Avoiding All-Nighters and Getting Results:

Tips for Effective Studying

• Study your hardest material first.

• Overlearn the material—more than five times through!

• Review your classroom and textbook notes daily.

• Study in a brightly lit, somewhat cool area.

• Use SQ3R for studying textbooks.

• Use READ for studying lecture notes.

• Use VCR$^3$ for storing information in long-term memory.

• Use recitation to rehearse.

• Take breaks every 30 minutes.
SQ3R

Survey: Read title, introduction if one is provided, headings, subheadings, charts, graphs, drawings, pictures, words or phrases in bold print; summary if one is provided. Think about what you already know about the subject matter.

Question: Ask who, what, when, where, why and how. If subheadings exist, turn them into questions; if not, base your questions on what you think you need/want to know.

Read: Read slowly and carefully to answer your questions. Read in sections; as you finish a section, write answers in margins or your notes. Underline answers in text.

Recite: When you finish a section and again at the end of your reading session ask yourself one simple question: "What was that all about?" Explain it to yourself, your roommate, your dog. Notice what you cannot explain and either go back immediately or plan to do so at your next study session in order to clarify ideas/concepts you really don't understand.

Review: Before you close your book, reread your margin notes, paper notes, underlined material to cement it into your memory. Repeat this step at least twice more before you are to be tested on the material.
R.E.A.D.
A method for studying notes

R Read your notes as soon as you can after you take them and then again later that day or the next day. Clarify ideas, facts, and concepts. Rewrite if necessary.

E Evaluate what you have read. Prioritize information; delete unimportant information.

A Ask questions. In the margin, write down what you think the notes mean and what questions might be asked by the instructor about the notes. If you don't understand something, go to the instructor and ask for clarification.

D Determine the main ideas. If you can summarize the notes and recite the summary to yourself and others, you demonstrate your understanding of the material. If you have gaps in your understanding, fill them by checking the text for more information or talking to the professor.
A method for committing information to long term memory

V Visualize information by creating word pictures as you hear information. Paint a mind image designed to help you remember.

C Concentrate on the details of the picture; don't let your mind wander. Stay focused. Mentally stare at the image until you can literally "see" it with your eyes closed.

R Relate information to something you already know. If Mendelian genetics doesn't make much sense, use nonsense images to help yourself remember—e.g. genes that dress in blue jeans with chromosome tattoos.

R Repeat information out loud while you are visualizing your mental image. Hear and see to double your sensory input and retrieval cues.

R Review—literally re-view—look again and again at your images; say it over and over. Repetition is the key.