



Department of Toxic Substances
Control
Berkeley Center for Green Chemistry

Green Chemistry in Higher Education Symposium

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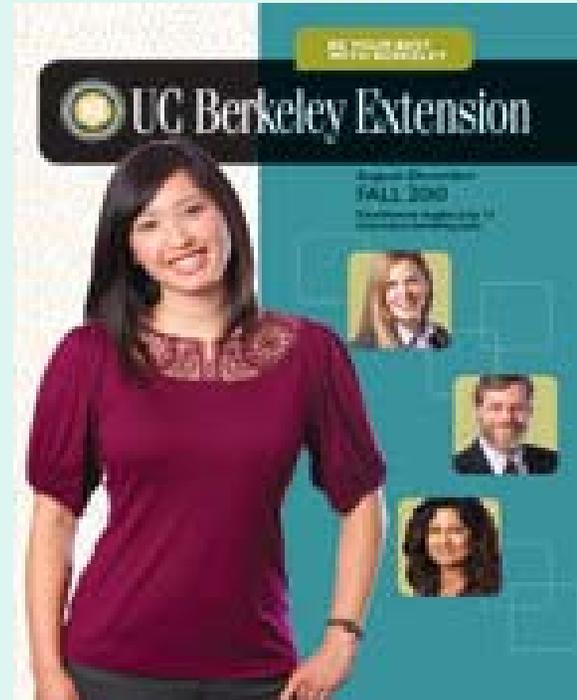
University of California's Mission

- Teaching
- Research
- Public Service



Overview of UC Berkeley Extension

- Our Mission
- Our Students
- Our Reach
- Key Public Benefits



Our Mission

- Build bridges between UC Berkeley and the public
- Extend the resources and scholarship of UC Berkeley
- Increase access to Berkeley-quality higher education
- Expand the influence of faculty research
- Improve the workforce
- Build the local and global community

Our Students

- Professional working adults
- Focused, engaged, and motivated
- Career changers and career advancers
- Lifelong learners and personal enrichment seekers
- Over 92% have a bachelor's degree
- Over 38% have a graduate degree



Our Reach

- Art, Sciences, Business and Management, Computer Technology, Engineering, Humanities, Education, Post-Baccalaureate Health Professions and Sustainability Studies
- Online and onsite
- Berkeley, San Francisco and Redwood City
- 1400 courses annually
- 29,000 enrollments annually

Key Public Benefits

- Supporting economic development
- Disseminating research and facilitating technology transfer
- Providing access to higher education
- Complementing the University's mission of research, teaching and public service



Sustainability Studies at Extension

- Essentials of Green Chemistry
- Smart Grid Technology
- Solar Energy and Green Building
- Sustainability and Energy
- Sustainability and Transportation
- Sustainable Design
- Corporate Social Responsibility Reporting
- Responsible Global Change Management
- Leadership in Sustainability and Environmental Management



Sciences and Mathematics at Extension

- Essentials of Green Chemistry
- Clinical Research Conduct and Management
- Post-Baccalaureate Health Professions Program
- Biomedical Sciences
- Regulatory Affairs
- Biopharmaceutical Business
- Project Management for Biopharmaceuticals
- Quality and Compliance for Biotechnology
- Bioscience Supply Chain and Manufacturing
- Biopharmaceutical Product and Process Development



Green Chemistry at UC Berkeley Extension

- New! Essentials of Green Chemistry Certificate
 - Overview
 - Required Courses
 - Elective Courses
 - Curriculum Requirements
 - Value of a Professional Certificate



Overview

- Developed in association with UC Berkeley
- Trains professionals in chemistry, engineering, public policy, toxicology, and business so that they can work collaboratively with green chemistry colleagues in the U.S. and beyond
- Has flexible courses—including online, weekend, and evening options—to accommodate work-life demands.



Who Will Benefit

- Environmental Mangers
- Sustainability Consultants
- Health Professionals
- Product Designers
- Engineers
- Chemists
- Biologists
- Product Managers
- Material Scientists
- Project Managers
- Decision Makers in Business, Government, and NGOs
- Career Changers



Required Courses

- Principles of Green Chemistry
- Decision Making in Comparative Risk Assessment
- Green Chemistry and Chemicals Policy
- Alternatives Assessment: Chemicals, Materials, Products and Processes
- Business and Financial Planning for Green Chemistry Innovation
- Current Topics in Green Chemistry

Elective Courses

- Physiology
- Developmental Biology
- Immunology
- Endocrinology
- Epigenetics
- Biology of Cancer
- Neurobiology
- Genetics
- General Chemistry
- Organic Chemistry
- Statistics
- Bioethics
- Nanotechnology
- Contemporary Environmental Issues
- Sustainability Leadership
- Greening Your Supply Chain
- Implementing Sustainable Change



Curriculum Requirements

- The curriculum consists of 5 required courses (10 semester units) and a varied number of elective courses for a minimum of 14 semester units (210 hours of instruction).
- All students are required to take Principles of Green Chemistry, then any four of the five remaining required courses.
- All coursework must be completed within five years of registering for the certificate.
- Total cost is approximately \$3800 depending on choice of electives.



Value of a Professional Certificate

- UC Berkeley Extension is a respected provider of adult and professional education.
- The University of California, Berkeley, is accredited by the Western Association of Schools and Colleges (WASC). UC Berkeley Extension—like all other UC Berkeley schools, colleges, and departments—is accredited by WASC through the University.
- Fulfilling the requirements for a professional certificate reflects the successful completion of a high-caliber, in-depth sequence sequence of courses.
- Critical for both career changes and career enhancers.
- Provides academic credit including official transcripts with grades.
- Many employers will reimburse their employees for the cost of academic courses within professional certificates.



Goals for 2010/2011 Academic Year

- Promotion of certificate program
- Finish building online courses
- Approval as a diploma program for international students
- Collaborations
- Public Programs
 - Green Chemistry in the Biopharmaceutical Industry-September
 - Berkeley Cue
 - Experimental Man-November
 - David Duncan
 - Advancing the Green Economy-March
 - Jon Gelbard

Learn More

- Extension.berkeley.edu/cert/greenchem.html
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