

Don't Go It Alone: Using Math Help Resources Effectively

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Outline

- 1. Textbooks**
- 2. Instructors**
- 3. Course Assistants**
- 4. Classmates**

General Calculus Course Goals

- 1. Student should not only develop practical computational skills, but also intuitive conceptual understanding of the course material.**
- 2. Students taking calculus should progress in developing analytical, critical-reasoning, and problem-solving skills.**

Why Read Your Textbook?

- Your textbook is a comprehensive guide to the course material.
- Your textbook is always available.
- Your textbook *will* always be available.
- You will likely have to read and understand mathematical and technical writing in the future.
- Access to more than one narrative on the material can provide for a broader and more robust understanding of the material.
- Exposing yourself to the material before class prepares you to engage in deeper discussions of the material in class.

Why Go to Your Instructor's Office Hours?

- to get help or hints on an assignment
- to get clarification on a concept or idea
- to fill in gaps in your mathematical background
- to learn critical-reasoning and problem-solving skills
- to be noticed by your instructor and convey eagerness
- to get to know your instructor more personally
- to build confidence in your ability to do mathematics
- to discuss your progress or course policies
- to discuss problems with classmates or members of the teaching staff
- to give your instructor feedback on the course and the difficulty of the material

“A source of trouble is a particular study habit shared by almost all students who are struggling academically: they always study alone. Students point out that those who always study alone are isolating themselves from a key benefit of college—the opportunity to learn from fellow students.”

– Richard Light, *Making the Most of College*, page 40

“Those students who study outside of class in small groups of four to six, even just once a week, benefit enormously. They each do the homework, independently, before they meet. Their meetings are organized around discussions of the homework. And as a result of their study group discussion they are far more engaged and far better prepared, and they learn significantly more.”

– Richard Light, *Making the Most of College*, page 52

“Students who extol the virtues of going over homework problems for chemistry in small working groups over dinner simultaneously point out that each of them still must demonstrate his or her learning individually... In the end, each student must show that he or she really does, as an individual, know the stuff.”

– Richard Light, *Making the Most of College*, page 53