

## **Study Skills Package**

This package provides basic information in each of nine areas. In each case, suggestions for changes in study habits are given. Do not feel that you must try to change everything at once. You are more likely to succeed if you make small changes and experience positive results than if you try to change everything and set yourself up for failure. A good place to start might be with a change that sounds most reasonable and workable and by applying it to your most difficult subject.

But before you even begin with this package, consider the most effective, efficient, and, yes, obvious thing you can do to enhance your study skills.

**TRY** Attending all classes and labs (if you don't already manage to do so).

**WHY?** You hear information from the person who will be testing you on it, you will take much longer to gather it from other sources, classes offer an opportunity to ask questions about difficult material, and you won't miss extra information (clues for tests and assignments, for example.)

The basic information in this Study Skills Package may be all you need in order to be successful in your studies. However, if you require further information or assistance, you might enrol in a Study Skills Workshop or make an individual appointment with a Study Skills counsellor. You can arrange to do either of these by contacting Counselling Services (Needles Hall, Room 2080, 888-4567 ext. 2655).

We're grateful to Sally Melville (counsellor, 1994) for the original TRY - WHY concept and related Study Skills contributions.

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## **Learning and Remembering**

Most students express a wish to be more efficient in their studies. Knowing how your brain takes in and processes information, and then working with this system, will greatly improve your efficiency.

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**TRY** Taking a break of 10 minutes for every 50 minutes of work; this will help you retain information.

**WHY?** Because learning does not occur by simply stuffing material into short-term memory. Learning occurs when what you put into short-term-memory connects--integrates--with what you already know (which is stored in long-term memory). This connection occurs naturally--and you experience the peak of your learning--when you stop inputting and relax (although you may think about the connections that are occurring).

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**TRY** Reviewing your notes (by doing something with the new material--reading, thinking, writing, or talking about it) at the end of the day, giving 10 minutes for every hour of new material you took in and want to retain.

**WHY?** Because research (into something called the [Curve of Forgetting](#)) has shown that if you don't recall or review or work with what you have learned on a given day, within 24 hours you will forget 50 - 80% of it.

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**TRY** Reviewing your notes (see above) at the end of the week, giving 5 minutes to each hour of new material for that week, then giving the same material 2-4 minutes of review at the end of the month.

**WHY?** Because the [Curve of Forgetting](#) indicates that these reviews are also required to be able to remember and reproduce something. If you pay attention to the daily and weekly reviews, the monthly ones may be taken care of in the course of studying for mid-terms.

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**TRY** Changing subjects or tasks every hour.

**WHY?** Because the brain does not easily assimilate the same or similar material hour after hour. This means that, when studying, you might read for an hour then do questions for an hour. And you wouldn't follow French verbs with German verbs. This also means that anything you want to learn and remember (like an assignment) should be started early and done over many nights. (Besides helping your brain take in the material, this sets up a routine of working with it more than once, which aids the review process that is essential to learning).

## **Time Management**

Students, whether first year or graduate, typically complain about a) the size of their workload and b) the amount of unstructured time. On the surface, these two issues appear to go together, but it takes time management skills to resolve them.

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**TRY** Keeping track of your time for one entire week. (Account for every 1/2 hour by filling in your schedule every few hours.) Add up totals for sleep, studying, and recreation.

**WHY?** Because you need to know if you are putting in enough hours. Normal for [sleep](#) is 50-60hrs; students who are sleep-deprived have lower marks than students who are getting enough sleep. Normal for school work is 1hr homework for every hour in class plus overtime for studying; this varies from one faculty and program to another, and mature and part-time students may need twice these hours for homework, so check with your advisor. Normal for recreation is 10-25hr, depending on your programme.

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**TRY** Planning your schedule in advance, to whatever degree you are comfortable, adjusting your hours to desired totals. Make clear contracts with yourself regarding time, place, and study task.

**WHY?** Because you will work best with a clear sense of purpose.

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**TRY** Writing everything down--long term goals (course requirements) on a calendar, short term goals (weekly requirements) on your schedule or "goals" sheet, daily goals (errands) on a "to do" list.

**WHY?** Because time management is about goals--clarifying them (on paper, leaving short-term memory free for learning), setting them, assessing them, developing methods for meeting them, and rewarding them.

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**TRY** Doing some work on a task the day that it is assigned, then developing a plan for finishing it by dividing the task into at least 5 "chunks" of work with established deadlines and rewards.

**WHY?** Because all of these activities help with motivation. First minute motivation is a powerful tool; after using it to gain momentum, set deadlines--with rewards--and chip away at the task to get it done.

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**TRY** Doing your most difficult work during hours when you feel best. (Save pleasant tasks for less productive times of the day.)

**WHY?** Because this will make you more efficient. Most of us have high energy time each day (often in the morning), with two periods of medium and one of low energy (often in the late afternoon). Find these times for yourself and work with them--doing difficult work during high time and easier work during lower times.

## **Listening and Note-Taking**

While it is expected that students come to university with the ability to take a good set of notes, this is not always the case. High school may not have demanded it, so good listening and note-taking skills may need to be developed.

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**TRY** Being a positive, active listener.

**HOW?** Sit near the front and do not read or talk. Pay particular attention during the second 20 minutes (when you tend to lose it) and to the last minutes when a summary might be given or conclusions drawn.

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**TRY** Being a positive, active learner.

**HOW?** Come to class with an interest in the material and with questions to be answered. You can develop these by thinking about and anticipating the lecture and by pre-reading the text (This latter is especially helpful if you find yourself having difficulty keeping up with the material.)

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**TRY** Getting accurate notes, with special attention to the main ideas.

**WHY?** There may be an overhead; if so, get that material down. In addition, look for points of emphasis-- from the prof's verbal language, body language, or careful reading of course notes. If you still feel you're missing the main points, try showing your notes to a classmate or to the prof.

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**TRY** Leaving lots of space between ideas.

**WHY?** Because you want lots of room to continue to add notes in your own words; this will help you learn the material on a deeper level by integrating it with what you already know. Also, the extra space will make it easier for you to find material when you are studying.

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**TRY** Going over new notes--10 minutes for each class--within 24 hours.

**WHY?** Because you lose 50 - 80% of the material if you don't. (For a further explanation of this idea, see [Learning and Remembering](#).)

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**TRY** Setting your notes up so you can study effectively from them.

**HOW?** Leave wide left margins; here you will write questions from which to study your notes. Leave the back of the page blank, so you can fold the page, cover the notes, and answer the questions when studying.

## **Reading**

Many students open their books, read until they finish (lose interest, or fall asleep), and are convinced that their concentration, comprehension, and speed are poorer than everyone else's. Students need to recognize that reading may be the most demanding work they do here and that nearly everyone reports difficulty with the volume of reading required.

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**TRY** Getting into the material more often but for shorter periods of time.

**WHY?** Because some students may only read for 20 minutes without losing concentration. Also, learning is improved by changing tasks each hour, spreading the work over time, and dipping into it more frequently. (For further explanation of these ideas, see [Learning and Remembering](#).)

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**TRY** Reading groups of words at a time and without mouthing them.

**WHY?** Because your brain can read faster than your mouth and more than one word at a time (A single word has little meaning anyway). Speed and comprehension will increase if you read in meaningful phrases.

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**TRY** Establishing a context by beginning with an overview of the material; this will improve comprehension and retention.

**HOW?** Read the introduction, headings, charts, graphs, diagrams, conclusion, and summary, then take a minute to think about the material before beginning to read in depth.

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**TRY** Reading with a purpose: to answer questions and to note the answers (the most important points) where they occur.

**HOW?** Establish a list of questions--from questions at the end of the chapter or by turning the headings into questions--and read to answer these. Put ticks in the margins when you think you've found answers. (It's better not to take notes, highlight, or underline at this point; you won't know which are the most important points until you are finished.) Take one more run through, focusing on the ticks in the margin and now deciding which are the most important points; now you can make an informed judgement, so it's appropriate to highlight, underline, or take notes.

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**TRY** Setting your text up so you can study effectively from it.

**HOW?** Write your questions in the margins, opposite the answers. Regularly review the material by covering the page and answering the questions.

## **Concentration and Distraction**

Most students report dissatisfaction with their ability to concentrate: they may have trouble getting down to work in the first place or feel that they never work as efficiently as they would like. While it is impossible to concentrate 100% of the time, it is possible to minimize external distractions and to begin to work on internal ones

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**TRY** Seriously examining your place of study. (Make what changes you can, or consider the cafeteria, library, or an empty classroom.)

**HOW?** Does it have adequate lighting? (A light bulb in your face can cause eye strain.) Does it have adequate ventilation? (Lack of circulating air can make you sleepy.) Does it offer space and comfort? (You need a clear desk for writing and a comfortable chair for reading.) Is it too warm or too cool? (Both extremes of temperature can make you sleepy.)

Are there too many line-of-sight distractions? (Some students cannot work with a bed or pictures from home in view.) On the other hand, does it feel like a sterile prison? (Some students work more efficiently with their doors open.) Are there too many audio distractions? (Some music may be fine, but loud rock with lyrics is stupefying.)

Do friends find and distract you easily? (Hide, or learn to say "No, I'm studying," either by pre-established signals or by sheer force of will.) This is all very personal and individual; find out what works for you.

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**TRY** Establishing a regular routine of eating, sleeping, and exercise.

**WHY?** Because the ability to concentrate depends on adequate sleep, decent nutrition, and the increase in well-being that comes with exercise. Students who have all three, generally show higher marks.

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**TRY** Bringing interest in the material and a sense of purpose to the task.

**WHY?** Because human beings are bored by what is not relevant to them. Therefore, you may need to create relevance--by talking to others or by relating the material to what interests you. In addition, it helps to always sit down to work with a clearly defined purpose and task.

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**TRY** Establishing rewards for accomplishments.

**WHY?** Because human beings work best with positive reinforcement.

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**TRY** Starting a WORRY BOOK if frequent worrying undermines you.

**WHY?** Because worrying deals with issues of the past or future, and studying requires that you be clearly focused on the present. Writing your worries down initially helps to diminish them somewhat; setting aside time and problem solving around what you have written helps further.

## **Preparing for Exams**

Students know that they need to study and that they should probably start well in advance of the exam. But because high school may not have demanded much in the way of studying, students find they really don't know how to study early and properly.

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**TRY** Not cramming! (But see [cramming](#) for exceptions) .

**WHY?** Because short-term memory hasn't enough space for all you need to know. Also, cramming stupefies long-term-memory (where well-learned material lives), and it can set you up for panic and "blinking."

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**TRY** Starting well in advance, breaking your studying into chunks, and reviewing often.

**HOW?**

- A week or more before the exam, do an initial overview (a 2-4hr quick review of the material); this will help to motivate you and to determine the structure of the course, where your difficult material is, and the volume to be covered.
- Develop and follow a plan for getting yourself through this volume of material, starting (if possible) with your most difficult stuff.
- At the beginning of each study period, do a 10 minute review of the previous period's material.

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**TRY** Studying "from the top down."

**WHY?** Because it is easier to understand and retain material that is well-organized. Therefore, start with a good grasp of the course's main ideas, then follow with the sub-topics and supporting details.

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**TRY** Studying by jogging your memory.

**WHY?** Because real understanding comes not when we stuff information in but when we draw it out. Exams require this same drawing out of information. So this should be the focus of studying: answering questions, solving problems, writing essays, defining, explaining, and applying terms, and working through past exams.

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**TRY** Taking in no new material the night before an exam.

**WHY?** Because you want to build confidence by reinforcing what you know rather than running the risk of scaring yourself by discovering something you don't know. Also, you want to avoid a temptation to cram.

## **Cramming**

Although you've been told to avoid cramming (studying the night before), there are times when you're left with no other choice. So here is information on how to cram.

For students who have worked hard all term but now have three exams in five days so only an evening to review already learned material:

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**TRY** Writing out a course summary.

**WHY?** Because reviewing the structure of the course will help you remember, comprehend, and retain the material.

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**TRY** To work through notes and assignments but just skim the text.

**WHY?** Because this is the best way to set priorities for the time that you have.

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**TRY** To stay calm and confident!

**HOW?** By taking breaks in your studying, by getting at least 6- and preferably 8-hours sleep, and by reminding yourself that working hard all term really will pay off!

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For students who've slacked off and are now in justifiable panic:

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**TRY** Gathering information about what's likely to be on the exam.

**HOW?** Find out which chapters in the text were covered; get a set of course notes, copy and return them; ask the TA what topics were emphasized.

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**TRY** Finding the following from information gathered: principal themes, sub-topics, and major illustrations. Now memorize them!

**WHY?** Repetition is the key to memorization; so is using every trick you can -- word association, rhymes, enumeration, sentences from acronyms.

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**TRY** Being selective. After memorizing major themes, decide what supporting material to concentrate on. You're more likely to remember a narrow range of material covered in depth.

**HOW?** Skim the text if there is only one, or skim only chapters that seem emphasized from your information gathering. If there are many texts, pick two to concentrate on. Take time to review what you've covered.

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**TRY** To be kind to yourself.

**HOW?** Get at least 6hrs sleep. Finally, record the pain of this experience (in a letter or a tape to be addressed next term) so you won't repeat it!

## **Writing Exams**

**TRY** Getting appropriate rest, exercise, and nutrition.

**WHY?** Because these things matter and will affect your performance.

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**TRY** Arriving just on time and leaving without commiserating.

**WHY?** Because there is wide-spread and contagious panic before an exam, and uninformed, post-exam second-guessing can be upsetting.

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**TRY** Using a crib sheet to help you, even though none is allowed.

**HOW?** Make a crib sheet of the material you are certain will help; take it to the exam; throw it out before you sit down; then recopy it from memory, somewhere on the exam booklet, as soon as you can.

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**TRY** Reading all questions (except multiple choice) before beginning, noting anything important that occurs to you as you do so.

**WHY?** Because weighing questions in terms of marks and time allows you to pace yourself accordingly; ranking then working on questions in order of difficulty helps you warm up on the easier questions (while your sub-conscious works on the harder ones); and writing ideas down ensures that you won't forget them or over-stress short-term memory.

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**TRY** Answering the questions as asked.

**WHY?** Because everyone makes the mistake of mis-reading questions. And if a question is similar to an assignment, it may take you four readings to see it accurately. Therefore, circle key terms of procedure and direction.

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**TRY** Being an active reader in a multiple choice exam.

**HOW?** Anticipate the answer to the question, then go looking for it

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**TRY** Showing you understand the question, know the relevant material, and can present it in an organized manner.

**WHY?** Because whether the question is essay or problem solving, this is what the prof wants. Re-state the question before answering. Organize your work (by establishing knowns and unknowns if problem solving or by writing an outline if answering an essay question). Present all relevant material or steps, never assuming something is too simple. Submit your rough work if you don't finish.

## **Sleep**

Nothing is more frustrating than not being able to sleep. Tossing and turning. Your mind is racing, going over everything that happened today. Noises keep you awake. What can you do? There **are** things you can do to get a restful night's sleep.

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### **Sleep only when sleepy...**

This reduces the time you are awake in bed. If you can't fall asleep within 20 minutes, get up and do something boring until you feel sleepy. Sit quietly in the dark or read the warranty on your refrigerator. Don't expose yourself to bright light while you are up. The light gives cues to your brain that it's time to wake up.

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### **Don't take naps...**

This will ensure you are tired at bedtime. If you just can't make it through the day without a nap, sleep less than one hour, before 3:00 p.m.

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### **Get up and go to bed at the same times every day...**

Even on weekends! When your sleep cycle has a regular rhythm, you will feel better.

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### **Refrain from exercise at least four hours before bedtime...**

Regular exercise is recommended to help you sleep well, but the timing of the workout is important. Exercising in the morning or early afternoon will not interfere with sleep.

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### **Develop sleep rituals...**

It is important to give your body cues that it is time to slow down and sleep. Listen to relaxing music, read something soothing for 15 minutes, have a cup of caffeine-free tea, do relaxation exercises.

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### **Make sure your bed and bedroom are quiet and comfortable...**

A hot room can be uncomfortable. A cooler room along with enough blankets to stay warm is recommended. If light in the early morning bothers you, get a blackout shade or wear a slumber mask. If noise bothers you, try wearing earplugs or introduce some "white noise," like a fan.

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### **Stay away from caffeine, nicotine and alcohol at least 4-6 hours before bed...**

Caffeine and nicotine are stimulants that interfere with your ability to fall asleep. Coffee, tea, cola, cocoa, chocolate and some prescription and non-prescription drugs contain caffeine. Cigarettes and some drugs contain nicotine. Alcohol may seem to help you fall sleep in the beginning as it slows brain activity, but you will end up having fragmented sleep.

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### Only use your bed for sleeping...

Refrain from using your bed to watch TV, pay bills, do work or reading. So when you go to bed your body knows it is time to sleep. Snuggling is an exception.

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### Have a light snack before bed...

If your stomach is too empty, that can interfere with sleep. However, if you eat a heavy meal before bedtime, that can interfere as well. Dairy products and turkey contain tryptophan, which acts as a natural sleep inducer. Tryptophan is probably why a warm glass of milk is sometimes recommended.

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### Take a hot bath 90 minutes before bedtime...

A hot bath will raise your body temperature, but it is the subsequent drop in body temperature that may leave you feeling sleepy.

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### Use sunlight to set your biological clock...

As soon as you get up on a sunny morning, go outside and turn your face to the sun for 15 minutes.