# College of Natural Resources

# Introduction to the College

UC Berkeley's College of Natural Resources (CNR) studies how all aspects of the environment intersect and support each other in order to do more in the world and do it wisely. At CNR, students and faculty study natural and human systems from biological, ecological, economic, and social sciences perspectives. They engage the issues that shape the complex, interconnected world of the 21<sup>st</sup> century, from sustainable food systems to obesity, from water policy to energy policy, and from the farreaching impacts of climate change to the linkages between the human genome, diet, and disease.

Providing a small-college experience at the world's greatest public university, CNR combines hands-on experience with a rigorous education. The College give students a solid foundation and big-picture perspective that informs and inspires them after they leave the campus.

Explore majors and minors (http://guide.berkeley.edu/archive/2014-15/undergraduate/degree-programs/?filter\_5=true) available through the College of Natural Resources.

All students in the College of Natural Resources are required to complete the University requirements of American Cultures, American History and Institutions, Entry-Level Writing, and the College requirement of Reading and Composition. In addition, they must fulfill the following College requirements:

# **University of California Requirements**

Entry Level Writing (http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/natural-resources/entry-level-writing-requirement)

All students who will enter the University of California as freshmen must demonstrate their command of the English language by fulfilling the Entry Level Writing Requirement. Fulfillment of this requirement is also a prerequisite to enrollment in all reading and composition courses at UC Berkeley.

American History and American Institutions (http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/natural-resources/american-history-institutions-requirement)

The American History and Institutions requirements are based on the principle that a U.S. resident graduated from an American university should have an understanding of the history and governmental institutions of the United States.

## **Campus Requirement**

American Cultures (http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/natural-resources/american-cultures-requirement)

American Cultures (AC) is the one requirement that all undergraduate students at UC Berkeley need to take and pass in order to graduate. The requirement offers an exciting intellectual environment centered on the study of race, ethnicity and culture in the United States. AC courses offer

students opportunities to be part of research-led, highly accomplished teaching environments, grappling with the complexity of American Culture.

## **College Requirements**

Quantitative Reasoning (http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/natural-resources/quantitative-reasoning-requirement)

The Quantitative Reasoning requirement is designed to ensure that students graduate with basic understanding and competency in math, statistics, or computer science. The requirement may be satisfied by exam or by taking an approved course.

Foreign Language (http://guide.berkeley.edu/archive/2014-15/ undergraduate/colleges-schools/natural-resources/foreign-languagerequirement)

The Foreign Language requirement may be satisfied by demonstrating proficiency in reading comprehension, writing, and conversation in a foreign language equivalent to the second semester college level, either by passing an exam or by completing approved course work.

Reading and Composition (http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/natural-resources/reading-composition-requirement)

In order to provide a solid foundation in reading, writing and critical thinking the College requires two semesters of lower division work in composition. Students must complete a first-level reading and composition course by the end of their second semester and a second-level course by the end of their fourth semester.

#### **Breadth Requirements**

The undergraduate breadth requirements provide Berkeley students with a rich and varied educational experience outside of their major program. As the foundation of a liberal arts education, breadth courses give students a view into the intellectual life of the University while introducing them to a multitude of perspectives and approaches to research and scholarship. Engaging students in new disciplines and with peers from other majors, the breadth experience strengthens interdisciplinary connections and context that prepares Berkeley graduates to understand and solve the complex issues of their day.

Additionally, the College requires that of the 120 units required for graduation, at least 36 units must be upper division courses, including a minimum of 15 units of upper division courses in the College of Natural Resources. No more than 4 units may be in activities courses in Physical Education. Each student must attain at least a C average in all upper division courses required of the major program.

CNR students may apply high school exam credit (Advanced Placement, International Baccalaureate, A-Level Exam) towards many College and Major Requirements. See AP Exam Equivalency Chart and Higher Level IB Exam Equivalency Chart in the CNR Student Handbook (http://nature.berkeley.edu/site/forms/oisa/undergrad\_handbook.pdf) for more information.

Content TBD

The Office of Instruction and Student Affairs (OISA) is the center for all academic related matters within the College of Natural Resources (CNR). Professional academic advisors partner with students to identify campus and community resources to support student success. Services offered by advisors range from major exploration, short-term and long-term program planning to enrichment opportunities, career exploration and personal goals and discovery. Students are highly encouraged to actively engage their academic advisors as they are experts in the College, major requirements, and policies. Advisors are dedicated to meeting the needs of the students and respect each student as a unique individual. Advisors also connect students to faculty to make the most of their undergraduate experience. All CNR students are assigned advisors based on their majors.

### **Advising Staff**

See page 7 of the Student Handbook. (http://nature.berkeley.edu/site/forms/oisa/undergraduate\_handbook.pdf)

### **Faculty Advisors**

Faculty advisors are CNR faculty assigned to advise students about a particular major of field to discuss majors, courses, research, and other academic issues. Students are often assigned a faculty advisor when they declare a major depending on departmental requirements. Students should see their faculty advisors in order to receive guidance toward achieving academic and career goals, ask questions about the content of courses and research in their respective field, and discuss interest in graduate school. Faculty advisors are not aware of all college policy and campus requirements, so students should rely on their major advisor for this sort of advising.

# Peer Advising Leadership (PAL) Program

The work of peer advisors is integral to the success of their fellow CNR undergraduates. Peer advisors are trained in understanding CNR and University requirements, policies, and procedures. They help with CNR recruitment and enrichment programs. Peer advisors work at information tables in the residence halls, participate in the CNR Welcome Day Program, Cal Day, and CalSO, and assist CNR Student Affairs staff with various other outreach programs. They also design and manage their own college-wide advising projects. Most importantly, they introduce their fellow students to a wide variety of campus services and resources.

# **Undergraduate Research**

The goal is for every undergraduate to get involved in some aspect of research before graduating from UC Berkeley. Although the campus offers research opportunities through Independent Study units (99/199) and the Undergraduate Research Apprenticeship Program (URAP), The College of Natural Resources offers numerous opportunities for students to design an independent research project or to contribute to an ongoing research project with faculty. Through research experience, students can expect to be mentored by a professor and gain the hands-on laboratory or field research skills that will complement what they are learning in the

# **Sponsored Projects for Undergraduate Research** (SPUR)

The CNR Sponsored Projects for Undergraduate Research Program (SPUR) encourages faculty and undergraduate students in CNR to collaborate on research projects by providing a grant to support their joint project. The funding for this program is generously donated by CNR

alumni. Participating in SPUR is an excellent way to gain experience in research and build relationships with faculty. Research opportunities are available at the beginning of each semester. Visit the Office of Instruction and Student Affairs or the SPUR website (http://cnr.berkeley.edu/site/spur.php) for more information.

# **The CNR Honors Program**

The College of Natural Resources Honors Program is designed to support undergraduate students interested in developing, executing, and evaluating a year-long independent research project under the guidance of a CNR faculty mentor. Students who successfully complete the CNR Honors Program will receive a notation of honors in their major. The CNR Honors Symposium, held once each semester, gives all honors students the opportunity to present their research to fellow students, faculty, deans, staff, friends, and family. For more information, visit Honors Program website (http://cnr.berkeley.edu/site/honors\_program.php) .

## **CNR-BSP Summer Research Program**

The CNR-BSP internship provides opportunities for students in the Biology Scholars Program (BSP) (http://bsp.berkeley.edu) to conduct research in the laboratories of selected CNR faculty during the summer (10 weeks). Students are matched with faculty based on mutual interest and are mentored by faculty, post-doctorates, and graduate students who are committed to mentoring young scientists. Students will meet biweekly with CNR staff and also attend faculty seminars and workshops with our summer undergraduate researchers. Interns also develop their leadership and communication skills by organizing and presenting at the annual BSP Summer Undergraduate Research Symposium. Students received a stipend of \$4000 and a \$300 supply allowance.

# **CNR Undergraduate Research Poster Sessions**

The Office of Instruction and Student Affairs sponsors a poster session each spring where CNR undergraduates present their research. Poster sessions give students the opportunity to explain and showcase their independent projects to a large audience. Other benefits of participating in a poster session include gaining communication and presentation skills and learning to summarize research, which is an integral part of scholarship. Students will receive recognition for their hard work on a research project and will have the chance to discuss their project with others who share their interests. Every participant is rewarded with a Certificate of Participation, and select presenters are also awarded prizes. The experience is one that students can add to their professional resume.

#### **Study Abroad and Field Programs**

CNR encourages students to add an international dimension to their education by participating in a study abroad program. Study abroad provides an opportunity to expand academic and cultural experiences while staying on track to complete major requirements. With proper academic planning, students can have the experience of a lifetime with no loss of time in completing their degrees.

There are over 100 different program options in more than 40 different countries offered by the UC Education Abroad Program. Students may be able to count some of the courses abroad towards their major requirements. The Berkeley Study Abroad office, located in 160 Stephens Hall, has connections to programs around the world specific to the social, environmental, and biological sciences. In addition, CNR sponsors the following two off-campus programs designed for undergraduates:

# Biology and Geomorphology of Tropical Islands

The Richard B. Gump South Pacific Research Station is located on Moorea Island in French Polynesia. Students attending classes on Moorea study subjects ranging from biology to archaeology with UC Berkeley professors. Studying for a semester at Moorea adds great field experience to the undergraduate career. This program is only offered in fall semesters. Information is available online (http://ib.berkeley.edu/moorea/Information.html).

# **Forestry Summer Field Program**

The UC Berkeley Forestry Summer Field Program is offered by CNR's Department of Environmental Science, Policy, and Management, and is an eight-week summer program consisting of four courses. The camp is located in the California Sierra Nevada. The overall goal of the Summer Field Program is to provide an introduction to the scientific and professional dimensions of forest and wildland resource management. Students participating in the program learn about ecology, forest, range and wildlife management, measurements, forest operations, and products. At the end of the program, students will have a broad, working knowledge of concepts and techniques used by wildland resource managers. The experience of studying these topics in a field setting inevitably enriches students' subsequent on-campus academic studies. Information is available online (http://nature.berkeley.edu/espm\_oldsite/summercamp).

#### **Student Resources**

#### **CNR Student Resource Center**

The Student Resource Center (http://cnr.berkeley.edu/site/resource\_center.php), located in 260 Mulford Hall, is a physical hub designed to foster academic, educational, and social activity and to provide a supportive environment for daily student life. By providing a wide range of materials pertaining to major/minor and departmental program information, jobs and internships, and graduate programs, and also serving as a central location to hold various programs that support CNR's standards of education, the Resource Center exists to build community for students, staff, and faculty alike.

#### **Facilities and Amenities**

#### Computer Lab

- Computing: Ten Dell PCs with internet capability and standard software: MSOffice, Adobe Acrobat Reader, standard web browsers.
- AirBears: The Resource Center is wired for AirBears.
- Printing: Printing is free CNR undergraduate students are allowed 10 pages of free printing every day. Student accounts are automatically renewed at the beginning of each semester. Please see the front desk assistant in 260 Mulford Hall to set up a printing account if the account does not work.

#### Study Space and Lounge Area

- The lounge area: Comfy couches for everyone's enjoyment.
- Study tables and desks: Huge study tables and chairs dominate half the center, offering a large amount of work space.
- Melvin the Tree: Had a bad day in class? Come tell Melvin, the Resource Center's happy tree. He adds life and a little greenery to the already pleasant atmosphere.

### **Course Preparation**

Chem P: In collaboration with the Student Learning Center (SLC) (http://slc.berkeley.edu), students in CNR are able to receive two units of credit for taking Chem P. Chem P is a course taught by the SLC in the fall semester designed to prepare students to take CHEM 1A General Chemistry the following semester. A number of incoming freshmen choose to take Chem P as a refresher course in their first semester.

Study Group for CHEM 3A Chemical Structure and Reactivity: In collaboration with the SLC, a specific study group has been designed for CNR students through the SLC that places a special emphasis on choosing examples and problems that both illustrate the material being learned in CHEM 3A Chemical Structure and Reactivity and how the topics are applicable to CNR majors.