

Important reminders to do well in the (any) class. Tips and Suggestions.

Objective of Course:

To gain a deep understanding of the key concepts and theories, without a focus on memorization and recall. Specifically, the exams in this course will test analysis, synthesis and a deep understanding and proficiency in the skills of problem solving. It is unlikely that you will do well in the Exams if you just memorize formulae or solutions to problems.

Let us note that the main purpose of the lectures in college environment is to present just enough background information about a topic so that you can start learning **on your own**. Although lectures are valuable, **the most significant part** of college learning results from three activities that occur outside the lecture room: individual reading and work, and group discussion.

Reading and Studying.

Readers who achieve a better understanding of a text, closer to the author's intention, are known to pause and reflect over how the current passage relates to previous sections and chapters. They try to discern different parts of the text, aim to finding out the main point of each, link the parts to each other and to the whole, and relate the content of the text to *their own experience and what they have learned earlier*. This approach includes:

Survey a text or other reading material, read quickly over the entire reading.

Question, ask yourself what were the main points in the reading?

Read all the material in order to answer these questions.

Recall, answering your questions without referring to the reading materials.

Review, by checking your answers against the textbook or reading materials.

Learning

Effective, active learners **take responsibility for much of their learning**. In so doing, they are able to identify and tackle problems, share and discuss ideas in formal and informal situations, master a body of knowledge appropriate to the course. There is no one right way to learn; there are many ways and it is important for you to explore and find ways that best serve your needs and that best enable you to develop the characteristics of effective learning.

Remember that learning Mathematics means doing Math (working and understanding problems).

Points to keep in mind:

- **Accept responsibility for your own learning.**
- Effective learners are motivated, organized, curious, active, selective, and enjoy learning.
- Make effective use of your time and energy. At a minimum set aside three hours of self-study for each hour of class (24 hours a week).
- Strive to have clear goals, a positive attitude towards yourself and your learning, and have a range of effective learning techniques ("a bag of tricks").
- Think for yourself and make connections between the topics you study and your personal experience.
- + Focus on understanding. Try to extend the concepts that you learn to situations that you have not experienced. Do not just gather information and memorize.
- Develop abilities not just to comprehend meaning, but also to analyze, relate, synthesize, and apply the course material.
- Work independently and collaboratively.