

An Important Message Concerning Academic Success

*Prepared Especially for Cal Poly's New Students in the
College of Science and Mathematics*

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Welcome To This Very Special University!

On behalf of our faculty, staff, and students, welcome to Cal Poly. We are excited about our new students and want to do whatever we can to facilitate your transition to the university and your success as a student. You are about to begin your college career at one of the most selective and highly respected universities in the United States, a university with an established tradition of academic excellence and an impressive record of student success. You are now part of the Cal Poly community and this tradition of excellence. This booklet suggests ideas and strategies for approaching your academic responsibilities. Your success will depend on your attitude, motivation, and commitment.

We want you to be successful!

We want you to be a Cal Poly graduate!

Academic Expectations

***Tell me and I will forget,
Show me and I will remember,
Engage me and I will understand.***

A Lakota Sioux Saying

***I hear and I forget,
I see and I remember,
I do and I understand.***

A Chinese Proverb

It is important that you quickly develop an understanding of the academic expectations of the faculty and your responsibilities in the learning process. In a typical course, your instructor will organize a reasonable amount of material and suggest thought processes and strategies for you to use in learning. Your instructor will model creative and critical thinking, analytical reasoning, curiosity, and imagination and attempt to motivate and guide you in the learning process. Your responsibility is to truly master the material in a way that has exercised and expanded your mind. Realistically, an instructor's opportunities for teaching are limited to the first two lines of the Lakota Sioux and Chinese proverbs shown above, the show and tell part. You are responsible for the third line. Your instructor is an intellectual guide but cannot learn for you or be responsible for your learning. You are responsible for your learning. This is very important, very personal, and your deepest responsibility.

How Much Should You Study?

*You should
study at least
two hours per
week for every
unit of
coursework.*

**STUDY
25-35
HOURS/WEEK**

This is really important! One of the greatest challenges of a student entering college for the first time is realizing how much study time is needed.

If you are a first time freshmen, wouldn't you agree that college will be more challenging than high school and require a greater personal commitment? In high school you were in school five days a week, seven hours a day for a total of 35 hours per week. National studies show that high school students average less than five hours a week on homework. The total commitment is about 40 hours per week. In college you will be in class 15 to 20 hours a week. Across the nation, universities recommend that students study two hours per unit per week, or 25-35 hours per week. The total time commitment (class time and study) is quite reasonable, around 40-50 hours a week, very similar to a full-time job. But just like with a job, if you manage your time well, there is ample opportunity for other interests and activities.

Study to Learn: Avoid Superficiality

It takes time and commitment to learn.

Keep up with your school work. Don't cram for exams.

The key to success is to develop a deep and lasting understanding of course material rather than just a superficial familiarity. How do you know if you have accomplished this? Above all, don't fool yourself. Reading the book several times, seeing how someone else worked a problem, recopying class notes to improve legibility... these are not indicators that you have mastered the material or even become slightly familiar with it. You know when you understand something; you get a good feeling inside. It begins with "Aha", "Oh yeah", "I see it now" and culminates in an excitement of wanting to use the new knowledge or to tell someone else what you know. A sense of satisfaction, of accomplishment, of confidence, of ability to perform, a "feel" for the subject... these are indicators of successful learning and it takes time to experience them. To keep up with your coursework, work problems when they are assigned, write drafts of papers over a period of time, and prepare for exams, you need to **STUDY 25-35 HOURS/WEEK.**

Preparing for Exams

If you can talk about something, explain it to someone else, you probably know it. If you can't, you don't.

Test yourself. Don't let the instructor be the first to test your knowledge.

It is vitally important to prepare well for exams. Keep up with the material. You cannot effectively cram for exams the night before. Your instructor will expect more than a regurgitation of facts or writing based on superficial memorization of concepts you don't really understand. Work with the material a little at a time, read a textbook paragraph over and over until you understand it. Ask yourself questions as you read. Work problems and examples until you feel proficient. Mastery, understanding, an ability to think creatively and critically, and an appreciation of the subject are expected goals of the learning experience.

Don't assume you know something because you understood a lecture, or the textbook readings, or how a problem was worked in a solutions manual. There is a world of difference between hearing or seeing something and actually doing it. Imagine that you were required to explain a concept or work some problems in front of your class; you would prepare well for this as you would not want to be embarrassed. Keep this same personal pride in mind when you are studying for exams. If you can talk about something, apply it to problems and examples, teach it to someone else... you probably know it. If you can't do this you don't know it.

Test yourself; don't let your instructor be the first to test your knowledge. You can test yourself by making a topic outline and making sure you can explain in depth and with understanding the topics without referring to your notes or textbook. You can make a list of representative textbook problems and prove to yourself that you can work all types, one after another, without hints or assistance. You can always do more in studying, but, if you are honest with yourself, you will know when you have done enough.

Writing Papers and Reports

Ideas. Outline. Several drafts. Give yourself time to exert your creativity.

Allow yourself plenty of time for papers and reports so you can fully develop your topic and do several drafts before turning in the final copy. Do a lot of thinking at first. Write down your ideas; cluster the ideas into an outline; convert the outline into a rough draft; revise the draft until you are satisfied. Go for content, maturity in expression, excellent grammar, vocabulary and sentence structure, variety in sentence beginning, conciseness, and good paragraphing. Practice good written expression no matter what the class or assignment. Written communication is an essential skill that will be important throughout your life.

Study Environment

Maintain a safe and healthy lifestyle so you can be alert and receptive in your studying and learning.

You need to set aside blocks of quiet time for study during which you will be rested, alert, receptive, and truly committed to what you are doing. Keep distractions at a minimum -- noisy music, telephone or other conversations, food, day dreaming, interruptions by roommates. Become engrossed in your studying; learn to enjoy and respect it.

Avoid all-nighters. Be careful about going home on weekends or exhausting yourself with questionable activities. You will probably need a significant portion of one day for study. And remember the two hours per week of study per unit of coursework. This is a good rule of thumb but you need to allocate the time effectively. Some courses require more time than others.

Organize yourself. Don't miss assignments. Keep a calendar so you can remember your assignments, papers, and exams. File exams, returned assignments, topic outlines, supplementary problems, etc., in separate folders for each class.

Get to know a few people in each of your classes whom you can contact if you are unclear about something or have to miss class. Some people like to form study groups. This has been found to be effective if you prepare for group meetings so you can be a contributor as well as a receiver and if you can truly learn from the experience.

Your Curriculum and General Education

A university education: it is not training; it is education for life.

Your curriculum consists of three parts: (1) major and support courses, (2) general education and breadth courses, and (3) elective courses. All are important. Your ability to communicate effectively, to comprehend science and technology, to understand history and current political systems, and to appreciate the arts and literature will have an important impact on the quality of your life. We are trying to help you prepare for a career, not just a job, and to become a sensitive, thoughtful, and contributing member of society.

Are You Learning?

What you learn is not nearly important as the exercise your mind receives.

What you need to "know" will change throughout your life; lifelong learning will be essential. In college you are learning to learn, to appreciate learning, to accept responsibility for your intellectual development. The actual material you study is not as important as the exercise your mind receives and the deep appreciation for learning you cultivate. That is why it is so crucial that you avoid superficial memorization and go for true learning that will truly develop your mind. You owe it to yourself to develop an inquisitive mind, to maintain a healthy curiosity, to release your creativity, and to think critically.

How Important Is Your First Year at Cal Poly?

Nationwide, only about 50% of those who start college actually finish with a degree. The first year is crucial to your success.

Really important! In fact, your first term, even early in your first term, is very important in defining your eventual level of success. Nationwide, only a bit more than 50% of those who start college actually finish with a college degree. We do much better at Cal Poly but it is important to realize that graduation is not a given. In your first year you develop study habits, learn what learning is about, and take the courses that are the foundation for your major and degree. Sometimes new students get distracted with newly acquired independence, new surroundings, new friends, and opportunities for social activities. Some engage in destructive behaviors. At the end of the year some students have just started thinking about their goals, they are just beginning to understand the importance of studying, and they just “sort of” learned the material in their first-year core courses... this is not much of a foundation for the following year. Adjusting to a new living environment and making new friends is important; it is a part of going to college. Just make sure you don't forget why you are here. And be safe!

Get Advising, Graduate on Time

Got Advising?

*Advising Center
756-2615*

Except in a few of Cal Poly's five year programs, undergraduate degrees are designed to be completed in four years. You should set this as a goal and make sure you understand and follow the prescribed curriculum. We hope you take advantage of the various opportunities for advising. The College of Science and Mathematics has an Advising Center in Science North (Building 53) with professional staff advisors. You will also be assigned a faculty advisor. And as you pursue your studies you will probably find valuable mentors among the faculty and staff. There may be reasons for taking more than four years to earn your degree such as supporting your education through employment. However, whatever your path, be sure it is well planned so you are following your curriculum accurately and efficiently and graduate on time.

Getting Help

*Dean's Office
756-2226*

If you develop a problem, get help. Don't let it fester until irreparable damage is done. There are lots of offices and people you can approach. Among them are your instructors, your advisor, department staff members, department leaders, the college Advising Center, Academic Skills Center, the dean's office, the Counseling Center, and the Health Center. Be direct and expressive so the person you are talking to realizes the seriousness of your problem.

The faculty is here for you. Take advantage of your instructor's office hours. Seek out a faculty member who can be an intellectual mentor, advisor, or friend. Close association with the faculty will greatly enhance your college experience.

Thanks for reading this. Think about your strategies for success now so you can get off to a good start. Your first year, actually your first quarter is the most important.

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