Hello! I'm Bob Brown. I'm retired but I taught at Southern Polytechnic and Kennesaw State for more than 20 years. I used to give my students some advice on best practices for studying, and some of them found that advice helpful. So I made this very short video with the hope that it will help others. If you have already developed an effective regimen for studying keep it up. If not perhaps these best practices will help you.

This advice was for a face-to-face classes, but it's applicable in any setting where the material is delivered in audio format. It assumes that class notes or slides are available in printable form.

First a little background. If you remember one key thing about these best practices remember repetition or reuse of information. Psychologists call this "rehearsal." The goal of studying is to move material from your short-term memory to your long-term memory. To do that you need to be exposed to it at least four times with increasing time periods between exposures. Simply glancing at the material doesn't work. You must actually use and think about it, relating new information to what you already know to form associative cues, which is why psychologists choose to call this rehearsal. This background information is necessarily highly simplified. The purpose is to explain why you should do these things and not to be a study of memory models.

Let's look at something called the Atkinson Shiffrin memory model. The model was proposed in 1968 by, as you might expect, Atkinson and Shiffrin, and changed and enhanced for several years afterward. There are other theories of memory and not all psychologists agree about how this works. Even so, this model can help us understand what we need to do to learn effectively.
We get a huge amount of input from our senses. For most of us, most of the input comes through our eyes and ears. We don't retain all of it. In fact, most of it is lost immediately. The sensory process in our brains "filters in" those inputs that have our attention and discards the rest. So if you're reading a compelling text message in class while the professor is saying at the time is lost. Those sensory inputs which had our attention are committed to short-term memory. To move information from short-term memory to long-term memory requires rehearsal, that is reusing the information.

The capacity of long-term memory seems to be unbounded. Information is returned to short-term memory for use through associative cues such as an exam or quiz question, or a situation that requires information that we've learned previously.

**Do the homework**

Onward to the best practices!

My first advice is, do the homework. Professors do not assign homework to get the answers. In nearly every case the professor already knows the answers. Yes, I've made mistakes and assigned problems I didn't know the answers to, but not very often. The purposes of the homework are to let you practice the things you're learning in a course and to demonstrate that you know the material. So do the homework!

**Read the assigned material before class.**

If you're given a reading assignment do it before class and take notes of the important points. Yes, the professor is going to tell you most of it in class, but usually the author of the material and the professor are different people, so you get two points of view on the same material and you get repetition. Don't promise yourself that you'll read it later because mostly that doesn't happen.

**In class, you should mostly be listening**

In class listen instead of messing around with your gear. You may have convinced yourself that you can multitask and still absorb the material. If so, you'd be wrong! A study at Bryan College showed that multitasking lowers IQs by 15 points during cognitive tasks. I don't know about you, but I don't have 15 points to spare.

**Ask questions**

If something the professor says is unclear, ask! If you have a question about something, probably so do others. Professors appreciate thoughtful questions. Asking helps you, helps the professor, and helps your classmates. If you have a question about material from the reading, hold it until the class reaches that part of the material so that you can ask it in context.

**Make short notes on paper of anything you think is important, especially if it's not on the slide**

If the professor says something that sounds important, especially if it's not already on the slide or the professor repeats it you, should probably jot that down on paper. Why paper? Professors
Pam Mueller at Princeton and Daniel Oppenheimer at UCLA did a study that showed that laptop note taking is less effective than longhand note taking for learning.

**Merge your notes onto the slides the following day**

On the day after class, merge your reading notes and your class notes onto the printed slides. The first time I told a class that, some people just got irate and asked, "Why should we do extra work when we could just take notes on the slides?" First, if you bring printed slides or printed class notes to class, you'll find them a distraction from what the professor is saying. Second, think about what you're trying to do. You're trying to move information from short-term memory into long-term memory, and what does that is repetition or rehearsal. So when you take those notes from the previous day and copy them on to the slides, you've done some repetition. You've done some of that work that it takes to help move information from short-term memory to long-term memory.

**Each class day, review the slides and notes from the class one week ago and skim the reading**

Each class day, review the slides and notes from the class one week ago and skim the reading. That gives you another round of repetition for moving things from short-term memory to long-term memory.

If you do what I suggest, do the homework, read the assigned material first, take notes in class, merge the notes onto the slides, study your merged notes a week later, you've gotten four or maybe five licks at the material without really doing very much work other than what you should have been doing anyway. By dividing it up into chunks, you stand a much better chance of remembering it at least as long as the exam, and maybe even remembering it long enough to use in your career in information technology. This works not only in my classes, but in every class that you take. If you do this, you’ll learn more, and as a side benefit, maybe make better grades.

I enjoyed making this video and I hope you found it helpful and useful.