memorized multiplication tables, the names of the states, and vocabulary words. Memorized facts ensured your success on multiple-choice questions. In college, however, most of your work is focused on understanding the material in depth. Remembering the year of the 9/11 attack (2001) is far less important than grasping the impact of that attack on American foreign policy. Understanding themes and ideas and being able to think critically about them is really the key to your success in college learning. For more on critical thinking skills, see Chapter 3 "Thinking about Thought". Although memorization is not the primary key to success, having a good memory is important to capture ideas in your mind, and it helps tremendously in certain subjects like sciences and foreign languages.

**How Memory Works**

Memory is the process of storing and retrieving information. Think of a computer. In many ways it is an electronic model of the human memory. A computer stores, retrieves, and processes information similarly to how the human mind does. Like the human version, there are two types of memory: short-term or active memory (RAM in the computer) and long-term or passive memory (the computer’s hard drive). As its name suggests, short-term or active memory is made up of the information we are processing at any given time. Short-term memory involves information being captured at the moment (such as listening in class) as well as from information retrieved from our passive memory for doing complex mental tasks (such as thinking critically and drawing conclusions). But short-term memory is limited and suffers from the passing of time and lack of use. We begin to forget data within thirty seconds of not using it, and interruptions (such as phone calls or distractions) require us to rebuild the short-term memory structure—to get “back on task.” Learn more about multitasking in Chapter 6 "Preparing for and Taking Tests". To keep information in our memory, we must either use it or place it into our long-term memory (much like saving a document on your computer).

How we save information to our long-term memory has a lot to do with our ability to retrieve it when we need it at a later date. Our mind “saves” information by creating a complex series of links to the data. The
stronger the links, the easier it is to recall. You can strengthen these links by using the following strategies. You should note how closely they are tied to good listening and note-taking strategies.

- **Make a deliberate decision to remember the specific data.** “I need to remember Richard’s name” creates stronger links than just wishing you had a better memory for names.

- **Link the information to your everyday life.** Ask yourself, “Why is it important that I remember this material?”—and answer it.

- **Link the information to other information you already have “stored,”** especially the key themes of the course, and you will recall the data more easily. Ask yourself how this is related to other information you have. Look for ways to tie items together. Are they used in similar ways? Do they have similar meanings? Do they sound alike?

- **Mentally group similar individual items into “buckets.”** By doing this, you are creating links, for example, among terms to be memorized. For example, if you have to memorize a vocabulary list for a Spanish class, group the nouns together with other nouns, verbs with verbs, and so forth. Or your groupings might be sentences using the vocabulary words.

- **Use visual imagery.** Picture the concept vividly in your mind. Make those images big, bold, and colorful—even silly! Pile concepts on top of each other or around each other; exaggerate their features like a caricature; let your imagination run wild. Humor and crazy imagery can help you recall key concepts.

- **Use the information.** Studies have generally shown that we retain only 5 percent of what we hear, 10 percent of what we read, 20 percent of what we learn from multimedia, and 30 percent of what is demonstrated to us, but we do retain 50 percent of what we discuss, 75 percent of what we practice by doing, and 90 percent of what we teach others or use immediately in a relevant activity. Review your notes, participate in class, and study with others.

- **Break information down into manageable “chunks.”** Memorizing the ten-digit number “3141592654” seems difficult, but breaking it down into two sets of three digits and one of four digits, like a phone number—(314) 159-2654—now makes it easier to remember. (Pat yourself on the back if you recognized that series of digits: with a decimal point after the three, that’s the value of pi to ten digits. Remember your last math class?)
• **Work from general information to the specific.** People usually learn best when they get the big picture first, and then look at the details.

• **Eliminate distractions.** Every time you have to “reboot” your short-term memory, you risk losing data points. Multitasking—listening to music or chatting on Facebook while you study—will play havoc with your ability to memorize because you will need to reboot your short-term memory each time you switch mental tasks.

• **Repeat, repeat, repeat.** Hear the information; read the information; say it (yes, out loud), and say it again. The more you use or repeat the information, the stronger the links to it. The more senses you use to process the information, the stronger the memorization. Write information on index cards to make flash cards and use downtime (when waiting for the subway or during a break between classes) to review key information.

• **This is a test.** Test your memory often. Try to write down everything you know about a specific subject, from memory. Then go back and check your notes and textbook to see how you did. Practicing retrieval in this way helps ensure long-term learning of facts and concepts.

• **Location, location, location.** There is often a strong connection between information and the place where you first received that information. Associate information to learning locations for stronger memory links. Picture where you were sitting in the lecture hall as you repeat the facts in your mind.

### JUST FOR FUN

Choose a specific fact from each of your classes on a given day. Now find a way of working that information into your casual conversations during the rest of the day in a way that is natural. Can you do it? What effect do you think that will have on your memory of that information?

### EXERCISE YOUR MEMORY

Read the following list for about twenty seconds. After you have read it, cover it and write down all the items you remember.

<table>
<thead>
<tr>
<th>Arch</th>
<th>Pen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chowder</td>
<td>Maple</td>
</tr>
<tr>
<td>Airplane</td>
<td>Window</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Kirk</td>
<td>Scotty</td>
</tr>
<tr>
<td>Paper clip</td>
<td>Thumb drive</td>
</tr>
<tr>
<td>Column</td>
<td>Brownies</td>
</tr>
<tr>
<td>Oak</td>
<td>Door</td>
</tr>
<tr>
<td>Subway</td>
<td>Skateboard</td>
</tr>
<tr>
<td>Leia</td>
<td>Cedar</td>
</tr>
<tr>
<td>Fries</td>
<td>Luke</td>
</tr>
</tbody>
</table>

How many were you able to recall? Most people can remember only a fraction of the items.

Now read the following list for about twenty seconds, cover it, and see how many you remember.

<table>
<thead>
<tr>
<th>Fries</th>
<th>Skateboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chowder</td>
<td>Subway</td>
</tr>
<tr>
<td>Brownies</td>
<td>Luke</td>
</tr>
<tr>
<td>Paper clip</td>
<td>Leia</td>
</tr>
<tr>
<td>Pen</td>
<td>Kirk</td>
</tr>
<tr>
<td>Thumb drive</td>
<td>Scotty</td>
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<tr>
<td>Oak</td>
<td>Column</td>
</tr>
<tr>
<td>Cedar</td>
<td>Window</td>
</tr>
<tr>
<td>Maple</td>
<td>Door</td>
</tr>
</tbody>
</table>
Did your recall improve? Why do you think you did better? Was it easier? Most people take much less time doing this version of the list and remember almost all the terms. The list is the same as the first list, but the words have now been grouped into categories. Use this grouping method to help you remember lists of mixed words or ideas.

Using Mnemonics

What do the names of the Great Lakes, the makings of a Big Mac, and the number of days in a month have in common? They are easily remembered by using mnemonic devices. Mnemonics (pronounced neh-MA-nicks) are tricks for memorizing lists and data. They create artificial but strong links to the data, making recall easier. The most commonly used mnemonic devices are acronyms, acrostics, rhymes, and jingles. Acronyms are words or phrases made up by using the first letter of each word in a list or phrase. Need to remember the names of the Great Lakes? Try the acronym HOMES using the first letter of each lake:

- Huron
- Ontario
- Michigan
- Erie
- Superior

To create an acronym, first write down the first letters of each term you need to memorize. Then rearrange the letters to create a word or words. You can find acronym generators online (just search for “acronym generator”) that can help you by offering options. Acronyms work best when your list of letters includes vowels as well as consonants and when the order of the terms is not important. If no vowels are available, or if the list should be learned in a particular order, try using an acrostic instead.

Acrostics are similar to acronyms in that they work off the first letter of each word in a list. But rather than using them to form a word, the letters are represented by entire words in a sentence or phrase. If you’ve studied music, you may be familiar with “Every Good Boy Deserves Fudge” to learn the names of the notes on the lines of the musical staff: E, G, B, D, F. The ridiculous and therefore memorable line “My
Very Educated Mother Just Served Us Nine Pizzas” was used by many of us to remember the names of the planets (at least until Pluto was downgraded):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>My</td>
<td>Mercury</td>
</tr>
<tr>
<td>Very</td>
<td>Venus</td>
</tr>
<tr>
<td>Educated</td>
<td>Earth</td>
</tr>
<tr>
<td>Mother</td>
<td>Mars</td>
</tr>
<tr>
<td>Just</td>
<td>Jupiter</td>
</tr>
<tr>
<td>Served</td>
<td>Saturn</td>
</tr>
<tr>
<td>Us</td>
<td>Uranus</td>
</tr>
<tr>
<td>Nine</td>
<td>Neptune</td>
</tr>
<tr>
<td>Pizzas</td>
<td>Pluto</td>
</tr>
</tbody>
</table>

To create an acrostic, list the first letters of the terms to be memorized in the order in which you want to learn them (like the planet names). Then create a sentence or phrase using words that start with those letters.

Rhymes are short verses used to remember data. A common example is “In fourteen hundred and ninety-two, Columbus sailed the ocean blue.” Need to remember how many days a given month has? “Thirty days hath September, April, June, and November…” and so forth. Writing rhymes is a talent that can be developed with practice. To start, keep your rhymes short and simple. Define the key information you want to remember and break it down into a series of short phrases. Look at the last words of the phrases: can you rhyme any of them? If they don’t rhyme, can you substitute or add a word to create the rhyme? (For example, in the Columbus rhyme, “ninety-two” does not rhyme with “ocean,” but adding the word “blue” completes the rhyme and creates the mnemonic.)

Jingles are phrases set to music, so that the music helps trigger your memory. Jingles are commonly used by advertisers to get you to remember their product or product features. Remember “Two all-beef patties,
special sauce, lettuce, cheese, pickles, onions on a sesame seed bun”—the original Big Mac commercial. Anytime you add rhythm to the terms you want to memorize, you are activating your auditory sense, and the more senses you use for memorization, the stronger the links to the data you are creating in your mind. To create a jingle for your data, start with a familiar tune and try to create alternate lyrics using the terms you want to memorize. Another approach you may want to try is reading your data aloud in a hip-hop or rap music style.

**CREATIVE MEMORY CHALLENGE**

Create an acrostic to remember the noble gasses: helium (He), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), and the radioactive radon (Rn).

Create an acronym to remember the names of the G8 group of countries: France, the United States, the United Kingdom, Russia, Germany, Japan, Italy, and Canada. (Hint: Sometimes it helps to substitute terms with synonyms—“America” for the United States or “England” for the United Kingdom—to get additional options.)

Create a jingle to remember the names of the Seven Dwarfs: Bashful, Doc, Dopey, Grumpy, Happy, Sleepy, and Sneezy.

Mnemonics are good memory aids, but they aren’t perfect. They take a lot of effort to develop, and they also take terms out of context because they don’t focus on the meaning of the words. Since they lack meaning, they can also be easily forgotten later on, although you may remember them through the course.

**KEY TAKEAWAYS**

- Understanding ideas is generally more important in college than just memorizing facts.
- To keep information in our memory, we must use it or build links with it to strengthen it in long-term memory.
- Key ways to remember information include linking it to other information already known; organizing facts in groups of information; eliminating distractions; and repeating the information by hearing, reading, and saying it aloud.
- To remember specific pieces of information, try creating a mnemonic that associates the information with an acronym or acrostic, a rhyme or a jingle.
1. For each of the following statements, circle T for true or F for false:

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<tbody>
<tr>
<td>T</td>
<td>F</td>
<td>Preparing for class is important for listening, for taking notes, and for memory.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>Multitasking enhances your active memory.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>If you listen carefully, you will remember most of what was said for three days.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>“Use it or lose it” applies to information you want to remember.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>Mnemonics should be applied whenever possible.</td>
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### 4.6 Chapter Activities

#### Chapter Takeaways

**Listening**

- Learning involves following a cycle of preparing, absorbing, recording, and reviewing.
- The most important difference between high school learning and college learning is that colleges expect you to take full responsibility for your learning. Many of the support mechanisms you had in high school do not exist in college.
- Listening takes place in two primary situations: where there can be open interaction with the speaker (social conversation, small group discussions, business meetings, and small classes) and where there is limited interaction with the speaker (lectures, online courses, and podcasts).
- In situations where interaction is allowed, active listening principles work well.
- In lecture situations, additional strategies are required. They include physical preparation, seating for listening, eliminating distractions, thinking critically about the material as it is presented, taking notes, and asking appropriate questions.
- Prepare for listening by completing all assignments for the class and reviewing the syllabus. Ask yourself what you expect to gain from the class and how that ties in to the rest of the course material.
- Think critically about what you are listening to. Do you agree with what the instructor is saying? How does it tie to the rest of the material in the course? What does this new material mean to you in “real” life?

**Note Taking**
There are four primary ways of taking notes (lists, outlines, concept maps, and the Cornell method).
Select the note-taking method that best serves your learning style and the instructor’s teaching style. Remember that methods may be combined for maximum effect.
Completing assignments and reviewing the syllabus can help you define the relative importance of the ideas the instructor presents.
Don’t expect to capture everything the instructor says. Look for keywords and central ideas.
Anything the instructor writes on the board is likely to be important.
Review your notes as soon as possible after the class, to annotate, correct, complete, and summarize.

### Memory

The two types of memory are short-term memory, which allows you to apply knowledge to a specific task, and long-term memory, which allows you to store and recall information.
The brain commits information to long-term memory by creating an intricate system of links to that information. Strength, number, and variety of links all lead to better recall.
To create strong links, start by making a conscious decision to want to commit something specific to memory. Link the information to real life and other data from the course. Group like information into “buckets” that create links among the terms you want to remember.
Use the information. The more you use the information, the more you will activate the links in your brain.
Eliminate distractions. Every time you are diverted from your task, you need to reboot your short-term memory, weakening the links.

### CHAPTER REVIEW

1. Describe the four steps of active listening.

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2. How is listening defined?
3. List three things you should do to prepare to listen in class.

4. Where should you sit in a class? Why?

5. What should you do with your notes soon after each class?

6. Why do you think the Cornell method of note taking is recommended by so many colleges?

7. How do short-term and long-term memory differ?
8. List three ways in which you can create links to help remember ideas.

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<th>How I will know I accomplished the action</th>
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9. Why is multitasking dangerous to memorization?

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10. What is a mnemonic?

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### MAKE AN ACTION LIST

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<th>How I will know I accomplished the action</th>
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<tr>
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<td>2.</td>
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<tr>
<td>My memory</td>
<td>1.</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>2.</td>
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