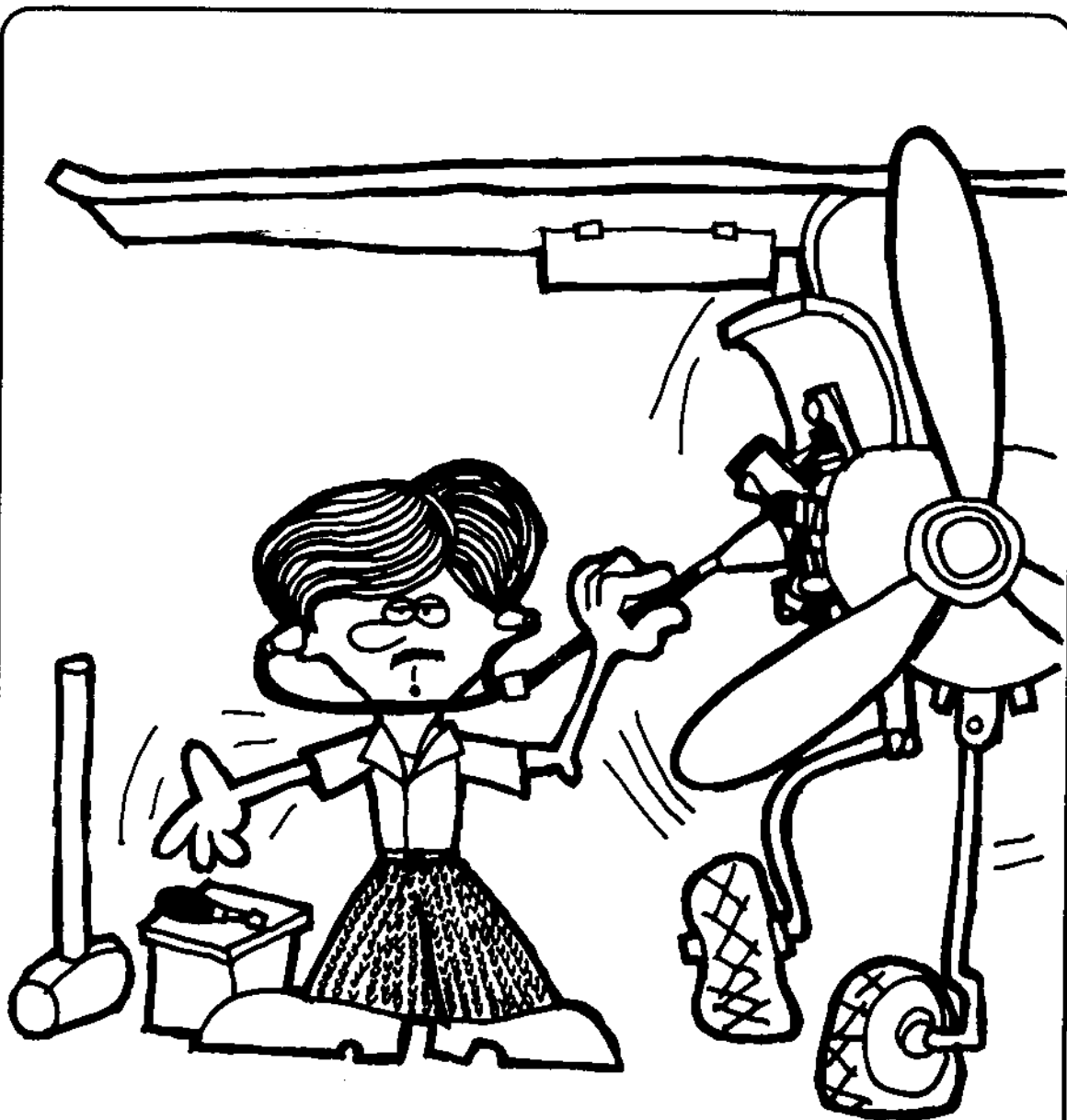


chapter **3** THE SECOND WEEK TO THE
FIRST EXAM



FINE TUNING YOUR
TECHNIQUE ...

chapter 3

THE SECOND WEEK TO THE FIRST EXAM:

Fine Tuning Your Techniques

Did you just buy this book and the first week of classes is already over? If “yes”, you should read through the first chapter and then try the suggestions of Chapter 2 for this week. (If “no”, you don’t need to read this and can move directly to the next paragraph. Ha!)

If you have honestly tried the procedure outlined for the first week, you are now ready to make profitable modifications of your study plans. You will be able to:

1. Design definite plans to get an A (or a B, or a C, or a D, or even flunk) in each course.
2. Do the required work in the **MINIMUM** amount of time.
3. Become a Superstar in those areas you like best and are good at. (Of course, there are non-academic areas where you’re largely on your own. This book is designed to supply you with more time for those activities, and Chapter 9 does have a few good suggestions.)

If you did *not* really follow the procedures recommended for the first week, we suggest you go back and **DO IT** for a week. This chapter is of no real value until you have tried Chapter 2 for a *full week*. You need to collect data before you can fine-tune a good program.

HOW DO THINGS LOOK SO FAR?

Choose between

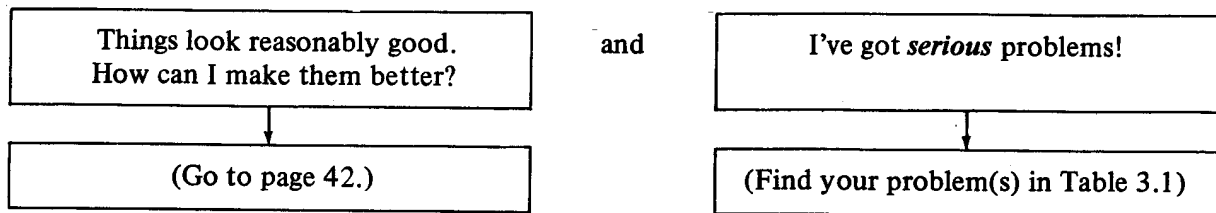








Table 3.1. Serious Problems List (Check your *worst* "symptoms" first)

| PROBLEMS | SYMPTOMS | SEE | |
|---|--|------|-----|
| | | PAGE | BOX |
| H OURS TOO SHORT (Out of time!)  | "I cut out some recommended steps to save time." | 35 | A |
| | "I follow all the steps, but never get finished." | 35 | B |
| | "I spend too much time on little things like eating, laundry, etc." | 36 | C |
| | "I'm constantly interrupted." | 36 | D |
| E ASILY DISTRACTED (Can't concentrate!)  | "It's impossible to keep your mind on your studies around this place." | 36 | F |
| | "I keep thinking about being behind in another class, or about other problems, while trying to study." | 37 | G |
| | "I really do like fun better than studying." | 37 | H |
| | "I'm too much in love to think of anything else." | 37 | I |
| L ACK OF UNDERSTANDING (Don't get it!)  | "I can't understand the textbook(s)." | 38 | J |
| | "I'm not feeling prepared for the class." | 38 | K |
| | "I can finally understand, but it seems to take forever." | 38 | L |
| P OOPED OUT (SO tired!)  | "I fall asleep while trying to study." | 39 | M |
| | "I fall asleep in class." | 39 | N |
| | "I'm trying to survive on less than seven hours of sleep per night." | 39 | O |
| | "I'm not <i>that</i> sleepy, but I don't seem to have enough energy to keep going." | 39 | P |
| M EMORY FAILURE (Can't remember!)  | "I can't seem to learn required memory material." | 40 | Q |
| | "I can learn things, but I keep forgetting them when I need them." | 40 | R |
| S XASPERATION (Schedule's a mess!)  | "I'm using a schedule, but worrying because my friends study differently." | 41 | S |
| | "I just <i>couldn't</i> stick to my schedule, so now I'm behind in most of my classes." | 41 | T |
| | "I found my schedule absolutely unrealistic!" | 41 | U |
| | "I'm trying to follow the advice in this book, but I just know the exams will kill me dead!" | 42 | V |

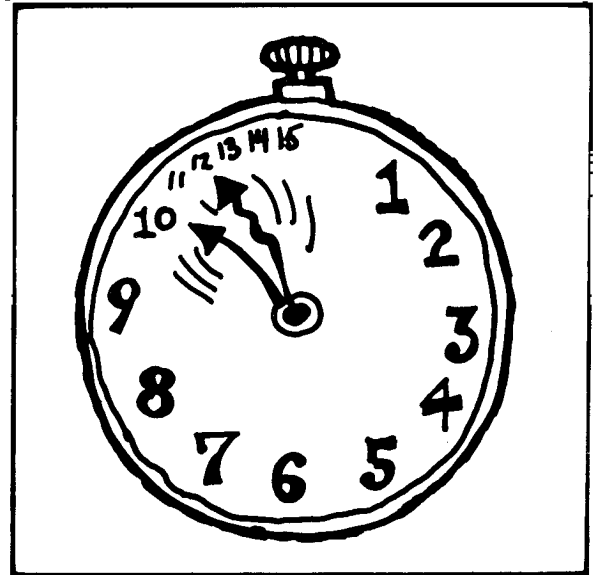


Table 3.2.
Solving "Time" Problems

| BOX | ANALYSIS & SOLUTION |
|--|---|
| <p>A</p> <p>"I cut out some recommended steps to save time."</p> | <p>This kind of saving is like driving an extra 100 miles to save a 50 cent bridge toll. The only <i>real</i> way to save time in the long run is to be <i>efficient</i>.</p> <p>For the next week, concentrate on building the <i>habit</i> of doing the RIGHT THINGS AT THE RIGHT TIMES (as described in Chapter 2). Both pre-class and post-class activities are <i>especially</i> important. They result in "more learning per minute" than most other times. In subsequent weeks, reinforcing this habit will get easier.</p> |
| <p>B</p> <p>"I follow all the steps, but never get finished."</p> | <p>This might result from any of a number of problems. See if one or more of the following applies.</p> <p>(1) You <i>can</i> finish work for all classes except one or two. If this is the case, simply revise your schedule (Section 3.2) to add more time for more demanding classes. Perhaps you can do this by removing some time now scheduled for less demanding classes.</p> <p>(2) You <i>can</i> understand what you read, but it takes a long time to read each paragraph. Reading "speed" can be improved. See page 47.</p> <p>(3) You have to go back over each section several times before you understand it. This is less of a "time" problem than an "understanding" problem. For the solution, see Table 3.4, Box L.</p> <p>(4) You find that a sizable fraction of your study block time is inefficient because your ability to work productively begins to decline. In this case, your scheduled study time is too long. Rework your schedule to plan more separate times to study the material. The maximum time should correspond to your "attention span" for this course (pages 9 and 10).</p> <p>(5) The first 5–20 minutes of your study time is usually spent trying to focus your mind on the task at hand. Most of us have this problem, which is caused by "brain clutter" (having many extraneous thoughts unrelated to the job to be done). For the solution, see "Brain-Flushing" (page 46).</p> <p>(6) You find, by looking over old exam files or talking with students who have previously had the class, that you are studying a lot of material that is unlikely to be covered by exams. "Overstudying" is a special problem for the conscientious student. The total amount of material covered by lectures and out-of-class assignments <i>can</i> be overwhelming. The solution to this problem is to spend <i>all</i> of your study time on those topics expected to correspond to 95% of the exam coverage until this information is thoroughly learned. (If you are planning for less than an A, reduce the percent accordingly.) <i>Only</i> after you have mastered the "essential exam material" should you study other topics. Even then, you should select only those topics of interest and importance to <i>you</i>. Defining the "essential exam material" will become easier for you after you have taken one or more exams in the course.</p> |

Table 3.2. Solving "Time" Problems (continued)

| BOX | ANALYSIS & SOLUTION |
|---|---|
| <p>C</p> <p>"I spend too much time on little things (like eating, laundry, etc.)"</p> | <p>Your problem is not really "Time", it's organization. Plan ways to do some of your studying while eating, doing laundry, etc. In this way, you will turn "unproductive" time into "useful study" time. (However, many dieticians recommend that you have at least one meal each day "without distractions".) For further suggestions, see Chapter 9.</p> |
| <p>D</p> <p>"I'm constantly interrupted."</p> | <p>Although interruptions can certainly cost you time, this is really a "distractions" problem. See Table 3.3, Box F.</p> |
| <p>E</p> <p>"I have so many VALID activities that I don't have time for all my studies."</p> | <p>This is really a joint time-schedule problem. However, you can only tackle it as a schedule problem.</p> <p>Rework your schedule (page 15). When you are at maximum efficiency, drop:</p> <ol style="list-style-type: none"> (1) some "Free" time, or (2) some activities, or (3) some courses, or (4) grade expectations, or (5) your chosen profession <p>[Trying to "drop" SLEEP won't work. That will only decrease efficiency and compound the problem (page 39)!]</p> |

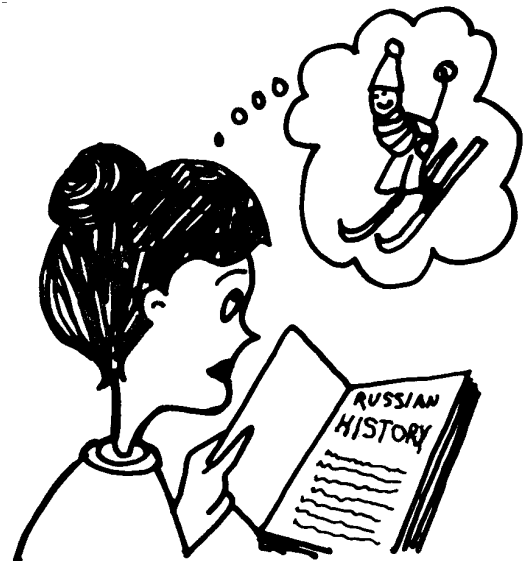


Table 3.3. Solving "Distractions" Problems

| BOX | ANALYSIS & SOLUTION |
|---|---|
| <p>F</p> <p>"It's impossible to keep your mind on your studies around this place."</p> | <p>Are the distractions <i>inside</i> the "study" room or from outside the room?</p> <p>If the distractions are <i>inside</i> the room, do something about it <i>immediately</i>. Ask your roommate to use an earplug or headphones with the radio, TV, or stereo. (Such items can be obtained at appliance or electronic shops.) Don't worry if he/she gets upset. If you're too close a friend, he/she will spend his/her life trying to impose on you since you "graduated from college and all he/she got was tough breaks". If your work area doesn't match the "Monk's Cell" (page 7), fix it or find another place to study that <i>is</i> quiet, uncluttered, and dedicated to study activities.</p> <p>If the distractions are from <i>outside</i> the room (phone calls, visitors, hard rock group in the shower, sunbathers on the neighboring roof, smell of pizza and beer, etc.), try ways of turning them off. Requests for phone calls only during scheduled "free" times may help. (Or you can ask the phone company to install a bell switch on your phone.) A sign on the door may help discourage visitors:</p> |

Table 3.3. Solving "Distraction" Problems (continued)

| BOX | ANALYSIS & SOLUTION |
|--|--|
| <p>F (con't)</p> | <div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px auto; width: fit-content;"> <p>I AM TRYING TO STUDY. PLEASE DO NOT DISTURB. I'LL BE FREE TO VISIT AT _____ .</p> </div> <p>Actually moving your desk away from the window may help. If problems persist, be prepared to move your study activities to another area meeting the "Monk's Cell" requirements (page 7). You may still sleep and change clothes in your room, but it's no longer your STUDY area.</p> |
| <p>G</p> <p>"I keep thinking about being behind in another class, or about other problems, while trying to study."</p> | <p>This is a <i>very</i> normal problem. Learning to solve it can really improve your study efficiency, as well as the efficiency of your work in your ultimate career.</p> <p>Part of the solution lies in reworking your schedule (page 15) so that you can trust your plans to keep you from getting behind in any classes. In reworking your schedule, be sure to plan study blocks corresponding to your attention spans (page 9). "Mind wandering" during a later portion of your study may indicate that you've passed your attention span limit. If "cluttered thoughts" occur frequently as a hindrance to getting started in your work, learn and practice the techniques of "Brain Flushing" (page 46). Working in a group-of-three (page 44) <i>will</i> help you keep your mind on the subject.</p> |
| <p>H</p> <p>"I really do like fun better than studying."</p> | <p>Welcome to the human race! But if you <i>do</i> like "fun", why are you methodically eliminating it from your life? If you let yourself think about "fun" when you should be studying, you get down to two choices:</p> <p>(1) This inefficiency will require more hours for studying, thus reducing the time available for fun, or</p> <p>(2) You won't be able to stay in school to enjoy the fun of it at all!</p> <p>The solution to having more time for fun while doing well in college is <i>still</i> to improve study efficiency. Rework your schedule as appropriate (page 15) and start practicing the self-discipline needed for success in college (and in all of life). A "group-of-three" (page 44) can help!</p> |
| <p>I</p> <p>"I'm too much in love to think of anything else."</p> | <p>This poses two choices:</p> <p>(1) You can improve your study efficiency to permit you to spend more "free" time with the one you love, or</p> <p>(2) You can flunk out of school, whereupon he/she may drop you like a hot potato and marry someone successful.</p> <p>Revise your schedule to improve study efficiency (page 15) and, if distraction persists, join with two other students in a study group (page 44). This will help you concentrate on the subject matter.</p> |



Table 3.4.
Solving "Understanding" Problems

| BOX | ANALYSIS & SOLUTION |
|--|---|
| <p>J</p> <p>"I can't understand the textbook."</p> | <p>Your textbook(s) and professor(s) may assume that you know a lot of terms and concepts that you never learned.</p> <p>See "Reading" (page 30). If that doesn't help, find an easier (lower level) textbook in the field. If your professor can't recommend one, go to the library or bookstore and ask for a book in the field that is designed for "non-majors" courses (or even for a high school course). If your college has a Learning Resources Center, go there for other types of supplementary material. Remember that other books or supplements are <i>only</i> to clarify the text and lectures. Any attempt to <i>replace</i> the text is dangerous. Visit with your professor regarding other "remedial" suggestions. Note that providing time for supplementary work may necessitate revising your schedule (page 15).</p> |
| <p>K</p> <p>"I'm not feeling prepared for class."</p> | <p>If the lecture coverage seems to take you by surprise, the lectures seem "from out of left field", or you are afraid you might be called upon for class participation, then you need to improve your pre-class work.</p> <p>Rework your schedule as necessary to increase pre-class time blocks (page 15). Be sure that you are doing the <i>right kinds</i> of pre-class activities (page 22). Discuss, with some "obviously prepared" students, the methods that they find useful. To improve your image in class participation, <i>volunteer</i> on those topics you feel you best understand. (This will also lower the odds of being called upon to discuss topics you feel unsure of. However, be willing to admit your uncertainties, but give a valid explanation of why you feel insecure about the topic.)</p> |
| <p>L</p> <p>"I can finally understand, but it seems to take forever."</p> | <p>This might be a "Time" problem. (See Table 3.2, Box B). It might also result from insufficient background or from trying to "understand" too large a block of material at once.</p> <p>If your background of terminology, concepts or skills is insufficient, seek supplementary "remedial" materials. Your instructor, a librarian, or a Learning Resources Center manager can offer some good suggestions. If you are trying to tackle too much material, break it down into smaller subsections. As problems in understanding arise, seek help immediately from your instructor or another "tutorial" person. Be prepared to ask specific questions or to explain the nature of your confusion. As these smaller blocks become clear to you, the "larger picture" will also develop clarity. You may also profit from looking over the discussions of "reading" (pages 30, 47).</p> |



Table 3.5.
Solving "Tiredness" Problems

| BOX | ANALYSIS & SOLUTION | | | | | | | | |
|--|---|----------------|---|----------------|--|----------------|---|----------------|--|
| <p>M</p> <p>"I fall asleep while trying to study."</p> | <p>This is not just a "problem". <i>It's a crisis!</i></p> <p>Change your "Monk's Cell" <i>now!</i> This is urgent, because you now associate this place with sleep. Sitting down there will trigger sleepiness as effectively as a heavy meal and low lights. You may be able to avoid moving out by rearranging the furniture with <i>strict</i> attention to the "Monk's Cell" design (page 7). However, the change must be <i>dramatic</i> if it is to be effective. Also check that you have scheduled (and are <i>getting</i>) sufficient sleep. Working in a study group (page 44) can also help keep you alert.</p> | | | | | | | | |
| <p>N</p> <p>"I fall asleep in class."</p> | <p>If you are getting enough sleep regularly, but still feeling drowsy in class, you are not following the recommendations for in-class activities. You can't fall asleep even with a monotone lecturer in a hot room right after lunch <i>if</i> you play the guessing game (page 24) thoroughly. If you tried the guessing game and still fell asleep, it means that you didn't do it in sufficient detail. You may need to shift some of the after-class study time to pre-class preparation. If you pre-guessed accurately, now is the time to add more detail to your guesses (page 67). If your pre-class guesses were wrong, work on improving them. <i>The more boring the class, the greater your need to pre-guess very accurately and in detail.</i> When you get it down to nearly item-by-item prediction, the class will become an excellent review session.</p> | | | | | | | | |
| <p>O</p> <p>"I'm trying to survive on less than seven hours of sleep per night."</p> | <p>YOU have to determine how much sleep you need. To do this, get up at exactly the same time every day. If you pop out of bed easily, you have had enough sleep. If getting up is a chore, your body and mind NEED more sleep. The average requirement is 7½ hours, but individuals vary.</p> <p>We will assume that you need 8 hours of sleep but are trying to get by on less. You can't afford this! Simple arithmetic can show that it won't work:</p> <table border="1" data-bbox="472 1266 1141 1535"> <tbody> <tr> <td>8 hours sleep:</td> <td>100% efficiency × 16 hrs awake = 1600 work and play units</td> </tr> <tr> <td>6 hours sleep:</td> <td>70% efficiency × 18 hrs awake = 1260 work and play units</td> </tr> <tr> <td>4 hours sleep:</td> <td>45% efficiency × 20 hrs awake = 900 work and play units</td> </tr> <tr> <td>0 hours sleep:</td> <td>5% efficiency × 24 hrs awake = 120 work and play units</td> </tr> </tbody> </table> <p>You can afford to cut down on sleep <i>only</i> if the work load <i>decreases</i>. Note that 12 hours sleep will not help. It is about the same as 6 hours! (100% efficiency × 12 hrs awake = 1200 units.)</p> | 8 hours sleep: | 100% efficiency × 16 hrs awake = 1600 work and play units | 6 hours sleep: | 70% efficiency × 18 hrs awake = 1260 work and play units | 4 hours sleep: | 45% efficiency × 20 hrs awake = 900 work and play units | 0 hours sleep: | 5% efficiency × 24 hrs awake = 120 work and play units |
| 8 hours sleep: | 100% efficiency × 16 hrs awake = 1600 work and play units | | | | | | | | |
| 6 hours sleep: | 70% efficiency × 18 hrs awake = 1260 work and play units | | | | | | | | |
| 4 hours sleep: | 45% efficiency × 20 hrs awake = 900 work and play units | | | | | | | | |
| 0 hours sleep: | 5% efficiency × 24 hrs awake = 120 work and play units | | | | | | | | |
| <p>P</p> <p>"I'm not <i>that</i> sleepy, but I don't seem to have enough energy to keep going."</p> | <p>This might result from improper diet (especially vitamin deficiency), improper exercise (too much <i>or</i> too little), or illness.</p> <p>The only safe solution to this problem is to consult your personal physician or the campus health center. Request simple blood tests or other analyses to detect possible illness. If nothing "serious" is detected, discuss ways of improving your exercise regimen, your diet, and your regular vitamin intake. What you MUST NOT do is to try to "cure" tiredness by a steady intake of caffeine or other stimulants!</p> | | | | | | | | |

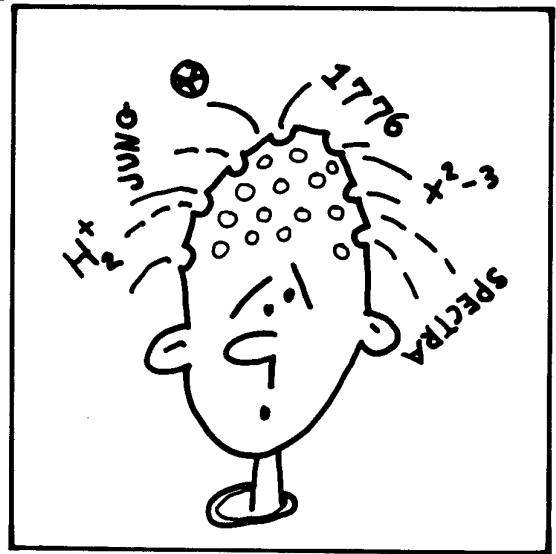


Table 3.6.
Solving "Memory" Problems

| BOX | ANALYSIS & SOLUTION |
|---|---|
| <p>Q</p> <p>"I can't seem to learn required memory material."</p> | <p>"Memorizing" is actually the easiest type of learning, if you use the <i>right</i> techniques (pages 10 and pages 83-87).</p> <p>Efficient memory work is best done in small time blocks (usually 30 minutes or less). For most people the time <i>just</i> before going to sleep is most effective. (You do not need to be nearly as alert to memorize as you do to study conceptual material or to work problems.) Try "flashcards" (page 86), but be sure that you <i>write</i> your "recall" at least half of the time that you work with the flashcards. At other times, say them aloud. That helps reinforce your memory. For "nonwriting" use, try going through flashcards with a friend, or alone while eating a meal or otherwise "routinely" occupied. Associating groups of terms, using "mental picture association", or using "letter codes" are all useful tricks to try. (For details, see pages 83-87).</p> |
| <p>R</p> <p>"I can learn things, but I keep forgetting them when I need them."</p> | <p>If this problem occurs mainly during exams, you may need to consult a counselor about "exam trauma". However, there are some tricks that can help. If you forget "all of the time", you are probably not reviewing enough to reinforce your memory or not using the memorizing "tricks" (pages 83-87).</p> <p>You should review all memory material on a regular basis. Rework your schedule as necessary to include regular "memory review" times and use "pre-guessing" (page 22) so that class time also helps with review. Regular review during post-class time (page 26) is also <i>very</i> important. For the special trick to avoid critical memory lapse <i>during exams</i>, see "Mental Crib Notes" (page 53).</p> |

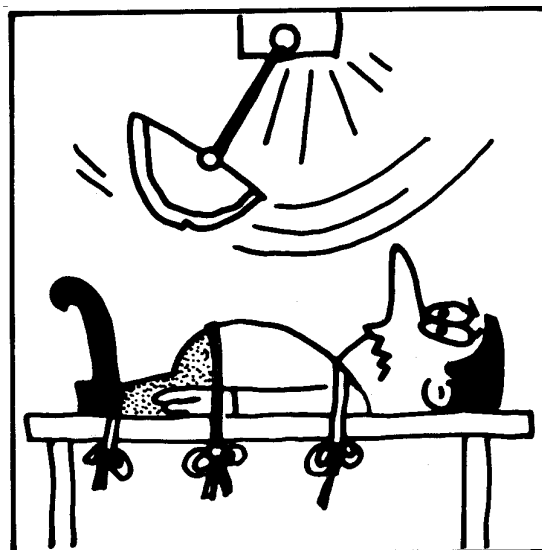


Table 3.7.
Solving "Exasperation" Problems

| BOX | ANALYSIS & SOLUTION | | | | | | | | | | | | | | | | | | |
|--|---|---|-------|--|--------------------------|--------------------------|--|--------------------------|--------------------------|------------------------------------|--------------------------|--------------------------|--|--------------------------|--------------------------|---|--------------------------|--------------------------|---|
| <p>S</p> <p>"I'm using my schedule, but worrying because my friends study differently."</p> | <p>Most students do not work efficiently. Even those who succeed usually do it the hard way, especially in the beginning.</p> <p>Stick to your schedule. Don't be tempted by those who "cram", "study all night before the test", or "only study old exams". None of these procedures is truly efficient in the long run. Most "crammers" find that they are dreadfully unprepared for cumulative exams, such as "finals". Regular, consistent study is the key to effective learning and long range retention. If your friends won't let you try <i>your</i> way for just one week, you surely don't need any enemies.</p> | | | | | | | | | | | | | | | | | | |
| <p>T</p> <p>"I just <i>couldn't</i> stick to my schedule, so now I'm behind in most of my classes."</p> | <p>This might be the result of improper use of time (see Table 3.2). Otherwise it is a "lack of determination" problem (a very common disease). The two major causes are old habits (bad ones) and a lack of maturity. (If you are truly immature, seal this book in a time capsule to be opened in a few years when you come back to college.)</p> <p>If you have bad habits START BREAKING THEM NOW! If you have just entered college, this will be one of the easiest times in your life to do it. (Easiest is not saying "easy".) This is a new life style and that can really help you to make changes. Check the following list:</p> <table border="0"> <thead> <tr> <th>TRUE</th> <th>FALSE</th> <th></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>1. I did set up an honest "Monk's Cell". (Chapter 1)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>2. I wrote a schedule. (Chapter 1)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>3. I did prepare for each class. (Chapter 2)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>4. I was intently pre-guessing the professor <i>in</i> class. (Chapter 2)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>5. I reworked notes and studied IMMEDIATELY after class. (Chapter 2)</td> </tr> </tbody> </table> <p>If you marked any "False", <i>those</i> are your problems.</p> <p>If you marked them all "True", your problem is the daily study routine. The next thing to try might be a group-of-three (see page 44). When working with others who are truly trying, you won't get off the schedule.</p> | TRUE | FALSE | | <input type="checkbox"/> | <input type="checkbox"/> | 1. I did set up an honest "Monk's Cell". (Chapter 1) | <input type="checkbox"/> | <input type="checkbox"/> | 2. I wrote a schedule. (Chapter 1) | <input type="checkbox"/> | <input type="checkbox"/> | 3. I did prepare for each class. (Chapter 2) | <input type="checkbox"/> | <input type="checkbox"/> | 4. I was intently pre-guessing the professor <i>in</i> class. (Chapter 2) | <input type="checkbox"/> | <input type="checkbox"/> | 5. I reworked notes and studied IMMEDIATELY after class. (Chapter 2) |
| TRUE | FALSE | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | 1. I did set up an honest "Monk's Cell". (Chapter 1) | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. I wrote a schedule. (Chapter 1) | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. I did prepare for each class. (Chapter 2) | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. I was intently pre-guessing the professor <i>in</i> class. (Chapter 2) | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. I reworked notes and studied IMMEDIATELY after class. (Chapter 2) | | | | | | | | | | | | | | | | | |
| <p>U</p> <p>"I found my schedule <i>absolutely</i> unrealistic."</p> | <p>If it was a schedule of 16 hours of pure work, plus 8 hours of sleep, you simply didn't follow the directions of Chapter 1. There should be times for dates, for exercise, and for other "fun" activities. Efficient study will maximize the hours available for these things. To find out how many hours you can spare, however, you still need to follow a good schedule for 1 full week (back to Chapter 2).</p> <p>If the schedule didn't work because you lost the economics assignment; had to go down the hall to find out what it was; got into a debate on sexual awareness; decided on a cold shower; took a TV break; went out for life-sustaining pizza (plus a couple of beers); came back via the pool room; called your girl/fellow to reassure her/him of your devotion; and, finally, found you had lost both your economics text and notes somewhere along the line—then, my friend, your problem is ORGANIZATION. Keep everything (including the sharp pencils) in its place and follow your schedule religiously.</p> <p>If you had too much time scheduled for history and not enough for physics, go to page 45 for rescheduling.</p> <p>If you have bitten off more than you can chew, go to GOALS (page 42). But don't assume it's too much until you are working at 100% efficiency.</p> | | | | | | | | | | | | | | | | | | |

Table 3.7. Solving "Exasperation" Problems (continued)

| BOX | ANALYSIS & SOLUTION |
|---|---|
| <p>V</p> <p>"I'm trying to follow the advice of this book, but I <i>just know</i> the exams will kill me dead."</p> | <p>This worry is as valid as worrying about finding a dragon in your closet. Worry is counterproductive. If worry is a constant dark cloud over your life, go to your personal counseling center for help.</p> <p>If you only have those "small nagging doubts" about handling exams, well, we've got good news for you. Read Chapter 4 and learn how the "pros" do it!</p> |

3.2 MAKING A GOOD THING BETTER

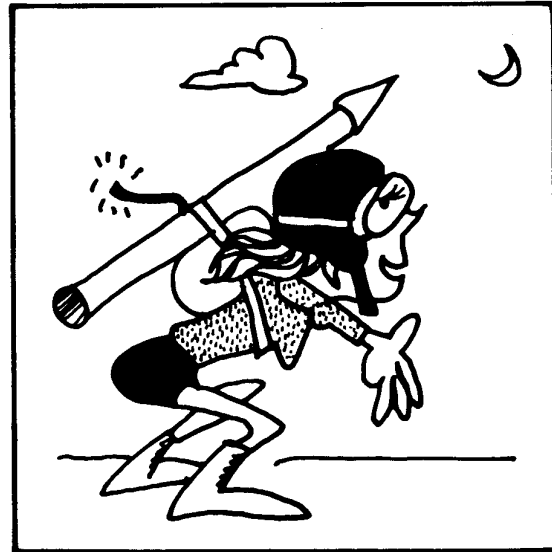
Unless your technique is already good, you're at the wrong page in this book, and need to spend time in Chapters 1 and 2 to get the background data, or in Table 3.1 to solve specific problems.

3.2a Goals: How High Shall I Aim?

That first week should have convinced you that you have undertaken a formidable job; but, more importantly, it's a job that CAN be done. You may not be up to maximum efficiency yet, but you should be well above the 50% level. Let's assume you're at about 60% efficiency. How high can you raise your goals? (If you're cheating and reading this without having one good week of trial, you're probably not even close to 60% yet.)

The choice of goals is two-fold:

- (1) What is your overall professional goal? and
- (2) What is your goal in each course? If you are a pre-med student the answer to both questions is A's. You don't get through the doors of medical school without exceptional grades. But if you are an electrical engineer, you probably want a decent average but are more concerned with getting a thorough understanding of mathematics than of English literature, for example.



At this point, you should have a feeling for the "cost" in hours to learn 95%, 85%, 75% or 65% of the course material (A, B, C and D respectively). Weigh this cost against the benefits:

1. Is the course likely to be useful for your planned career?
2. Does the course provide necessary background for further required programs?
3. Is the grade for this course of particular importance for something you want? (For example, medical schools consider grades in science courses more heavily than grades in most nonscience courses.)
4. Is the course *required* for your particular major?
5. Is the course one that you find particularly interesting, even if not potentially "useful to your career"?

If your answer is "yes" to three or more of these questions, then the "benefit" is large and a grade of A or B is important, no matter what the cost. If you answered "no" to three or more of these

questions, then you may wish to consider limiting your efforts to those necessary for a C, if your other courses have a large time requirement. A decision to “settle for a C” should always be weighed carefully and cannot really be justified unless your other commitments are quite heavy.

Now that you’ve decided, how do you go about getting an A or a B, or a C, or even a lowly D? (For an F, burn this book and drink more beer—that will work!) An A is simply 95% of the material (sure, a 90 will usually get you an A but we don’t plan game strategy by cutting it that close). Similarly, use 85% for a B, 75% for a C and 65% for a D. Pick the necessary percentage of the material, starting with what has been stressed most in class. Regardless of the percentage you intend to learn, use the *prof’s* scale of what is important. This is indicated by (a) stated objectives, (b) emphasis in lecture, (c) assignments and problems in the text, and (d) old exams. With complete calm you can blatantly ignore

1 point out of 20 and get an A,

1 point out of 6 and get a B,

1 point out of 4 and get a C,

1 point out of 3 and get a D.

That may sound like poor studying, but it’s NOT. That is, very simply, how you get grades. The point of more thoroughly learning the subject matter (shooting for 100%) is covered later under SUPERSTAR areas (page 47).

Let’s hope that grades will not be the *only* criteria *YOU* will use to evaluate your academic progress. Any passing grade in a truly inspiring course can *far* outweigh an “A” in “Drudgery 107”.

3.2b Idea Cards: “Instant Pictures” from the “Flash of Inspiration”

Have you ever tried unsuccessfully to remember a phone number and then later had it just “pop into your mind”? Very often, we seem to come up subconsciously with a solution to a problem or have a “great idea” at a time and place far away from our normal working area. Then the trouble is to remember it until we can find some way to write it down.

Purchase a package of 3” x 5” cards, wrap a few of them with a rubber band (along with a cheap pen) and stick them in your pocket or purse. Now when the solution or approach to a problem you’ve been grappling with “magically” comes to mind, you can write it down. If you’re walking across campus and a spectacular idea “hits you” for that term paper, you can sketch a quick outline before you forget about it.

One of the authors of this book has written three songs and developed a number of inventions just because he had his “IDEA CARD” package when the “inspiration struck”. Having those cards on your bedside table also allows you to go back to sleep peacefully when you really did “dream up” that great idea.

3.2c Group Study: Cooperation Comes in Groups-of-Three



Way back in the early parts of Chapter 2, it was suggested that you identify *good* students in the class (well prepared; active participants; those who review instead of stampeding for the coffeeshop when class ends). Recent studies have shown that for most students a good study group is **MORE** efficient than studying alone. The *optimum* group size is three persons. Larger groups do not allow each member enough opportunity to **CONTRIBUTE**, and your increase in efficiency depends on how much **YOU** contribute. Groups of two do not work nearly as well because too many problems are not resolved and it's easier to become distracted. In particular, if you form a group-of-two with your sweetheart, what you study may never appear on an exam.

Consider the possibility of group study carefully. In an experimental class, it raised the level of two-thirds of the participating students above 90%. Perhaps more importantly, **NO** failures occurred with students who consistently worked in these groups. **DON'T** try to carry other students. The group-of-three concept is valid only if all three participate fully. If you decide to try it, you must get together for **RESCHEDULING** (page 45).

If you work in a group-of-three, make a note each time you must get help from another member. That's an item you need to review again.

3.2d Tutors

Many students will consider the use of a tutor for help in one or more courses. A good tutor can help you understand ideas, concepts, and problem solving. A tutor can also give you the one-on-one attention and instant response to questions that may not be possible in large classes.

To make most efficient use of a tutorial session, *you* must be prepared. Only *you* can do the required readings and memory work for a class. The tutor *cannot* help you in these areas (except to refer you to the parts of this book that *can* help you). You *must* come to the tutorial session with as much knowledge as you can gain in advance, and with *specific* questions and problems you need help with. You should show the tutor the attempts you have made to tackle problems or grasp ideas. *Then* the tutor can help you effectively.

If you feel that tutorial help is necessary, *first* check out possible *free* help before you invest in a paid tutor. Most faculty provide office hours for at least limited "tutorial" work. Many campus groups, such as "honor societies" and "service" fraternity/sorority organizations offer free tutorial services. Frequently, you can arrange with other students for an exchange of tutorial services. (e.g., You help a friend with English and the friend helps you with math). The "group-of-three" study plan (Section 3.2c) involves you in a continuing give-and-take tutorial program.

College expenses are high enough. Only when all else fails should you engage a paid tutor. Even then, you should work to improve your study skills and self-sufficiency to minimize the need for prolonged tutorial expenses.

If you decide to seek a paid tutor, ask your professor for recommendations. You do not want to invest in an unskilled tutor or in one unfamiliar with the course. Proper study of the techniques described in this book will minimize, or eliminate, extra tutorial expenses.

3.2e Rescheduling: Making a Good Schedule Better

The minor schedule adjustments you can now *wisely* make may be repeated at regular intervals.

(1) To Add Time To One Activity You Must Remove It From Another.

Adding time to items is too simple—the place to start is where you can remove it from another.

Don't remove time from your sleep schedule (see page 39).

Don't remove all your recreation and break times.

(Such a schedule is too tough to follow.)

The ideal time is removed from courses that are presently ABOVE your goals levels. Remove the time from your evening study schedule but leave the pre-class preparation and the immediately-after-class “special study” intact.

The second choice is to remove PART of the time from the non-specified (“catch-up”) study hours and make them specified-course study hours.

The third place to remove time is from your longer breaks or “free” times. Don't eliminate the breaks—but perhaps you can cut them down. If you have “all day breaks” (free-time) on Saturday or Sunday, these can be cut easily. Sleep is NOT a break! It is an ESSENTIAL ingredient in the success formula (see page 39). Meals are also necessary parts of the formula. But, if you want to, you can work on flash-cards during a meal. If you have been devoting scheduled study time to flash cards, some of this can probably be shifted to walking, waiting, and eating times.

When you have tried everything else, remove a few of your breaks. If you decide to add more hours to dates, playing pool, or other “fun”, remove the specific hours from the schedule with a *full awareness* of what you are taking the time away from.

(2) Time May Be Exchanged Between Activities.

If you have discovered that some supplementary remedial work is needed (page 38) or that you have to make up for getting behind in some classes, use some of your “free” time. Once you are “caught up”, you can replace this as “free” time without disturbing the rest of your schedule.

Your original schedule was based, in part, on your view of which courses were most difficult. If your view has changed, you may wish to exchange hours so that the most difficult courses are moved to earlier (fresher) hours.

Memorization is tedious (hateful, $\phi \diamond \xi \# \Lambda \chi$) but it is not intellectually difficult. It can be done very late in the day—just before you go to sleep. What you MEMORIZE immediately before going to sleep will also stay with you better.

(3) Getting Off Schedule

If you strayed seriously from your schedule in the first (trial) week, when did this happen? If you consistently got away from your studies at 7:00 pm every day, consider SCHEDULING a break at that time. Do this by exchanging break times. Remember that several shorter break times are better than a few long breaks.

3.2f Brain-Flushing: Getting Started on an Efficient Basis

If you are like most of us, you often find it difficult to sit down to study a scheduled block of material and to really start work on it right away. Random thoughts about things or people seen during the day, about additional tasks that will need to be done, or about other unrelated topics interfere with concentrating on the job at hand. This “brain clutter” can cause you to lose valuable time from a scheduled study block.

One way to solve this problem is to plan a 5–20 minute “brain-flushing” time just prior to your scheduled study time. The “brain-flushing” involves some activity that is quite different from studying, but that *does* involve concentration. Examples of such activities include shoe shining, dish washing, balancing the checkbook, sorting books and notes into a sequence to match the evening’s study plans, reading one chapter in a novel, or playing some music. You can easily think of other similar activities. The key is to use the activity, whatever it is, as a focus of your attention. Thus, you are “erasing the mental blackboard” of all the extraneous thoughts that would otherwise interfere with concentrating on your studies. This activity **MUST** be a *private* activity, and one that you can *finish*, so that it does not become an additional distraction.



One easy way to use “brain-flushing” is to write various suitable activities on small cards and keep them in an envelope, but *not* at your desk. Go to your desk 5–20 minutes before your first scheduled study time. Take a look at the work planned for your first study block. If you can easily start on it, with good concentration, do so. (That way you can finish your work ahead of schedule.) But, if you don’t feel quite ready to start, get up and go get a “brain-flushing card” and do that activity. *Then* start your studying. You’ll be amazed how your initial level of concentration has improved.

Some persons have successfully used “yoga-like” mental exercises as “brain-flushing”. If you are interested in such techniques, you should contact one of the staff at the personal counseling center or discuss this with a professor in the Psychology Department.

Incidentally, one of the reasons that post-class activities are so important (page 26) is that the class itself has served to focus your attention on that subject. “Brain-flushing” has already been done for you and you can start post-class activities efficiently.

3.2g Speed: If You Can Go Faster, You Will Have More Free Time

EFFICIENCY is the first key to speed. All of the preceding discussions were aimed at getting better and better efficiency.

Rapid READING is the second key to speed. But even rapid reading starts with efficiency. What do you want to learn when you are reading? Skip what you don't need. Reading can be done:

1. to get a specific fact. (VERY fast glance.)
2. to get an overview. (SLIGHTLY slower but still very fast.)
3. to learn in detail. (The greatest time requirement.)

Have the *objective* of your reading in mind and *don't* read a calculus text like a novel.* When you finish reading a passage and have studied MORE than *your* objectives, you are going too slow. That is not EFFICIENT. [See the SUPERSTAR section (below) if this is something you love to do!]

To increase your reading speed (and anybody can *without* losing comprehension), force yourself to go a little faster. The best practice material is the reading you do for pleasure—magazines, newspapers, captions on cartoons, or the rules in the poolroom. If you force yourself to read VERY FAST with these examples, your “comfortable” reading rate will also increase gradually. If you are a very slow reader (e.g., reading single words instead of word groups) you may wish to enroll in a reading improvement course. One of the best books for the self-teaching of better reading is *Developing Reading Versatility* by W. Royce Adams (Holt, Rinehart and Winston, 1977). The same author has an additional series of books on “How to Read” in specific subject areas.

3.2h Superstar: The Things You Do For Personal Satisfaction



Some students will devote all their free time to athletics (with hopes of spending 10 years as a professional athlete).

Others will spend this time searching for a rich spouse (and may spend over 10 years without working).

Still others will spend this time on activities which will make them uniquely well-trained in their field (and get 10 more job choices when they finish school).

Some thinkers will devote all of this time to reflection and inquiry into new and different fields (and perhaps become one of the 10 most fascinating people in the world).

Of course, some will spend this time playing pool, drinking beer, and telling tall tales. (They will get conned by pool sharks, join AA in 10 years, and have a surprising repertoire of tired jokes when leaving school without a diploma).

*Great novels should be read slowly enough to catch hidden irony, wit and feeling. Read between the lines and listen to the rhythm of the words. Developing an “ear” for language *at its best* can open unexpected doors.

For athletics, see the coaches and trainers; for rich spouses, see what cars they drive; for academics see the following; (for the last choice, see a doctor—a psychiatrist).

If you have a desire to become an outstanding professional, there are many non-obvious routes to follow. Virtually every field has a trade journal which serves as a news magazine for the profession. Here is an excellent way to see what professionals are doing, what problems need to be solved, what job opportunities (or surplus of personnel) may exist, and how the other courses you are taking tie in with your major. Scan this journal regularly with close attention to anything that has popped up in one of your courses.

If you're at a school with an active research program, get a copy of the departmental brochure and list of publications. This will tell you what your prof (and future profs) are especially interested in. After you wade through the decoding of the technical vocabulary, you may find a particular part of the field that is of special interest to you. If you pursue this further, and still have some free time, go talk with the people working in this area. Many students have entered into research programs by this mechanism very early in their careers.

For a richer cultural experience, identify who the THINKERS on the campus are. (They are NOT limited to the undergraduates that you currently know.) Many will be faculty worth having as friends. Hopefully, you can identify these BEST and MOST ACTIVE minds from a wide variety of disciplines. Do they have groups they sponsor? Do they hold non-class meetings? Will they suggest new avenues and/or readings? The *real* thinkers will welcome your MIND PICKING more than you might expect!

3.2i Some Special Uses of "Catch-Up" Times

You originally scheduled some "catch-up" times to permit you to finish any work not completed during regular study times. If you are now working fairly efficiently, or if you have revised your schedule for better study times, you will rarely need "catch-up" hours for the original purposes. You should not, however, eliminate all of these time blocks from your schedule.

Use some of your "catch-up" blocks to get ahead on long range assignments, such as term papers or projects. Working well ahead of deadlines will avoid a last minute rush. It can also produce a much better term paper or project—and a pleasant surprise for the prof (who just might remember your diligence with a higher grade).

Sometimes you will need "catch-up" time because you got behind for reasons beyond your control. (*Not* following your schedule *is* something *you* controlled.) In catching up on missed work, be sure that you do *no more* than is necessary (page 43). "Catching up" often *SEEMS easier* than "keeping up". That's because "hindsight" can rather easily identify the *important* parts of past work. However, don't let this fool you into a pattern of procrastination. Too much "catching up" can accumulate into an overload in the critical later weeks of the term.

Use some of your scheduled "catch-up" time for hobbies or "superstar" activities (page 47). In addition, when you feel you've *earned* it, use some unneeded "catch-up" time to reward yourself for finishing your studies as planned. Take in a movie, go out to dinner, or do something else "just for fun". When you are doing your work efficiently you deserve to "pat yourself on the back" sometimes. Successful people value their *own* judgment of a "job well done".

3.3 SUMMARY

1. Use your **SCHEDULE**.
2. Study **EACH** course daily.
3. Work to the level of your **GOALS**.
 - a. **PREPARE** for class.
 - b. **PRE-GUESS** the prof in class.
 - c. **REVIEW** immediately after class.
 - d. **STOP** when you have reached your objectives.
 - e. Make each day's study a **PRACTICE** for **EXAMS**.

In addition to the ideas presented in this chapter, you may find a need for some special procedures that are particularly useful for certain types of courses. For the following special techniques, refer to Chapter 8:

1. Memorizing (page 83)
2. Problem Solving (page 87)
3. Lab Courses (page 91)
4. Analyzing (page 92)
5. Writing (page 95)
6. Library Work (page 97)

NOW, IF YOU NEED MORE DETAILS OF "SPECIAL TECHNIQUES", TAKE A LOOK AT CHAPTER 8. OTHERWISE, GO DIRECTLY TO THE "GOOD NEWS" OF CHAPTER 4.