

May 2023

1st – Common reply deadline for college enrollment

6th—SAT

AP exams

IB exams

Juniors – work on resume and college list

June 2023

June 3rd—SAT

June 10th—ACT

Seniors – thank teachers and others who helped you
thank scholarship providers
have your final transcript sent to your college

Studying Abroad—Freshman Year or Later

The opportunity to live and study in a foreign country is seen by students and parents alike as not just a fun part of college, but necessary preparation for working in a global economy. In fact, study abroad is considered so valuable that a few colleges actually require students to go abroad before graduating. Students can also do internships abroad to meet this requirement. In addition to semester or year-long programs, students can choose a three or four week intensive study abroad experience, generally offered in January or May. Some of these programs include coursework before or after the trip, which helps students integrate classroom learning with real world experience.

In the past, students would spend junior year abroad, often studying the language of the country they were visiting. The trend today is for shorter stays, with courses offered in English. Semester and summer programs have become very popular. At colleges that have a one month January term, professors may take a group of students to study theater in London or to study the rainforest in Latin America. One advantage of the short-term programs is that students can go on several study abroad trips while in college. Students who are studying engineering or preparing for medical school also may find the short-term programs easier to incorporate into their curriculum. The disadvantage of a brief study abroad program is you miss out on the total immersion in a culture that is only possible when you live in a country for an extended time.

Britain has long been a popular choice for study abroad as there is no language barrier. Australia also attracts many American students who want to spend a semester

abroad for this reason, as well as the fact that the seasons are reversed, and students can enjoy beach weather in January.

Study abroad programs are often designed so students will have time to explore their host countries, with classes held only four days a week.

Study abroad is now available as early as freshman year. Increasingly, colleges are utilizing freshman year study abroad programs as a way to manage enrollment. At schools such as NYU, USC, Northeastern and others, some applicants may be offered spring admission as well as the opportunity to complete their fall semester by studying abroad at a designated campus. In some cases, students complete their entire freshman year abroad. Students who opt in to these programs generally report very favorable experiences.

The freshmen study abroad programs can provide smaller classes, closer relationships with faculty and a stronger sense of community than students find on the large home campus of these schools. But there are some potential drawbacks. While students who start their college career abroad become more independent and bring a broader perspective to their studies when they move on to their U.S. school, they do miss out on some of the traditional first year campus experiences, and may feel a little out of place when they arrive on campus as sophomores. Students who have never spent time away from home may find it challenging not to be able to come home for a weekend or for Thanksgiving. They need to be mature enough to handle the lack of supervision and availability of alcohol.

Whether students go as freshmen or later in their college career, studying abroad can be a valuable part of the college experience.

Career Paths for Molecular Biology Majors

- Molecular Biologist
- Microbiologist
- Geneticist
- Environmental Technician/
Consultant
- Biomedical Researcher
- Research Scientist
- Professor/Teacher
- Toxicologist
- Pharmaceutical Sales Repre-
sentative
- Scientific Editor
- Technical Writer
- Laboratory Technician
- Product Safety Manager
- Patent Lawyer
- Bioinformatics Technician
- Nutrition Educator
- Clinical Diagnostics Specialist
- Crop Improvement Consultant
- Business Manager
- Scientific Supply Representa-
tive
- Veterinarian



Focus on Majors: Molecular Biology

Molecular biology is the study of biology at the molecular level. It focuses on the structure and function of the molecules that form the basis of life. Molecular biologists explore cells, their characteristics and parts, chemical processes, and how molecules control cellular activity and growth. They frequently focus on certain types of molecules or work to define the biological processes that cause genetic defects.

Majoring in this field prepares students for a wide range of careers in scientific research, medicine, bioengineering, and biotechnology. It is important to note that there will be a high demand for science and engineering jobs in the future. Government agencies such as the EPA, the NIH, and the U.S. Food and Drug Administration hire graduates to work in research, analyze samples of food, air, water, and drugs, and head programs that review the safety of new medical devices, foods, and drugs. In the field of biotechnology, molecular biologists work to improve therapies, vaccines, drugs, and medical diagnostic testing. They assist in the design of environmental biotechnological products, which are used to clean up hazardous waste. They also work in quality control, manufacturing, production, and information systems.

Jobs are also available in education. Chemistry and biology teachers are currently in demand at both the junior high and high school levels. With a doctoral degree, students can become university professors. Professors perform research in laboratories and write up the results of their research findings. They also spend time writing grant proposals to support their research and teaching efforts. In the field of agriculture, molecular biology graduates work to create more disease re-

sistant genetically-engineered crops. In the pharmaceutical industry, jobs are available in the design and manufacturing of drugs and vaccines. Other employment options include writing and reporting on scientific policy, biological and medical illustration, and forensic science.

While specific coursework varies among colleges, students planning on majoring in molecular biology can expect to take classes in chemistry, biochemistry, genetics, molecular biology, cell biology, biostatistics, physics, and mathematics. It is important to note that some college programs focus on preparing students for medical school while others prepare students for careers in the biotechnology industry. Decide which path you prefer and pick a college that is consistent with your career plans. Students should be ready to record and analyze data using computers, perform research and laboratory work, attend lectures, and work cooperatively with other students. To enhance job prospects, it is recommended that students spend an additional year at a college that offers training programs for specialized lab techniques, such as cell culture and DNA sequencing and synthesis. This is often known as a “certificate program”, and can give students the added research experience that is crucial to finding jobs in their field.

For more information, visit the website of the American Society for Biochemistry and Molecular Biology at www.asbmb.org. This organization publishes scientific journals and supports research funding and education. To see job listings and read about current events, another helpful website is www.cellbio.com, the Cell and Molecular Biology Online informational resource.

Financial Matters: Cutting the Cost of College



As financial aid packages arrive, families are faced with just how much college will cost. At many schools, self-help is up and gift aid is down. That means that colleges are offering less in the way of tuition discounts or grants, and expect families to assume a greater part of the college financial burden. Parents may pay expenses from savings and wages, students through part-time employment, and both parents and student may meet some expenses through educational loans. No wonder families are eager to find ways to cut college costs. Here are some ideas:

- Plan to graduate from college on-time or even early. In order to earn a bachelor's degree in four years, students need to choose appropriate classes and stick with them. Dropping a class may leave you with too few credits and lengthen the time required to earn your bachelor's degree. Changing majors or double-majoring may also add to the length of your stay at the school. The net effect: increased cost and lost wages.
- Get a jump on credits through AP or IB classes or CLEP exams. Passing scores on AP exams taken in high school may lead to college credit, while high scores on the College Level Examination Program can shorten the time you need to earn your degree. Check out www.collegeboard.org for a list of schools that award credit through CLEP exams.
- Consider taking some of your credits at a nearby community college during

summer breaks. Community college classes are generally less expensive per credit. Make sure that they'll be accepted by your college before registering for outside courses.

- Get a job. Part-time employment (aim for a maximum of 10-12 hours/week) provides extra structure to the college student's day and provides money to meet college expenses. Students who qualify for work-study programs may find on-campus employment that fits well within the student's class and study schedule.
- After freshman year, consider applying to be an RA (Resident Assistant). Resident Assistants help to develop community among dorm residents and counsel students regarding problems or concerns. In return, the RA generally receives free room and board.
- Buy used books whenever possible or explore digital options.

Maximizing Your Summer Break

Summer provides the best opportunity for future college applicants to separate themselves from the pack. As the number of students applying to colleges continues its upward trajectory, so too does the need for students to make an effort to distinguish themselves.

So how do you get noticed? Doing something meaningful over the summer is one of the most effective ways to stand out. You don't need to travel the world or cure cancer, but it is important to make sure that whatever experience you choose is substantive. This is a great time for some self-reflection and to identify potential academic and professional aspirations.

Summer is more than a break from homework, tests and the drama of high

school relationships; it is an opportunity for students to delve a little deeper into their academic or extracurricular interests. Some suggestions:

Get a taste of college - Close to home: Private schools and community colleges offer a variety of remedial and advanced classes during the summer. Students can take a prerequisite for a higher-level course or find a class not offered at their high school.
Resources: Online classes for credit: Check out The Virtual High School, (www.vhslearning.org), a non-profit organization dedicated to online education, which offers 24 AP courses as well as dozens of other classes. Many states also offer online high school classes. Be sure to check with your school counselor to make certain your

high school accepts credit for these classes before you sign up and confirm how it will appear on your final high school transcript.

Get a taste of college - Far away: There are two options if you'd like to spend some time checking out a college by test-driving their academics, staying in the dormitories, eating in the cafeteria and hanging out on campus: Pre-college academic programs – students can study and earn college credits on hundreds of campuses nationwide.
Pre-college enrichment courses – these are special interest courses lasting typically 1-3 weeks.
Resources: Check out a college's programs by going to their home page and typing "pre-college" or "summer programs" in their search box.



Elizabeth Levine

**liz@SignatureCollege
Counseling.com**

845.551.6946

**www.SignatureCollege
Counseling.com**

Colleges That Change Lives

A 4.2 GPA student should be successful at any college, but when a college routinely admits B students and transforms them into high-achieving, confident college students, that school is having more of an impact than a highly ranked college that only admits top students.

If you are immersed in the college search process, you may have heard about *Colleges That Change Lives*, a book profiling 40 schools located around the country that offer very different programs but share a commitment to the undergraduate experience.

While most of the CTCL schools are small, private liberal arts colleges, Evergreen State College is a public school with over four thousand undergraduates. The wooded, waterfront campus in Olympia is less than an hour from Seattle. But what really distinguishes Evergreen is the unique interdisciplinary curriculum. Instead of taking four or five classes at a time, students sign up for one program, which is usually team-taught by several professors from different fields. Programs often include field projects, internships or travel, which are easy to schedule since students don't have other classes. Rather than picking a major, students create their own course of study, in consultation with professors who get to know them well. Students receive narrative evaluations of their work instead of grades, although grades can be provided if necessary for graduate school applications.

While a number of CTCL schools, such as

Hampshire College, allow students tremendous freedom to create an individualized course of study, St. Johns College has a mandated curriculum. There are no majors and no course choices. Students spend their four years reading and discussing the great books of western civilization, and everyone studies Greek and French, as well as four years of math and three years of science.

Students looking for a more traditional curriculum might like Eckerd College, which has a waterfront campus in Florida, and offers a nice selection of liberal arts majors as well as terrific marine science programs.

If you want a beautiful campus with trees but need to be near a major city, Goucher College, just outside Baltimore, offers the best of both. You will also be seeing the world beyond campus as Goucher requires all students to study abroad.

Most of the CTCL schools are not super selective when it comes to admission, but that doesn't mean you won't work hard to earn a degree. Some of the schools require students to complete a major research paper, similar to a master's level thesis. It's no surprise that so many graduates of CTCL schools go on to earn Ph.D.s.

In addition to offering small classes and nurturing faculty, many of the CTCL schools also offer merit scholarships, making these colleges a real bargain for strong students. Learn more about Colleges That Change Lives at: www.ctcl.org