INTRODUCTION TO THE MAJOR

The Molecular Environmental Biology (MEB) major introduces students to the organization and function of biological organisms at the molecular, cellular, organismal, and ecological levels. Students learn how to apply biological principles to understand how organisms function in their environment.

MEB graduates acquire a broad foundation across a breadth of biological core areas, which gives them especially valuable scientific training. A classic pre-medical or pre-health science major, MEB prepares students well for graduate education in pre-health fields and in biological research, as well as a variety of careers related to biology and the environment.

STRUCTURE OF THE MEB MAJOR

The lower division coursework provides a strong foundation in biological principles, and the upper division areas introduce students to the organization and function of biological organisms at the molecular, cellular, organismal, and ecological levels.

The major also offers specialization through six Areas of Concentration: 1) animal health and behavior, 2) biodiversity, 3) ecology, 4) environmental and human health, 5) insect biology, and 6) global change biology.

AMPLIFY YOUR MAJOR

- Apply to the Sponsored Project for Undergraduate Research (SPUR) program to pursue joint research with a faculty member.
- Conduct field research in French Polynesia through the Moorea program.
- Present your research at a Rausser College-sponsored Poster Session.

HOW TO USE THIS MAP

Use this map to help plan and guide your experience at UC Berkeley, including academic, co-curricular, and discovery opportunities. Everyone’s Berkeley experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

Molecular Environmental Biology is a fantastic way to get a taste of everything Cal has to offer in terms of biology. Animals, insects, microbes, plants—you name it.

― Jonathan Huang, MEB student
MOLECULAR ENVIRONMENTAL BIOLOGY
Bachelor of Science

**FIRST YEAR**
- **Explore your major**
  - Familiarize yourself with MEB major requirements.
  - Meet with the MEB undergraduate advisor and sketch out a four-year plan.
  - Enroll in a Freshman Seminar or DeCal.
  - Consider taking some lower division courses over the summer.

- **Connect and build community**
  - Take advantage of the Student Resource Center.
  - Get involved with one of the many student groups at Rausser College.
  - Get to mentoring from graduate students with Berkeley Connect.

- **Discover your passions**
  - Apply for a research position through the SPUR program.
  - Visit the Office of Undergraduate Research and Scholarships to learn about student programs and resources.
  - Explore the Berkeley Natural History Museums.

- **Engage locally and globally**
  - Learn about service and leadership opportunities with the Public Service Center and LEAD Center.
  - Explore study abroad options with Berkeley Study Abroad.

- **Reflect and plan your future**
  - Explore the resources at Berkeley Career Engagement.
  - Join Handshake to find Berkeley-specific career opportunities and workshops.
  - Create a LinkedIn profile and resume.
  - Connect with alumni through the Career Connection Series and Cal Alumni.

**SECOND YEAR**
- **Explore your major**
  - Consider adding a minor or a summer minor.
  - Review the college’s guidelines for study abroad.
  - Finish the majority of your lower division courses.

- **Connect and build community**
  - Get to know the college’s peer advisors.
  - Attend Student Environmental Resource Center meetings to engage with sustainability issues on campus.
  - Get to know professors and graduate student instructors during their office hours.

- **Discover your passions**
  - Apply for a new SPUR project or the Undergraduate Research Apprenticeship Program.
  - Go to faculty office hours to learn about their research and opportunities for collaboration.
  - Consider applying to NSF REU Programs.
  - Follow a Course Thread of your interest.

- **Engage locally and globally**
  - Go to events and seminars held on campus to learn about current research.
  - Look into study abroad programs if you are interested in conducting field work abroad.
  - Apply for internships or shadowing opportunities.

- **Reflect and plan your future**
  - Check out the MEB Career Snapshot for information about career options.
  - Conduct informational interviews with people in careers you are curious about.
  - Take advantage of career and pre-health advising for Rausser College students.

**THIRD YEAR**
- **Explore your major**
  - Choose an emphasis in MEB and enroll in related courses - some classes count in several emphases.
  - Start with Area B classes - they are generally easier than Area A classes.
  - Begin Area A courses. Pre-Health students should enroll in MCB 102.

- **Connect and build community**
  - Help other students as a Rausser College Peer Advisor.
  - Network with faculty and graduate student instructors to find a mentor who is conducting research on a topic that interests you.

- **Discover your passions**
  - If eligible, apply to the Rausser College Honors Program to pursue a year-long independent research project under the guidance of a faculty member.
  - Apply for funding in order to initiate your own project through SPUR.

- **Engage locally and globally**
  - Apply for a Rausser College Travel Grant to fund travel for academic conferences or research.
  - If interested in environmental policy, look into UCDC in Washington, D.C.
  - Consider the Alternative Breaks program to go on service trips over spring or winter break.

- **Reflect and plan your future**
  - Applying to grad school? Take GRE/MCAT/DAT over the summer and start asking for recommendation letters.
  - Research potential graduate programs.
  - Attend STEM-focused career fair.

**FOURTH YEAR**
- **Explore your major**
  - Gain hands-on skills with courses in Statistics or field biology.
  - Connect your major to career opportunities focusing on areas of concentration within your major.

- **Connect and build community**
  - Reach out to graduate students who can offer guidance about post-graduation opportunities and serve as mentors.
  - Become a Golden Bear Orientation Leader and welcome new students to UC Berkeley.

- **Discover your passions**
  - Complete any “bucket list” courses that you still wish to take.
  - Consider submitting to the Berkeley Scientific Poster session.
  - Teach your own DeCal course.

- **Engage locally and globally**
  - Attend a conference such as the Clinton Global Initiative: University Conference. Look into travel grants from by college and ASUC.
  - Look at fellowship and gap year opportunities.

- **Reflect and plan your future**
  - Attend Employer Information Sessions and On-Campus Recruitment.
  - Utilize job board tools in your job search.
  - Explore TAMU and ECOLOG for jobs.
  - Look into the centralized SOPHAS grad school application for public health.

**WHAT CAN I DO WITH MY MAJOR?**
- Jobs and Employers
  - Dentistry
  - Ecology
  - Education
  - Entomology
  - Medicine
  - Molecular Biology
  - Nursing
  - Optometry
  - Physician Assistant
  - Public Health
  - Toxicology
  - Veterinary Medicine
  - Zoology

Examples gathered from the First Destination Survey of recent Berkeley graduates.

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Updated: 11.03.23