January–June
SPRING 2012
Enrollment opens
December 5
extension.berkeley.edu

Meet JOHN NEPOMUCENO,
Designated Subjects Career Technical Education
Teaching Credential Student, on p. 2.
Meet our other cover students throughout the catalog.
Get started with a free information session

Discover how UC Berkeley Extension can help you achieve your goals. Learn more about programs. Get to know instructors. Meet your fellow students. Ask questions. Visit extension.berkeley.edu/infosessions.

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Welcome from the Dean

Extension Is Here for You

UC Berkeley Extension has been educating adults in the Bay Area for 120 years. Much has changed in that time. One thing, however, has always remained a constant at UC Berkeley Extension: our commitment to providing a Berkeley-quality education to lifelong learners and those looking to change or advance their careers.

We serve the professional continuing education goals of our students, with more than 30,000 enrollments each year. Our reach has grown to include not only Berkeley and the Bay Area but also a global community of students—from the young adults who come to our International Diploma Programs to the audience that embraces our innovative online offerings.

Extension offers 80 professional certificates and specialized programs of study, including courses for corporate clients, business programs for international students, and online certificates and programs for distant learners. For post-baccalaureate students, Extension offers graduate- and professional-school preparation programs. Extension also offers college-prep programs for high school students.

What’s more, there is no formal application process for most of our programs. A majority of our courses are available to the general public as part of our mission to extend the research and scholarship of UC Berkeley worldwide, to increase access to higher education, to contribute to the global information economy, to improve the workforce and to enrich the local community.

You can see evidence of this in the student profiles throughout this catalog. Our students are motivated learners from a variety of backgrounds. We hope you gain inspiration from their success stories, and we look forward to welcoming you to the UC Berkeley Extension community.

Diana Wu, Ed.D.
Dean, UC Berkeley Extension
For high school English teacher John Nepomuceno, summer break isn’t a break at all—it’s an opportunity for career advancement. Nepomuceno already holds a bachelor’s in sociology and a master’s in education, both from UC Berkeley. But thanks to the urging of the Oakland Unified School District and his annual summer break from teaching, he can now add the Designated Subjects Career Technical Education Teaching Credential to his credit. More important, Nepomuceno can use that credential in the classroom at East Oakland’s Mandela Law and Public Service Academy of the Fremont Federation of High Schools.

In his Social Justice and Advocacy class, which prepares students to become professionals, Nepomuceno’s end goal is to make a difference in students’ lives. “The kids in East Oakland need it—it’s rough out there,” he says. Thanks to ideas and advice from classmates and instructors in the program, Nepomuceno is better prepared to break through to his students. “One of the things that really touched me was the level of experience and wealth of information you can get from your peers,” he says.

Nepomuceno notes the Career Technical Education Foundations course, with group discussions fueled by instructor Vicki Pontius, as especially enriching. “High school teachers with 20 years of experience were mixed in with members who had no teaching experience, such as a guy from the automotive industry,” Nepomuceno says. “Vicki was a great facilitator in bridging that gap between industry professionals and experienced teachers.”
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.
Professional Certificates and Specialized Programs of Study

Art and Design
- Certificate Program in Interior Design and Interior Architecture
- Certificate Program in Landscape Architecture
- Post-Baccalaureate Certificate in Visual Arts
- Professional Program in Sustainable Design
- Professional Sequence in Cultural Landscape Preservation and Management
- Professional Sequence in Graphic Design
- Specialized Program in Digital Photography
- Specialized Program in Drawing
- Specialized Program in Painting

Behavioral Health Sciences
- Certificate Program in Alcohol and Drug Abuse Studies
- Post-Baccalaureate Program for Counseling and Psychology Professions
- Professional Program in Aging and Mental Health
- Professional Program in Child and Adolescent Treatment
- Professional Program in Eating and Weight Disorders
- New! Professional Program in Health Advocacy
- Professional Program in Neuropsychological Assessment
- Professional Program in the Study of Loss and Grief
- Professional Program in the Treatment of Anxiety Disorders
- Professional Program in the Treatment of Mood Disorders
- Professional Program in Trauma-Informed Interventions

Business
- Certificate Program in Accounting
- Certificate Program in Business Administration
- Certificate Program in Business Analysis
- Certificate Program in Entrepreneurship and Small Business Management
- Certificate Program in Finance
- Certificate Program in Leadership and Management
- Certificate Program in Marketing
- Certificate Program in Project Management
- Paralegal Studies Program
- Professional Program in Business Process Management
- Professional Program in Women and Leadership
- Professional Sequence in Agile Management
- Professional Sequence in Integrated Marketing Communications
- Professional Sequence in Marketing Metrics
- Professional Sequence in Personal Financial Planning
- Professional Sequence in Project Human Resource Management
- New! Professional Sequence in Sales Management
- Professional Sequence in Wealth Management
- Professional Series in Strategic Online Marketing
UC Berkeley Extension offers widely respected professional certificates and specialized programs of study to ensure students get the training to advance in their careers and meet their personal goals.

Our highly motivated students come from diverse backgrounds. Most are adult learners who hold bachelor’s degrees, and more than a third have graduate degrees. But no matter what stage of their careers or education, all Extension students share a desire for high-quality training and education.

To help working adults and full-time students reach their goals, Extension offers hundreds of courses every term. Beginning nearly every week of the year, daytime, evening and weekend courses are held at multiple locations in Berkeley, San Francisco and Belmont.

For even greater convenience, many of our courses, professional certificates and specialized programs of study are also available online. Learn more at extension.berkeley.edu/cert.

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You’re invited to attend any or all of our spring programs for the general public. This is your chance to learn more about intriguing and important topics and to get better acquainted with brilliant thinkers and Bay Area luminaries. Reserve your place today at extension.berkeley.edu

FREE EVENTS

FRIEZE, Charlotte B.A., B.S.
EDP 023473
Wednesday, 7–9 pm
San Francisco: Art and Design Center • FREE

A Private Paradise: Contemporary American Gardens
Editor and author Charlotte Frieze moderates a panel of prominent California landscape architects and designers for a conversation on contemporary gardens. Her recently published book Private Paradise: Contemporary American Gardens (Monacelli Press, 2011) serves as the starting point for an exploration of individual design philosophy and the intersection between traditional elements of garden design and current concerns.

Challenges—need instructional methods that are comprehensive and transformative, methods that honor their diversity and cultures.

Sedique Popal, Ed.D., Extension Honored Instructor
EDP 203745
Tuesday, 6–9 pm
May 15
Berkeley: Golden Bear Center • FREE

Culturally Responsive Teaching and Learning
Learn practical skills in cross-cultural communication at a dynamic free seminar presented by Sedique Popal, an Extension Honored Instructor. With an increase in international student populations, it has become more critical for educators and counselors to reach students in a culturally responsive manner. These students need instructional methods that are comprehensive and transformative, methods that honor their diversity and cultures.

Sedique Popal, Ed.D., Extension Honored Instructor
EDP 203745
Tuesday, 6–9 pm
May 15
Berkeley: Golden Bear Center • FREE

31ST ANNUAL PANEL ON THE PRESIDENCY Election Year: The Obama Presidency and the 2012 Campaign
As President Obama seeks a second term, examine his presidency and the 2012 election in this panel discussion. Get answers to provocative questions in an intelligent evening devoted to issues that carry much importance as the nation heads towards the 2012 presidential election.

EDP 023366
Monday, 7:30–9:30 pm
March 12
Berkeley Campus: 105 Stanley Hall • FREE

Cal Day 2012
Join UC Berkeley Extension in celebrating Cal Day with the UC Berkeley campus. Don’t miss this opportunity to attend lectures by esteemed professors, visit galleries and museums, see performances, and take part in hands-on programs for the whole family. For a complete schedule, visit calday.berkeley.edu.

Saturday, April 21, 9 am–4 pm
Berkeley Campus • FREE

15th-Annual Student Reading Series
Come hear students in the Post-Baccalaureate Certificate Program in Writing share their works of poetry, nonfiction and fiction at our annual student reading series.

Sunday, May 6, 4 pm
Books, Inc., 601 Van Ness Ave., San Francisco • FREE

Sunday, May 20, 3 pm
Diesel, A Bookstore, 5433 College Ave., Oakland • FREE

Making Math Real: Reaching All Learners With a Multisensory Approach to Learning
David Berg, well-known educational therapist and founder of the Making Math Real Institute, presents a lively talk focused on strategies to help students overcome difficulties in understanding mathematics. Berg explains why students may be struggling with mathematical concepts, and details strategies for lowering anxiety and increasing comprehension through proven tools and techniques.

David Berg, E.T.
EDP 203737
Thursday, 6–9 pm
May 10
Berkeley: Golden Bear Center • FREE

Making the Health Care System Work for You and Your Family
This lecture and panel discussion covers some of the general trends that patients—as well as those who will be advocating for them either as family members, paraprofessionals or professional health advocates—need to know as they negotiate an increasingly complex health care system in the United States. Learn how you and your family can become informed decision makers.

John Swartzberg, M.D., FACP, clinical professor of medicine, UC Berkeley School of Public Health
EDP 423202
Thursday, 4–6 pm
Feb. 2
Berkeley: Golden Bear Center • FREE
New Courses and Programs for Spring 2012

Advance your career or pursue a personal interest with new courses and programs designed for your enrichment. At UC Berkeley Extension, you’ll find many new ways to be your best this spring.

**ART AND DESIGN**
- An Architectural Tour of Tuscany
- Digital Filmmaking Fundamentals
- Exploring the World of Textiles
- History of Photography: A Dynamic Study and Practice
- Multimedia Storytelling

**BEHAVIORAL HEALTH SCIENCES**
- Clinical and Ethical Approaches to End-of-Life Care
- Families and Health Care Advocacy
- Helping Patients Make Informed Decisions
- Overview of Health Care Advocacy
- Professional Program in Health Advocacy

**BUSINESS**
- The Coach Approach to Effective Communication and Leadership Development
- Design Thinking for a Sustainable World: Amplify Your Impact at Work and for the Planet
- The HR Consultant’s Toolkit
- Interpersonal Communication Skills for Business
- Strategic Management for Executives
- Professional Sequence in Sales Management

**COMPUTER TECHNOLOGY AND INFORMATION MANAGEMENT**
- Building Your Private Cloud With Linux
- Procedural Database Programming (T-SQL and PL/SQL)
- Programming With Ruby

**ENVIRONMENTAL ENGINEERING AND MANAGEMENT**
- Food and Beverage Processing and Packaging
- Plastics and the Environment
- Smart Grids: Energy-Efficient Buildings

**HUMANITIES, LANGUAGES AND PERSONAL DEVELOPMENT**
- Gender and Nation in 20th-Century British and Anglophone Women’s Literature

**SCIENCE, BIOTECHNOLOGY AND MATHEMATICS**
- Hematology
- Intellectual Property and Biopharmaceutical Patent Law
- Life Sciences Business and Marketing: Their Integral Role for Success
- Life Sciences Product Marketing: It’s All in the Plan
- Physiology of the Cardiac and Respiratory Systems
- Toxicology

**WRITING, EDITING AND TECHNICAL COMMUNICATION**
- Specialized Program in Professional Writing

LOOK FOR NEW THIS TERM TAGS THROUGHOUT THE CATALOG.
After seven years as a sales territory manager at Source Surgical, a medical-device sales company, Kelly Bratton is making a bold career leap into interior design. First testing out her choice with a couple of Extension design classes, Bratton is now immersed in the Certificate Program in Interior Design and Interior Architecture.

Bratton appreciates that the program delivers real-world experience with instructors who don’t just teach, but who also work in the field. “All of the teachers work in the area, so it’s like I’m already working with architects, designers and lighting designers,” she says.

As a matter of fact, Bratton is working part-time for a designer on kitchen remodeling projects. She proves herself a valuable asset by bringing Autodesk AutoCAD and Adobe Photoshop skills—learned at Extension—to the table. In the future, Bratton wants to run her own business, working on residential, commercial and hospitality projects. Her experience at Extension is prompting her to be proactive toward that goal. “The instructors treat the students like professionals,” Bratton says. “And the students are really motivated here—everyone’s looking for work before they graduate—so it pushes you to feel the same way.”
Sharpen your professional skills. UC Berkeley Extension has the courses you need to develop your talent and stay up to date in all aspects of art and design.

Learn the latest techniques in graphic design. Discover the newest trends in green building. Or take a studio class in drawing, painting or photography. Focus on landscape architecture, interior design or visual arts, and earn a certificate from a program that professionals recognize for quality. Work with award-winning designers, artists and industry professionals to refine your portfolio; gain hands-on experience with local firms; and cultivate a professional network to advance your career.

**Visual Arts**
- Art History and Museum Studies
- Drawing
- Painting
- Photography, Film and Video
- Other Media
- Post-Baccalaureate Core Courses

**Graphic and Interactive Design**
- Studio, History and Theory Courses
- Computer Courses

**Interior Design and Interior Architecture**
- Phase I
- Phase II
- Phase III
- Electives
- General Interest

**Landscape Architecture**
- Foundation Courses
- Advanced Courses
- Electives

**Sustainable Design**
- Required Courses
- Electives
Visual Arts

COURSE INFORMATION
(415) 284-1041
visualarts@unex.berkeley.edu
extension.berkeley.edu/subject/visual.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

FREE INFORMATION SESSION
Post-Baccalaureate Certificate in Visual Arts and Specialized Programs in Digital Photography, Drawing and Painting

Whether you are new to visual arts or a practicing artist dedicated to refining your skills and applying to graduate school, come to a free, no-obligation open house evening and learn how our diverse programs can help you develop as an artist. For more information about the Post-Baccalaureate Certificate in Visual Arts, see p. 15 or visit extension.berkeley.edu/cert/visualarts.html. For more information about the specialized programs in Digital Photography, Drawing and Painting, see pp. 11–13 or visit extension.berkeley.edu/subject/visual.html.

EDP 013433
1 meeting
Thursday, 6:30–8 pm
Jan. 26
San Francisco: Art and Design Center • FREE

Art History and Museum Studies

Ancient Greek Art
X400.4 • 2 semester units in Art History
An elective in the Post-Baccalaureate Certificate in Visual Arts

From the shadows of the Bronze Age, individual city-states emerged from constant conflict and created a canon of unsurpassed beauty. What makes the art of Delphi, Olympia and Athens so uniquely Greek? Why did Homeric heroes and gods continue to inspire art for centuries? Trace the path of Greek art from Mycenaean heroes through its Geometric and Archaic periods to the heights of classical architecture and sculpture. Through illustrated lectures and discussions, you witness the Hellenistic sensuality that was so irresistible to the Roman conquerors who spread this art throughout the Mediterranean.

EDP 013482
Birgit Urmson, M.A.
10 meetings
Mondays, 6:30–9:30 pm
March 19–May 21
San Francisco: Art and Design Center • $445

Landscape Art of the Romantic Era
X102.5 • 2 semester units in Art History
An elective in the Post-Baccalaureate Certificate in Visual Arts

If you seek nature, poetry, travel and adventure through art, this course is your ticket to a visual journey through the inspiring landscape paintings, drawings and prints of the European Romantics. Illustrated lectures focused on the art of J.M.W. Turner, Philipp Otto Runge, Caspar David Friedrich, William Blake, John Constable, Jean-Baptiste-Camille Corot and Théodore Rousseau deepen your understanding of the Romantic vision of nature. You also gain an understanding of the art of the British watercolor school, the tradition of outdoor oil-sketching in Rome and the burgeoning interest in illustrated travel guides and lithographic albums during the Romantic era.

EDP 013292
Josine Smits, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 10–March 13
San Francisco: Art and Design Center • $455

Contemporary Art:
History and Theory
X442 • 2 semester units in Art History
A requirement in the Post-Baccalaureate Certificate in Visual Arts

Contemporary art’s succession of contending, and often conflicting, ideas and styles challenges those who view art as a mode of self-expression that nevertheless manages to be generally accessible. Examine the radical vision that drove disparate contemporary movements such as pop, minimalism and conceptualism. Explore how forms such as performance, body and land art expanded the concept of what it means to create fine art. You ultimately gain an understanding of the impulses, interests and innovations that have driven the art world from the middle of the 20th century to the present.

EDP 013193
Hannah Tandeta, M.F.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 15–May 17
San Francisco: Art and Design Center • $455

NEW THIS TERM

History of Photography: A Dynamic Study and Practice

Survey the history of photography from its pictorial beginning to its digital revolution to learn how to use the techniques and ideas developed by major photographers into your work.

For course schedule, see p. 13.

Dada and Surrealist Cinema

Discover how Dada and surrealist directors use new techniques in their efforts to elevate the craft of filmmaking into an art form.

For course schedule, see p. 14.
Drawing

Drawing Fundamentals
X405 • 2 semester units in Art
A requirement in the Specialized Program in Drawing
Develop observational abilities and rendering skills in this introduction to the fine art of drawing. The instructor presents methods of describing objects in terms of line, value, shape and texture. Course projects help you explore the principles of light, space, composition and perspective using a variety of media and techniques.

Sec. 1 EDP 013243
Sheila Ghidini, M.F.A.
12 meetings
Tuesdays, 6:30–9:30 pm
Feb. 21–May 8
San Francisco: Art and Design Center • $455

Sec. 2 EDP 013250
Pamela Lanza, M.F.A.
12 meetings
Wednesdays, 6:30–9:30 pm
Feb. 25–May 12
San Francisco: Art and Design Center • $455

Drawing Intermediate
X406 • 2 semester units in Art
A requirement in the Specialized Program in Drawing: an elective in the Post-Baccalaureate Certificate in Visual Arts
Focus on rendering skills and creative approaches to composition and subject. The class includes in-depth studies of value, forms in space, line, expressive and imaginative drawing, and an introduction to the figure.

Prerequisite: Drawing Fundamentals X405 or consent of instructor

EDP 013268
Christian Fagerlund, M.F.A.
12 meetings
Wednesdays, 6:30–9:30 pm
Feb. 22–May 9
San Francisco: Art and Design Center • $455

Pastel
X408 • 2 semester units in Art
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing
Colored pastel is one of the most versatile and expressive mediums in contemporary drawing. Through demonstrations and slide lectures, learn the history of pastel and the wide variety of techniques. Note: Bring any pastels you currently use and three pieces of gray-toned paper to the first meeting.

Prerequisite: Drawing Fundamentals X405 or consent of instructor

EDP 013409
Donald Bradford, M.F.A., Extension Honored Instructor
12 meetings
Thursdays, 6:30–9:30 pm
Feb. 27–May 14
San Francisco: Art and Design Center • $455

Advanced Anatomy for Artists
X415.7 • 1 semester unit in Art
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing
Building on the skills learned in Anatomy for Artists X415.5, this intensive workshop offers advanced techniques for exploring the skeletal and muscular systems and their relationship to the surface structures of the body. Note: Please bring a sketchbook (8x10-inch or larger) and pencil to the first class.

Prerequisite: Anatomy for Artists X415.5 or consent of instructor

EDP 013375
Christian Fagerlund, M.F.A.
2 meetings
Saturday and Sunday, 9 am–5 pm
Jan. 28–29
San Francisco: Art and Design Center • $325

Exploring the Portrait and Self-Portrait
X434 • 2 semester units in Art
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing
Explore the expressive use of line, the dramatic values of light and shadow and the basics of human anatomy. Slide-illustrated lectures present portraits and self-portraits using mood, memory, photography, abstraction and fantasy as expressive tools. Note: Bring an 18x24-inch newsprint pad, an 18x24-inch drawing pad, pencils and charcoal to the first class.

Prerequisite: Drawing Fundamentals X405 or consent of instructor

EDP 013276
Glenn Hirsch, M.F.A.
12 meetings
Mondays, 6:30–9:30 pm
Feb. 27–May 14
San Francisco: Art and Design Center • $455

Working in Series
X413.3 • 2 semester units in Art
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the specialized programs in Drawing and in Painting
The process of working in series is an effective vehicle to unlock creative potential, capitalize on unexpected discoveries and uncover new forms of self-expression. Illustrated lectures introduce you to contemporary artists who work in series and to the ideas behind this approach. Course assignments inspire innovative thinking and encourage you to delve into your own serial explorations.

Prerequisite: Experimental Drawing X433, Painting Workshop X470, or consent of instructor

EDP 013466
Pamela Lanza, M.F.A.
12 meetings
Mondays, 6:30–9:30 pm
Feb. 27–May 14
San Francisco: Art and Design Center • $455

ART AND DESIGN

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/drawing.html.

Required Courses
• Drawing Fundamentals X405 (offered this term)
• Drawing Intermediate X406 (offered this term)
• Figure Drawing X415

Specialized Program in Drawing
Drawing, the foundation of any art practice, is your most accessible and versatile tool for exploring and expressing creative ideas. With the Specialized Program in Drawing, you can master fundamental drawing techniques, methods and materials. Expand your understanding of line, gesture, volume, composition and perspective so you can accurately and artistically put your creative ideas into concrete form. Required and elective courses provide the opportunity to develop your perceptual awareness, technical range and artistic vision.

Curriculum Requirements
The curriculum consists of 3 required courses and a minimum of 2 electives for a total of 10 semester units (180 hours of instruction).

Required Courses
• Drawing Fundamentals X405 (offered this term)
• Drawing Intermediate X406 (offered this term)
• Figure Drawing X415

EDP 013276
Glenn Hirsch, M.F.A.
12 meetings
Mondays, 6:30–9:30 pm
Feb. 27–May 14
San Francisco: Art and Design Center • $455

Self-Portrait
X413.3 • 2 semester units in Art
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the specialized programs in Drawing and in Painting
The process of working in series is an effective vehicle to unlock creative potential, capitalize on unexpected discoveries and uncover new forms of self-expression. Illustrated lectures introduce you to contemporary artists who work in series and to the ideas behind this approach. Course assignments inspire innovative thinking and encourage you to delve into your own serial explorations.

Prerequisite: Experimental Drawing X433, Painting Workshop X470, or consent of instructor

EDP 013466
Pamela Lanza, M.F.A.
12 meetings
Mondays, 6:30–9:30 pm
Feb. 27–May 14
San Francisco: Art and Design Center • $455

Register using EDP 022476

Learn More and View the Flyer
extension.berkeley.edu/spos/drawing.html (415) 284-1041
visualarts@unex.berkeley.edu

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Specialized Program in Painting

After centuries of experimentation, painting still promises the discovery of boundless creative expression. The Specialized Program in Painting teaches essential painting techniques to develop your creativity using a variety of materials and methods. The curriculum broadens your understanding of line, form, color, composition and space. Required and elective courses provide the opportunity to expand your range of skills, experiment with new approaches and develop your artistic voice.

Curriculum Requirements
The curriculum consists of 3 required courses and a minimum of 2 electives for a total of 10 semester units (180 hours of instruction).

Required Courses
- Painting Fundamentals X410 (offered this term)
- Color Theory for the Visual Arts X403 (offered this term)
- Painting Intermediate X411 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/painting.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/painting.html (415) 284-1041 visualarts@unex.berkeley.edu

Register using EDP 022484

Painting

Painting Fundamentals
X410 • 2 semester units in Art

A requirement in the Specialized Program in Painting

Get an introduction to the essential materials and techniques of painting, including building and stretching a canvas, mixing color, under-painting, glazing and washing, dry brushing and using a palette knife. You also explore the use of composition, line, contrast, texture and color. Demonstrations, slide-illustrated lectures and individual and group critiques give you a basis for developing visual awareness.

Sec. 1 EDP 013508
Larry Robinson, M.F.A.
12 meetings
Wednesdays, 6:30–9:30 pm
Feb. 22–May 9
San Francisco: Art and Design Center • $455

Sec. 2 EDP 013516
Larry Robinson, M.F.A.
12 meetings
Thursdays, 1:30–4:30 pm
Feb. 23–May 10
San Francisco: Art and Design Center • $455

Color Theory for the Visual Arts
X403 • 2 semester units in Art

A requirement in the Specialized Program in Painting; an elective in the Post-Baccalaureate Certificate in Visual Arts

Strengthen your use of color by understanding how colors interact. This foundation course for basic painting includes lectures and projects on perception and color intensity, the value scale and simultaneous contrast, the effects and physics of color, and theories on color psychology.

EDP 013490
Larry Robinson, M.F.A.
12 meetings
Tuesdays, 1:30–4:30 pm
Feb. 21–May 8
San Francisco: Art and Design Center • $455

Painting Intermediate
X411 • 2 semester units in Art

A requirement in the Specialized Program in Painting; an elective in the Post-Baccalaureate Certificate in Visual Arts

Expanding on the basic painting techniques and principles learned in Painting Fundamentals X410, this course further engages you in the use of composition, color, contrast, light and movement. Image-illustrated lectures, demonstrations and individual and group critiques provide opportunities to expand your artistic skills.

Prerequisite: Painting Fundamentals X410 or consent of instructor

EDP 013300
Eva Bovenzi, M.F.A.
12 meetings
Thursdays, 6:30–9:30 pm
Feb. 23–May 10
San Francisco: Art and Design Center • $455

Painting Workshop
X470 • 2 semester units in Art

An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Painting

By focusing on personal expression, this workshop helps you realize your creative ideas. You are encouraged to take risks, to explore unpredictable rather than predictable painting and to engage in painting rather than picture making.

Prerequisite: Painting Fundamentals X410 or consent of instructor

Sec. 1 EDP 013524
Larry Robinson, M.F.A.
12 meetings
Mondays, 7:30–10:30 pm
Feb. 13–May 7 (no meeting Feb. 20)
Berkeley Campus: 385 Kroeber Hall • $455

Sec. 2 EDP 013391
Eva Bovenzi, M.F.A.
12 meetings
Thursdays, 9:30 am–12:30 pm
Feb. 23–May 10
San Francisco: Art and Design Center • $455

The Abstract in Nature
X427 • 2 semester units in Art

An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Painting

Using a variety of painting and drawing techniques and media, investigate the ways that line, texture, color, light and composition are revealed in nature. Working outdoors, gather raw material and then use these source materials to create paintings and drawings in the studio that distill the imagery into a unique abstract visual language and iconography. Note: Bring hard and soft graphite pencils, a small sketchbook and a magnifying glass to the first meeting.

EDP 013185
Eva Bovenzi, M.F.A.
12 meetings
Tuesdays, 6:30–9:30 pm
Feb. 21–May 8
San Francisco: Art and Design Center • $455

Mixed-Media Painting
X440 • 2 semester units in Art

An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Painting

Learn painting and drawing methods, textural effects and collage techniques that encourage improvisation and experimentation in your work. The instructor demonstrates the use of water-based painting media and their combination with drawing media, including pencil, charcoal and ink.

Prerequisite: Painting Fundamentals X410 or consent of instructor

EDP 013284
Glenn Hirsch, M.F.A.
12 meetings
Saturdays, 10 am–1 pm
Feb. 25–May 12
San Francisco: Art and Design Center • $455
Watercolor Fundamentals
X449.1 • 2 semester units in Art
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Painting
Explore Chinese landscape painting through its history and hands-on experience with its key techniques and materials. Lectures introduce Chinese masterworks and examine the depth and power of this art form. Examine the underlying philosophy of qi in relationship to the basic tenets of Chinese brush painting, the application of varying blends of ink and water and the use of speed and pressure in brush application. Instructor demonstrations and course exercises offer you the opportunity to learn the techniques of the masters and to develop your own style.
EDP 013797
Aiqin Zhou, M.F.A.
10 meetings
Saturdays, 1:30–4:30 pm
March 3–May 5
San Francisco: Art and Design Center • $455

Digital Photography Intermediate
X405.2 • 2 semester units in Architecture
A requirement in the Specialized Program in Digital Photography; an elective in the Post-Baccalaureate Certificate in Visual Arts
Learn advanced digital photography techniques focused on lighting, compositional awareness and technical range so you can confidently produce images that express your artistic vision. You also deepen your understanding of the aesthetics and pictorial strategies of photography. The curriculum provides the opportunity to expand your perceptual awareness and technical range so you can confidently produce images that express your artistic vision.
Prerequisite: Digital Photography Fundamentals X405 or consent of instructor
EDP 013227
Bryan Hewitt, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
San Francisco: Art and Design Center • $455

Digital Photography Advanced
X405.6 • 2 semester units in Architecture
A requirement in the Specialized Program in Digital Photography; an elective in the Post-Baccalaureate Certificate in Visual Arts
Learn advanced digital photography techniques focused on lighting, composing, editing and presentation strategies. You creatively and conceptually explore a single project that culminates in a cohesive body of work appropriate for presentation to graduate schools, galleries or prospective employers. Note: Bring samples of your current work to the first session.
Prerequisite: Digital Photography Intermediate X405.2 or consent of instructor
EDP 013201
Bryan Hewitt, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
San Francisco: Art and Design Center • $455

Photography, Film and Video

Digital Photography Fundamentals
X405 • 2 semester units in Architecture
A requirement in the Specialized Program in Digital Photography
Learn the basics of digital cameras through an overview of the fundamentals of photography and photographic terminology. The instructor covers image-editing software and demonstrates digital effects. You receive one-on-one time with the instructor to help you learn about your particular make and model of digital camera. Note: A digital SLR camera with interchangeable lenses and raw capture capability is recommended.
EDP 013219
David Papas
10 meetings
Saturdays, 10 am–1 pm
March 17–May 19
San Francisco: Art and Design Center • $455

History of Photography: A Dynamic Study and Practice
X405.8 • 2 semester units in Architecture
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Digital Photography
Survey the history of photography to learn how to incorporate the techniques and ideas developed by major photographers into your work. Explore skills such as stop-action composition and creative use of color theory. Planned classroom discussion topics include concepts of portraiture, depictions of nature, relationship to time, creation of narrative, conceptual practice and social reporting.
EDP 013474
Emanuelle Namont Kouznetsov, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
March 19–May 21
San Francisco: Art and Design Center • $455
### NEW THIS TERM

#### Multimedia Storytelling

**X416.1** • 2 semester units in Film Studies

An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Digital Photography

Create short documentaries and films using your still camera. Build stories using your photographs by developing a plot and conclusion about an event you have photographed, producing a biography about an individual, constructing your own narrative using actors or assembling a succession of objects to generate an animation. You use time-based software to produce four 3- to 10-minute films using photographs, motion graphics, text, and audio.

**EDP 013961**

Elizabeth Lim, M.F.A.

10 meetings

Thursdays, 6:30-9:30 pm

March 15–May 17

San Francisco: Art and Design Center • $455

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#### Digital Filmmaking Fundamentals

**X415.1** • 2 semester units in Film Studies

An elective in the Post-Baccalaureate Certificate in Visual Arts

Explore digital filmmaking as the creation and manipulation of time, light and sound. Through group and individual exercises, you learn the digital tools (industry-standard software) to confidently move through three phases of content creation: preproduction, production and postproduction. Also, in-class screenings of works by contemporary filmmakers, video artists, and popular media provide an opportunity for critical discussions about the provocative and ever-changing state of this digital art.

**EDP 013225**

Brice Hobbs, M.A.

10 meetings

Tuesdays, 6:30–9:30 pm

March 20–May 22

San Francisco: Art and Design Center • $455

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#### Dada and Surrealist Cinema

**X425** • 2 semester units in Film Studies

Dada and surrealist filmmakers have explored the outer limits of film, creating works that are sometimes beautiful, sometimes disturbing and often both. Trace the development of these film movements and the works that use the cinematic medium in unexpected ways, and discover how directors use new techniques in their effort to elevate the craft of filmmaking into an art form. Weekly screenings introduce you to the works of Dada and surrealist filmmakers in Europe and America, postwar California filmmakers and modern and contemporary surrealist films.

**EDP 013722**

Dominic Angerame, M.F.A.

10 meetings

Saturdays, 1:30–4:30 pm

March 17–May 19

San Francisco: Art and Design Center • $455

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### The Art of Film

**X20** • 3 semester units in Film Studies

An elective in the Post-Baccalaureate Certificate in Visual Arts

Survey a range of classic and modern works, and learn to recognize what makes a well-crafted motion picture. Topics include the handling of space and time in motion pictures, as well as the history and uses of sound, editing, performance, directing, narrative style and screenwriting. You are responsible for renting and viewing films as part of this course.

**EDP 867739**

L. Thomas Poicard, Ph.D.

Enroll anytime

Online • $715

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### Other Media

#### Monoprinting Fundamentals

**X417.1** • 2 semester units in Art

An elective in the Post-Baccalaureate Certificate in Visual Arts

Monotype is an exciting and versatile printmaking technique that allows artists to quickly develop and expand creative ideas. Get a thorough grounding in the techniques, materials and use of the printing press through lectures, demonstrations and hands-on work. You receive group and individual critiques on your work. A field trip to Auroboroa Press promises added inspiration.

**EDP 013383**

Heather Wilcoxon, M.F.A.

12 meetings

Wednesdays, 6:30–9:30 pm

Feb. 22–May 9

San Francisco: Art and Design Center • $455

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### Post-Baccalaureate Core Courses

#### Post-Baccalaureate Seminar 2: Portfolio and Critique

**X495** • 2 semester units in Art

A requirement in the Post-Baccalaureate Certificate in Visual Arts

Present original artwork to your peers and receive in-depth responses regarding issues of meaning and content, as well as technical and formal resolution. Get useful feedback on the development of your portfolio of artwork. Discuss relevant topics in visual art and culture, and develop your vocabulary and skills of critical awareness. **Note:** Please bring your original artwork to the first meeting.

**Prerequisite:** Post-Baccalaureate Seminar 1: Portfolio and Visual Dynamics X491 or consent of instructor

**EDP 013425**

Jamie Brunson, M.F.A.

10 meetings

Mondays, 6:30–9:30 pm

Feb. 27–April 30

San Francisco: Art and Design Center • $495

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#### Post-Baccalaureate Mentorship

**X495.5** • 1 semester unit in Art

An elective in the Post-Baccalaureate Certificate in Visual Arts

Develop a cohesive body of work that demonstrates a personal approach to art making; a skill level appropriate for potential application to graduate programs; and the ability to discuss your conceptual intent and artworks in formal, philosophical and historical terms. Get individual guidance and evaluation from an approved program instructor. Evaluate your artistic growth, and discuss issues of meaning, content, technique and formal resolution in your artwork.

**Prerequisite:** Registration in the Post-Baccalaureate Certificate in Visual Arts

**EDP 013417**

Various instructors

3 meetings

Scheduled in consultation with instructors

Held off-site • $325

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#### Portfolio Review

801

A requirement in the Post-Baccalaureate Certificate in Visual Arts

All Post-Baccalaureate Certificate in Visual Arts students must successfully complete a portfolio review and discuss their art in formal, philosophical and historical terms to receive the certificate. Program instructors determine students’ readiness for graduate study and give feedback on student portfolios.

**Prerequisite:** Post-Baccalaureate Seminar 3: Portfolio Development and Professional Practices X495.1

**EDP 013441**

Various instructors

1 meeting

Friday, 1:30–4:30 pm

Feb. 10

San Francisco: Art and Design Center • $355

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### For Course and Schedule Information

Visit extension.berkeley.edu/catalog
Post-Baccalaureate Certificate in Visual Arts

The Post-Baccalaureate Certificate in Visual Arts provides a critical bridge between talent and skill. This exciting curriculum provides the rigorous studio practice and the conceptual and art-historical framework necessary to develop a portfolio of work for application to graduate programs in fine art. Gain a Berkeley-quality education in the visual arts that you can complete on a part-time or full-time basis.

Curriculum Requirements
The curriculum consists of a minimum of 12 courses and a final portfolio review for a total of 24 semester units (360 hours of instruction), including 6 required courses (10 semester units), 1 art history elective (2 semester units), and a minimum of 6 art practice electives (12 semester units).

Prerequisites
Completion of one or more of the specialized programs of study in drawing, painting or digital photography or equivalent. A bachelor’s degree is required to register for the Post-Baccalaureate Certificate in Visual Arts.

Required Courses
• Modern Art: History and Theory X441
• Contemporary Art: History and Theory X442 (offered this term)
• Post-Baccalaureate Seminar 1: Portfolio and Visual Dynamics X401
• Post-Baccalaureate Seminar 2: Portfolio and Critique X495 (offered this term)
• Post-Baccalaureate Seminar 3: Portfolio Development and Professional Practices X495.1
• Portfolio Review 801 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/visualarts.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/visualarts.html
(415) 284-1041
visualarts@unex.berkeley.edu

Register using EDP 022442
Graphic and Interactive Design

COURSE INFORMATION
(415) 284-1070
designarts@unex.berkeley.edu
extension.berkeley.edu/subject/graphic.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

FREE INFORMATION SESSION
Professional Sequence in Graphic Design
UC Berkeley Extension’s Professional Sequence in Graphic Design offers a study of timeless design principles, accompanied by an appreciation of historical and current trends. Find out how you can learn from industry professionals to build a comprehensive portfolio and advance in the field. For program details, see this page or visit extension.berkeley.edu/spos/graphicps.html.

EDP 013110
1 meeting
Thursday, 6:30–8 pm
Jan. 12
San Francisco: Art and Design Center • FREE

Studio, History and Theory Courses

Graphic Design Studio I
X401.2 • 3 semester units in Design
A requirement in the Professional Sequence in Graphic Design
Graphic design encompasses many specialties, from advertising and Web design to illustration and packaging. Through a series of challenging foundation projects, you gain an understanding of the basic principles of graphic design. Discuss design-related skills, portfolio requirements and work opportunities. Guest lecturers give a first-hand look at the imagination and skills applied in graphic design. This course is essential if you are interested in entering the field or beginning the Professional Sequence in Graphic Design.

Sec. 1 EDP 013904
Ivan Trujillo, M.F.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–May 9
San Francisco: Art and Design Center • $680

Sec. 2 EDP 013755
Bruce Yelaska, B.A.
15 meetings
Mondays, 6:30–9:30 pm
Feb. 6–May 21 (no meeting Feb. 20)
San Francisco: Art and Design Center • $680

Graphic Design Studio II
X401.3 • 2 semester units in Design
A requirement in the Professional Sequence in Graphic Design
Develop your skills in composition, color use and typography. Balancing the conceptual and technical aspects of design, you define your design goals and develop your ability to generate concepts and layouts and present them in a professional manner. Assignments range from logo development to layouts for books, brochures, magazines, posters and package design.

Prerequisite: Graphic Design Studio I X401.2; basic proficiency in Adobe Illustrator, InDesign and Photoshop is strongly recommended.

EDP 013896
Dona Turner, B.F.A.
12 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–April 18
San Francisco: Art and Design Center • $650

Principles of Publication Design
X405 • 2 semester units in Design
An elective in the Professional Sequence in Graphic Design
Learn typography and page composition, including grid layout and the principles of contrast, repetition, alignment and proximity. Through lectures, hands-on projects and classroom critiques, learn how to design books, brochures, magazines, periodicals and collateral pieces. Learn how to copy-fit and write design specifications. Guest speakers give presentations of their work.

Prerequisite: Access to Adobe InDesign or QuarkXPress

EDP 013813
Nancy Cutler, B.S.
10 meetings
Thursdays, 6:30–9:30 pm
March 1–May 3
San Francisco: Art and Design Center • $525

Computer Courses

InDesign
X496 • 2 semester units in Design
An elective in the Professional Sequence in Graphic Design
Explore the fundamentals of InDesign—including its unique typographic and graphic capabilities—while learning shortcuts and tips for using the program’s tools most efficiently. Develop several real-world projects for print, PDF and Web formats.

Prerequisite: Apple Macintosh experience

EDP 013888
Diane Burns, B.A.
10 meetings
Tuesdays, 6–9 pm
Jan. 24–Feb. 28 (also Saturdays, Jan. 28–Feb. 25, 9:30 am–12:30 pm; no meeting Feb. 18)
San Francisco: Art and Design Center • $790

Professional Sequence in Graphic Design

Graphic design shapes the visual culture. The fundamentals of graphic design—exciting ideas, effective communication and social contexts—are essential to everyone working in the field. Study timeless design principles, and gain an appreciation of historical and current trends. Learn from industry professionals to build a comprehensive portfolio and advance in the field.

Curriculum Requirements
The curriculum consists of 4 required courses and 2 electives for a minimum of 11 semester units (177 hours of instruction).

Required Courses
Take program courses in the following sequence:
- Graphic Design Studio I X401.2 (offered this term)
- Graphic Design Studio II X401.3 (offered this term)
- Graphic Design Studio III X411
- Graphic Design Studio IV Portfolios X434

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/graphicps.html.

Learn More and View the Brochure
extension.berkeley.edu/spos/graphicps.html
(415) 284-1070
designarts@unex.berkeley.edu

Register using EDP 022406

Artwork (detail) by Naomi Salazar, Student
**Illustrator I**  
X461 • 2 semester units in Design  
*An elective in the Professional Sequence in Graphic Design*  
Adobe Illustrator is the industry-standard tool for creating vector graphics, a must-have in any graphic designer’s toolbox. Through step-by-step instructions, you learn to use Illustrator’s powerful drawing tools to create original artwork. You also learn how to use the pen and transformation tools, layers, color palettes and gradients, as well as Illustrator’s amazing typographic capabilities. This course is for both print and Web designers.  
*Prerequisite:* Apple Macintosh experience  
**EDP 013979**  
Michael Starkman, M.F.A.  
10 meetings  
Mondays, 6:30–9:30 pm  
Feb. 27–May 7 (no meeting March 19)  
San Francisco: Art and Design Center • $825

**Photoshop I**  
X462 • 2 semester units in Design  
*An elective in the Professional Sequence in Graphic Design*  
Adobe Photoshop is essential to any graphic designer’s toolbox. Learn the fundamental concepts of Photoshop: layers, painting tools, blending modes, tonal correction and retouching and sharpening images. Explore the fundamentals of scanning, image resolution and appropriate file formats. Projects and lectures emphasize real-world production and collaging techniques. This course is for anyone planning a career in the graphic arts.  
*Prerequisite:* Apple Macintosh experience  
**EDP 013987**  
Charlene Lowe, B.A.  
10 meetings  
Saturdays, 1:30–4:30 pm  
Jan. 21–March 31 (no meeting Feb. 18)  
San Francisco: Art and Design Center • $790

**Creating Websites With HTML**  
X453.1 • 2 semester units in Computer Science  
*An elective in the Professional Sequence in Graphic Design; recipient of the Distinguished Course Award from the University Continuing Education Association (UCEA)*  
HTML is the universal language that underpins every page displayed on the Web. Using a straightforward, step-by-step approach, you learn to build pages of increasing sophistication and design, acquiring a sound working knowledge of HTML and Web design.  
See Web for technical requirements.  
**EDP 877985**  
Julia Ann Smith, Ph.D.  
Enroll anytime  
Online • $595

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**Interior Design and Interior Architecture**

**COURSE INFORMATION**  
(415) 284-1070  
interiordes@unix.berkeley.edu  
extension.berkeley.edu/subject/interior.html

**FREE INFORMATION SESSION**  
Certificate Program in Interior Design and Interior Architecture  
Find out how UC Berkeley Extension’s certificate can help you start or advance your career in interior design and interior architecture. Meet students and teachers to learn how the certificate enhances your knowledge and career prospects in this field. Tour the Art and Design Center at Third and Mission streets to see where courses are held, and view examples of work produced by current students. For certificate details, see p. 19 or visit extension.berkeley.edu/cert/intdes.html.

**EDP 013128**  
1 meeting  
Tuesday, 6:30–8 pm  
Jan. 10  
San Francisco: Art and Design Center • FREE

**EDP 013136**  
1 meeting  
Tuesday, 6:30–8 pm  
May 8  
San Francisco: Art and Design Center • FREE

**Phase I**

**Design Principles and Elements**  
X475.1 • 3 semester units in Architecture  
*A requirement in the Certificate Program in Interior Design and Interior Architecture*  
In this beginning studio course, you study and explore the relationship of form and space and the fundamental principles that organize and control the built environment. Learn why balance, harmony, rhythm, emphasis, contrast and proportion are the components of good design. Understand how these principles interact with the elements of scale, form, color and texture in two- and three-dimensional exercises.  
**Sec. 1 EDP 013334**  
Ivan Tzvetin, Dipl. Arch. (Bulgaria), AIA-E, Extension Honored Instructor  
15 meetings  
Wednesdays, 6:30–9:30 pm  
Feb. 1–May 9  
San Francisco: Art and Design Center • $800

**Sec. 2 EDP 013342**  
Ivan Tzvetin, Dipl. Arch. (Bulgaria), AIA-E, Extension Honored Instructor  
15 meetings  
Thursdays, 2–5 pm  
Feb. 2–May 10  
San Francisco: Art and Design Center • $800

**Graphic Communication I**  
X476.1 • 3 semester units in Architecture  
*A requirement in the Certificate Program in Interior Design and Interior Architecture*  
Learn the language and uses of mechanical drafting in this foundation course. Produce floor and ceiling plans, sections and elevations that communicate your ideas. Throughout the process, you gain an understanding of industry standards and learn how information is organized in architectural drawings. Enhance your communication skills further as you examine the principles of orthogonal drawings to create one- and two-point perspectives.  
**Sec. 1 EDP 013862**  
George “Skip” Soksin, B.Arch., AIA, LEED AP, and Ivan Tzvetin, Dipl. Arch. (Bulgaria), AIA-E, Extension Honored Instructor  
15 meetings  
Thursdays, 6:30–9:30 pm  
Feb. 2–May 10  
San Francisco: Art and Design Center • $850

**Sec. 2 EDP 013359**  
Julie Barron, B.F.A.  
15 meetings  
Tuesdays, 2–5 pm  
Feb. 7–May 15  
San Francisco: Art and Design Center • $850

**Color Theory and Application for Interiors**  
X412.7 • 3 semester units in Architecture  
*A requirement in the Certificate Program in Interior Design and Interior Architecture*  
Color is one of the most powerful, useful and expressive tools available to design compelling interior spaces. Review color based on the theories of Albert Munsell, Johannes Itten and Josef Albers. Learn how to change the value and intensity of colors using paint. Two-dimensional exercises apply theory to using color in interior space.  
**EDP 013870**  
Vesta Kirby, M.F.A.  
15 meetings  
Tuesdays, 6:30–9:30 pm  
Feb. 14–May 22  
San Francisco: Art and Design Center • $850

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**ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111**
AutoCAD

X479.1 • 3 semester units in Architecture

A requirement in the Certificate Program in Interior Design and Interior Architecture

Develop your digital communication skills by learning to use drafting and editing commands in Autodesk AutoCAD, the industry-standard computer-aided drawing software. Then, progress with more advanced commands such as XREFs, blocks with attributes and XCLIPS. Learn to translate your “model/space” drawings into scaled “paper space” files and plot them using multiple viewports.

Prerequisites: Basic knowledge of PCs and Graphic Communication I X476.1. We recommend you take this class before Revit X479.2.

Sec. 1 EDP 013730
Jennifer Dye, M.A.
15 meetings
Mondays, 2–5 pm
Jan. 30–May 21 (no meetings Feb. 20 and April 30)
San Francisco: Art and Design Center • $950

Sec. 2 EDP 013318
Shalini Agrawal, M.Arch.
15 meetings
Thursdays, 6–9 pm
Feb. 2–May 10
San Francisco: Art and Design Center • $950

Graphic Communication II

X476.2 • 3 semester units in Architecture

A requirement in the Certificate Program in Interior Design and Interior Architecture

Enhance your skills in translating two-dimensional floor plans into three-dimensional space. Exercises, including the creation of quick sketch vignettes, expand your ability to visualize design concepts and communicate them rapidly and vividly. Use a variety of media—such as colored pencils, magic markers and watercolor—to enhance your sketches graphically.

Prerequisite: Graphic Communication I X476.1

EDP 013771
Jennifer Mahoney, B.A.
14 meetings
Wednesdays, 6:15–9:15 pm
Feb. 1–April 25 (also Saturday, March 24, 9:30 am–3:30 pm)
San Francisco: Art and Design Center • $850

Digital Presentation Techniques

X481 • 2 semester units in Architecture

A requirement in the Certificate Program in Interior Design and Interior Architecture

Gain the skills to create effective concept and design drawings using two-dimensional and three-dimensional software. In this introductory course, you learn how to use Google SketchUp, Adobe Photoshop and Adobe Illustrator to augment your creative ideas. This class is invaluable to students and design professionals alike.

Prerequisites: Graphic Communication II X476.2 and AutoCAD X479.1 or Revit X479.2

EDP 013912
Dan Goldstein, M.Arch., LEED AP
12 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–April 18
San Francisco: Art and Design Center • $800

Phase II

Interior Finishes and Materials

X480 • 3 semester units in Architecture

A requirement in the Certificate Program in Interior Design and Interior Architecture

Learn to evaluate the characteristics of finishes and surface materials for use in interior applications to determine their appropriateness for different uses. Study how materials are installed and how they transition into one another. Understand the substructure on which they are applied and how to specify materials appropriately. Activities include lectures and panel discussions by product representatives. Expand your resource base as you take field trips to showrooms and manufacturing facilities.

Prerequisites: Design Principles and Elements X475 and Graphic Communication I X476.1

EDP 013763
Cheryl Gordon, B.F.A., B.A., LEED AP, IIDA
15 meetings
Thursdays, 2–5 pm
Jan. 26–May 3
San Francisco: Art and Design Center • $850

History of Architecture, Interiors and Decorative Arts II

X412.5 • 3 semester units in Architecture

A requirement in the Certificate Program in Interior Design and Interior Architecture

Architecture and design changed rapidly from the time of the Industrial Revolution in the 19th century to the period of cultural postmodernism in the late 20th century. In this continuation of the History of Architecture, Interiors and Decorative Arts I X412.4, you learn about Victorian revival style, the emergence of arts and crafts and the modern and contemporary movements.

Prerequisites: History of Architecture, Interiors and Decorative Arts I X412.4 and Graphic Communication II X476.2

EDP 013177
Sandra Poza, B.S.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 9–May 7 (no meetings Jan. 16, Jan. 30 and Feb. 20)
San Francisco: Art and Design Center • $850

Revit

X479.2 • 3 semester units in Architecture

A requirement in the Certificate Program in Interior Design and Interior Architecture

Learn the basic principles in Autodesk Revit building information modeling (BIM) software and its uses in the design process. Participate in hands-on activities to help familiarize yourself with a parametric three-dimensional modeling program that takes you from design to preliminary construction documentation to presentation layout. You then create floor plans using basic building components, coordinated elevations, three-dimensional perspectives and documentation using Revit.

Prerequisite: Graphic Communication I X476.1 and AutoCAD X479.1

Sec. 1 EDP 013326
Tamara Roth, B.F.A., LEED AP ID+C, Associate IIDA
15 meetings
Saturdays, 1–4 pm
Jan. 28–May 12 (no meeting Feb. 18)
San Francisco: Art and Design Center • $950

Sec. 2 EDP 013706
Stephanie Osorio, M.Arch., LEED AP, and Caroline Nassif, B.Arch., LEED AP
15 meetings
Tuesdays, 6:30–9:30 pm
Feb. 7–May 15
San Francisco: Art and Design Center • $950
The professional interior designer is qualified by education, experience and examination to enhance the function and quality of interior spaces. The Certificate Program in Interior Design and Interior Architecture provides an affordable and comprehensive interior design education that combines studio courses with the study of design theory, history, presentation skills and resources. Learn from industry professionals, and build a comprehensive portfolio to enter the field of residential and commercial interior design.

**Curriculum Requirements**

The curriculum consists of 19 required courses (55 semester units) and a minimum of 3 electives (6 semester units) for a total of 61 semester units.

**Required Courses**

**Phase I**
- Design Principles and Elements X475 (offered this term)
- Graphic Communication I X476.1 (offered this term)
- Color Theory and Application for Interiors X412.7 (offered this term)
- AutoCAD X479.1 (offered this term)
- Graphic Communication II X476.2 (offered this term)
- History of Architecture, Interiors and Decorative Arts I X412.4
- Digital Presentation Techniques X481 (offered this term)

**Phase II**
- Design Studio I X482.1
- Interior Finishes and Materials X480 (offered this term)
- History of Architecture, Interiors and Decorative Arts II X412.5 (offered this term)
- Revit X479.2 (offered this term)
- Space Planning X413.8 (offered this term)
- Fundamentals of Lighting Design X484
- Design Studio II X482.2 (offered this term)

**Phase III**
- Building Components and Systems for Interior Architecture X483 (offered this term)
- Design Studio III X482.3
- Construction Documents X414.6
- Business Practices for Interior Designers X409
- Design Studio IV X482.4 (offered this term)

**Electives**

For a list of electives available this term, visit extension.berkeley.edu/cert/intdes.html.

**Learn More and View the Brochure**

extension.berkeley.edu/cert/intdes.html
(415) 284-1070
interiordes@unex.berkeley.edu
Register using EDP 022137
Space Planning
X413.8 • 3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture
Practice and gain experience developing programs that satisfy your clients’ needs and make the best use of space. Learn techniques for assimilating client-project information, analyzing program requirements and developing schematic space-planning solutions for both residential and commercial situations. You also study building codes, fire safety and barrier-free designs as essential components of laying out interior space.

Prerequisite: Graphic Communication I X476.1, AutoCAD X479.1 or Revit X479.2, and Design Studio I X482.1

EDP 013367
Julie Barron, B.F.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–May 9
San Francisco: Art and Design Center • $950

Design Studio II
X482.2 • 3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture
Conceptualize and design a residential project. Using a specified program, analyze spaces and refine layouts to satisfy functional requirements. Become familiar with residential lines of furnishings and finishes. Develop your color palette, and select appropriate materials to produce a workable and aesthetic environment for everyday living.

Prerequisite: Color Theory and Application for Interiors X412.7, Design Studio I X482.1, Interior Finishes and Materials X480 and Space Planning X413.8

EDP 013789
David Polifko, M.S.E.E., M.F.A.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 31–May 8
San Francisco: Art and Design Center • $1,000

Phase III
Building Components and Systems for Interior Architecture
X483 • 4 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture
Gain an understanding of building components, systems and processes and the sequence of construction in residential and commercial buildings. Learn how various building systems—plumbing, mechanical, electrical and environmental controls—are integrated into structures so that you can effectively design safe, healthy and suitable environments for human activity.

Prerequisite: Design Studio I X482.1

EDP 013748
Jennifer Dye, M.A.
15 meetings
Thursdays, 6–10 pm
Feb. 2–May 17 (no meeting May 3)
San Francisco: Art and Design Center • $1,000

Design Studio IV
X482.4 • 3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture
Combining your learning of space planning, color theory, lighting, material selection, design and construction, this final design studio challenges you to apply all of your knowledge to a multi-story project. Study models are used to examine how light penetrates the various volumes of spaces. Appropriate and sustainable solutions for window treatments, soft goods, finishes and furniture are included in creating a viable design.

Prerequisites: Design Studio III X482.3 and Digital Presentation Techniques X481

EDP 013920
Stephen Wong, M.Arch., and Laurel Sprigg, M.A.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 24–May 1
San Francisco: Art and Design Center • $1,200

Electives
Fundamentals of Interior Design
X474 • 1 semester unit in Architecture
An elective in the Certificate Program in Interior Design and Interior Architecture
Explore the world of residential and commercial interior design in this introductory course. Gain exposure to resources, design theory, history, vocabulary and the process of design. For those contemplating registering for the certificate, this course provides a good overview of future coursework.

EDP 013938
Esin Karllova, B.A., B.S., CID, LEED AP
6 meetings
Mondays, 6:30–9:30 pm
Jan. 30–March 12 (no meeting Feb. 20)
San Francisco: Art and Design Center • $425

Internship in Interior Design
X409.2 • 2 semester units in Architecture
An elective in the Certificate Program in Interior Design and Interior Architecture
Work as a junior designer to gain greater exposure to the real design world and prepare for your future profession. You are responsible for finding an interior design or architectural firm with which to intern before the course begins. A total of 96 internship hours is required within a period of six months. Before enrolling, call the Interior Design office at (415) 284-1070 to receive an internship packet, complete a request form for your site approval and then meet with the instructor. To complete the internship, you must provide a daily journal, a paper, an oral presentation summarizing your internship and an evaluation from your job supervisor.

Prerequisite: Design Studio II X482.2

EDP 013144
Rachael Hagner, M.Arch., AIA, IIDA
2 meetings
Wednesdays, 11:30 am–7:30 pm
Jan. 4 and May 30
Scheduled in consultation with instructor

Kitchen Design
X447 • 2 semester units in Architecture
Study the ingredients that make up a well-designed kitchen, including traffic patterns, storage, equipment, materials, lighting and color. Study codes and the process of construction. Learn to prepare drawings and make design decisions necessary to write your own specifications and put your kitchen design out to bid.

Prerequisite: Graphic Communication II X476.2, AutoCAD X479.1 or Revit X479.2, and Digital Presentation Techniques X481

EDP 013169
Tiffany Rose Leichter, B.Arch.
12 meetings
Wednesdays, 6–9 pm
Feb. 8–April 25
San Francisco: Art and Design Center • $825
NEW THIS TERM
Exploring the World of Textiles
X499.2 • 1 semester unit in Architecture
Gain a new appreciation for the world of textiles as expert Laurel Sprigg shares her passion and knowledge of the ancient craft of weaving. Trace the development of natural fibers to synthetic weaves. Experience exotic, new and vintage products. Get a behind-the-scenes look at San Francisco Design Center showrooms and the Textile Conservation Lab of the Fine Arts Museums of San Francisco. This course is well-suited for both design professionals and the interested public.
EDP 023523
Laurel Sprigg, M.A.
7 meetings
Fridays, 1–4 pm
Jan. 27–March 9
San Francisco: Art and Design Center • $530

General Interest

Inside the World of Antiques and Fine Art
0.4 ceu
In this private and highly informative walking tour and lecture, you examine three centuries of antiques and art. Learn what to look for when acquiring an antique, and discuss the current trends and directions with experts. Tour highlights include Coup d’Etat, an important design and antiques trend-setter; Therien & Co, an influential dealer in fine 20th-century antiques; Almond Hartzog Gallery, international dealers in significant 20th-century design and designers; and Rachel Prater, a specialist in fine 20th-century silver design and Danish masters.
EDP 012151
Diane Dorrans Saeks, B.A.
1 meeting
Saturday, 1–5 pm
Feb. 11
San Francisco: Walking Tour • $100

NEW THIS TERM
An Architectural Tour of Tuscany
0.2 ceu
Learn how four major civilizations in Tuscany created an enduring legacy of culturally rich cities, furnishings and art. Take a visual tour of Etruscan and Roman cities; medieval hill towns; and Florence, the center of the 15th-century Italian Renaissance. Explore Carrara, the town where Michelangelo hand-selected marbles for his sculptures, and Viareggio, renowned for its modern resort hotels built in a classical style. Along the way, develop an appreciation for some intriguing, off-the-typical-path attractions that Tuscany offers the informed visitor.
EDP 013953
Sandra Poza, B.S., ASID
1 meeting
Thursday, 7–9 pm
March 15
San Francisco: Art and Design Center • $75

Landscape Architecture
COURSE INFORMATION
(415) 284-1041
landarch@unex.berkeley.edu
extension.berkeley.edu/subject/landscape.html

FREE INFORMATION SESSION
Certificate Program in Landscape Architecture and Professional Sequence in Cultural Landscape Preservation and Management
Discover how UC Berkeley Extension can prepare you for success in the growing and challenging field of landscape architecture. This short session includes an overview presentation, an opportunity to meet program staff and a question-and-answer period. For more information on the professional certificate, see p. 23 or visit extension.berkeley.edu/cert/land.html. For more information on the specialized program of study, see p. 24 or visit extension.berkeley.edu/pmp/preservation.html.
EDP 023481
1 meeting
Thursday, 6:30–8 pm
Jan. 19
San Francisco: Art and Design Center • FREE
EDP 023499
1 meeting
Tuesday, 6:30–8 pm
May 15
San Francisco: Art and Design Center • FREE

Foundation Courses

Introduction to Landscape Architecture
X457 • 2 semester units in Landscape Architecture
Get an orientation to landscape architecture as an environmental design profession. Lectures and field trips explore the history of landscape architecture; the central ideas of the profession; the role of the designer in the problem-solving process; and the nature, modes and scope of current landscape architectural practice.
EDP 013532
Jennifer Ivanovich, M.L.A.
10 meetings
Tuesdays, 6–9:30 pm
Feb. 14–April 3 (also Saturdays, Feb. 18 and March 10, 2–5 pm)
San Francisco: Art and Design Center • $650

Gardens, Parks and Urban Open Spaces I
X416 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture and in the Professional Sequence in Cultural Landscape Preservation and Management
Examine the development of the built environment in terms of landscape architecture, architecture, urban design and their interrelationship. Topics include Islamic achievements in Asia, urban planning during the Italian Renaissance, the gardens of Eastern Asia and the emergence and evolution of public parks and open spaces.
EDP 843474
Julia Pon, M.A.
Jan. 17–April 10
Online • $820

Gardens, Parks and Urban Open Spaces II
X418 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture and in the Professional Sequence in Cultural Landscape Preservation and Management
Study the interrelationship among landscape architecture, architecture and urban design. Slide-illustrated lectures survey the built environment from professional landscape architecture’s beginnings in the 19th-century English social reform movement to the present. Emphasis is on the evolution and growth of the landscape architecture profession.
Prerequisite: Gardens, Parks and Urban Open Spaces I X416
Sec. 1 EDP 843482
Maria Landoni
Jan. 17–April 10
Online • $820
Sec. 2 EDP 013540
Elizabeth Boults, M.L.A.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 23–May 7 (no meeting Feb. 20)
San Francisco: Art and Design Center • $825

Landscape Graphics I
X458 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
This continuation of Landscape Graphics I X458 sharpens your visual thinking skills for applications in which drawing is used to communicate ideas, processes and images. A series of drawing exercises includes illustration techniques for plans and elevations. The instructor covers rendering techniques with media such as colored pencils, pastels, markers, pencils and ink.
Prerequisite: Landscape Graphics I X458
EDP 013557
Vera Gates, B.S., LEED AP
15 meetings
Wednesdays, 6:30–9:30 pm
Feb. 15–May 23
San Francisco: Art and Design Center • $750
FREE PUBLIC LECTURE

A Private Paradise: Contemporary American Gardens

Editor and author Charlotte Frieze moderates a panel of prominent California landscape architects and designers for a conversation on contemporary gardens. Her recent book Private Paradise: Contemporary American Gardens (Monacelli Press, 2011) serves as the starting point for an exploration of individual design philosophy and the intersection between traditional elements of garden design and current concerns such as sustainability, drought tolerance and the use of native plants.

Charlotte Frieze, B.A., B.S., designs gardens for residential clients. She has been a member of the American Society of Landscape Architects since 1984 and was elected to the Council of Fellows in October 2008. From 1989 until 2007, Frieze was House & Garden’s garden editor, traveling the world to bring brilliant garden design to more than 1 million subscribers. Frieze is author of the three-book series The Zone Garden, A Surefire Guide to Gardening (Simon & Schuster, 1997) and Social Gardens: Outdoor Spaces for Living and Entertaining (Stewart, Tabori & Chang, 1988).

EDP 023473
1 meeting
Wednesday, 7–9 pm
Jan. 18
San Francisco: Art and Design Center
FREE

Spring Plants and Applications
X444 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Get an introduction to approximately 125 species of trees, shrubs and ground covers commonly used in landscaping in Northern California. Discuss the visual characteristics, nomenclature, cultural requirements and design applications with the instructor and fellow students. You pay particular attention to plants especially valued for springtime features such as blooms and new foliage. You also learn to recognize the plants in several situations and stages of maturity and develop a plant palette varied enough to prepare basic planting plans. Each session includes an outdoor field trip, rain or shine. Wear walking shoes. Note: This is a field-trip course. Class meeting locations change weekly.
Candidates for the Certificate Program in Landscape Architecture who are already skilled in plant identification may be able to waive this course by taking an exam. For information about taking the plant identification waiver exam, call (415) 284-1041.

EDP 013565
Quin Ellis, A.S.
12 meetings
Saturdays, 9 am–1 pm
March 3–May 19
Berkeley Campus: 50 Barrows Hall • $780

Advanced Courses

Construction Technology I
X404 • 4 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Grading, drainage, on-site water retention and erosion control are the subjects of this course as you learn about structures appropriate to grading solutions (retaining walls, curbs) and develop grading skills for both earth forms and hard surfaces. The goal is to develop an understanding of the procedures and skills for solving grading and surface drainage problems, as well as the techniques necessary for quantifying the elements of their solution.
Prerequisites: Completion of all courses leading up to and including Studio L1: Environmental Design X116, Planting Design X401 and Social Factors in Environmental Design X402

EDP 013573
Michael Lamb, M.L.A.
30 meetings
Wednesdays, 6:30–9:30 pm
Feb. 8–May 23 (also Saturdays, Feb. 11–May 18, 9 am–12 pm; no meeting Feb. 18)
San Francisco: Art and Design Center • $1,325

Planting Design
X401 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Review the history of planting in environmental design, and focus on the design process: site analysis, client and user analysis and schematic design. Learn the concepts of plant massing, scale, space, proportion, color, texture, light, scent, illusion and seasonal changes, and prepare planting plans based on these concepts.
Prerequisites: Completion of all courses leading up to and including Studio L1: Environmental Design X116

EDP 013599
Patrick Miller, M.L.A.
14 meetings
Tuesdays, 5:45–9:45 pm
Jan. 17–April 24 (also Sundays, March 11 and April 1, 10 am–4 pm; no meetings Feb. 21, March 13 and April 10)
San Francisco: Art and Design Center • $1,115

Advanced AutoCAD for Landscape Architecture: Level II
X433 • 2 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Reinforce and improve your ability to create landscape architectural designs using AutoCAD 2012 for Windows. You study concepts such as how to use dialog boxes to adjust settings for dimensions, linetypes, layers and color. You also learn how to make a script file to manage layers for various plan types and to transfer layers from model-space to paper-space viewports.
Prerequisite: AutoCAD for Landscape Architecture: Level I X428

EDP 013607
Tony Estorbrooks, B.L.A.
14 meetings
Mondays, 6:30–9:30 pm
Feb. 6–May 14 (no meeting Feb. 20)
San Francisco: Art and Design Center • $1,210

Studio L3: Advanced Landscape Architectural Design
X408 • 6 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Study advanced landform and planting design, design detailing, preparation of working drawings and presentation graphics. Discover design solutions at the design-development phase of the project sequence. Lectures address budgets, available materials and technology and construction industry norms on detailed and integrated design decisions.
Prerequisites: See Web.

EDP 013623
Jacob Tobias, M.L.A.
30 meetings
Mondays and Wednesdays, 6:30–9:30 pm
Feb. 6–May 21 (no meeting Feb. 20)
San Francisco: Art and Design Center • $2,050
Certificate Program in Landscape Architecture

Landscape architecture is a vital field dealing with a broad range of complex issues. The Certificate Program in Landscape Architecture offers a preprofessional curriculum focused on the numerous and varied opportunities that exist in landscape architecture. This professional certificate enables you to develop a diverse set of skills to reflect current practice and anticipate change so that you are well-equipped to make worthwhile contributions from the outset of your career. The curriculum encourages individual creativity while emphasizing the practical applications of design solutions. In short, this professional certificate offers useful exposure to the theory and practice of landscape architecture.

Curriculum Requirements
The curriculum consists of 21–22 required courses (depending on specific electives taken) for a total of 63 semester units (945 hours of instruction).

Required Foundation Courses
- Introduction to Landscape Architecture X457 (offered this term)
- AutoCAD for Landscape Architecture: Level I X428
- Autumn Plants and Applications X446
- Gardens, Parks and Urban Open Spaces I X416 (offered this term)
- Gardens, Parks and Urban Open Spaces II X418 (offered this term)
- Landscape Graphics I X458
- Landscape Graphics II X459 (offered this term)
- Principles and Elements of Design X412.1
- Spring Plants and Applications X444 (offered this term) or Summer Plants and Applications X445
- Studio LI: Environmental Design X116

Required Advanced Courses
- Advanced AutoCAD for Landscape Architecture: Level II X433 (offered this term)
- Construction Technology I X404 (offered this term)
- Construction Technology II X405
- Planting Design X401 (offered this term)
- Professional Practice in Landscape Architecture X427
- Social Factors in Environmental Design X402
- Studio L2: Project Planning and Design X406
- Studio L3: Advanced Landscape Architectural Design X408 (offered this term)
- Studio L4: Environmental Analysis and Design X407
- Studio L5: Site Planning Practicum X409 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/land.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/land.html
(415) 284-1041
landarch@unex.berkeley.edu
Register using EDP 022186
Professional Sequence in Cultural Landscape Preservation and Management

Cultural landscapes are places that include historical, cultural and natural resources associated with an important historic event, activity, person or group of people. Gain an understanding of the preservation and management of cultural landscapes, a growing area of professional practice. Learn established professional standards, get an introduction to the vocabulary of the discipline and apply learned techniques to class assignments. Develop awareness and build skills through a sequence of lecture-style and studio-based courses. Classes that make up the program are either required courses or approved electives in the Certificate Program in Landscape Architecture, which allows you to progress concurrently through both programs.

Curriculum Requirements
The curriculum consists of 5 required courses for a total of 11 semester units (142 hours of instruction).

Required Courses
- Design with Culture Studio X479
- Gardens, Parks and Urban Open Spaces I X416 (offered this term)
- Gardens, Parks and Urban Open Spaces II X418 (offered this term)
- The Cultural Landscape: Preservation and Sustainable Practice X455
- Tools of Preservation: Managing Change in Cultural Landscapes X451 (offered this term)

Learn More and View the Flyer
extension.berkeley.edu/spos/preservation.html
(415) 284-1070
landarch@unex.berkeley.edu

Register using EDP 022509

Studio L5: Site Planning Practicum
X409 • 6 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
This final course provides detailed guidance on the preparation of a comprehensive set of contract documents for a site planning project. Lecture topics focus on issues of professional practice, including marketing, project management, controlling work with other professionals, licensing and construction administration. Three weekend morning field trips (to be arranged) focus on detailing, potential construction difficulties and successful project implementation. You may wish to brush up on either hand-drafting or CAD skills in the weeks prior to starting class.
Prerequisites: All other required courses in the Certificate Program in Landscape Architecture
EDP 013631
Catherine Chang, B.A.
30 meetings
Tuesdays, 6:30–9:30 pm
Jan. 10–April 17 (also Thursdays, Jan. 12–April 19, 6:30–9:30 pm; three weekend morning field trips to be arranged)
San Francisco: Art and Design Center • $2,050

Electives

Tools of Preservation: Managing Change in Cultural Landscapes
X451 • 1 semester unit in Landscape Architecture
A requirement in the Professional Sequence in Cultural Landscape Preservation and Management; an elective in the Certificate Program in Landscape Architecture
The preservation of historically significant and culturally important landscapes is a vibrant and growing aspect of landscape architectural practice. Get an introduction to these fundamental tools of the preservation process, and gain an understanding of the function and application of those tools in this survey course. Subject area experts give guest lectures on specific aspects of the preservation process. Learn effective strategies and techniques for managing and enhancing culturally important landscapes as they are inevitably confronted with change or threatened with demolition.
EDP 013615
Gretchen Hilyard, M.S.
6 meetings
Thursdays, 6:30–9:30 pm
April 19–May 24
San Francisco: Art and Design Center • $495

LEED for Landscape Architects: Shaping a Sustainable Landscape
X471 • 2 semester units in Landscape Architecture
An elective in the Certificate Program in Landscape Architecture
The Leadership in Environment and Energy Design (LEED) program is one of the most widely recognized systems for gauging sustainable development. You examine the application and meaning of sustainable practices in landscape architecture, with emphasis on this and other emerging systems. You learn to identify opportunities for sustainable landscape design, apply a range of design and construction practices within the context of the LEED system and focus on LEED documentation.
EDP 013581
Geoffrey Katz, M.L.A., ASLA, LEED AP
18 meetings
Thursdays, 6:30–9:30 pm
Feb. 2–April 5
San Francisco: Art and Design Center • $580

Community Design and Internship
X401.7 • 2 semester units in Landscape Architecture
Assist in the preparation of an urban greening plan, and develop your planning skills. Explore greening strategies, urban forest management and the public process of community design. Classroom lectures supplement weekly Saturday work sessions. Attendance at one public workshop or meeting is also required. You are paid a modest hourly wage by the sponsoring firm for nonclassroom hours. Enrollment is limited to six.
Contact the program director for approval prior to enrolling for this unique opportunity.
EDP 013821
JC Miller, M.A., ASLA
18 meetings
Thursdays, 6:30–8:30 pm
Feb. 2–April 12 (also Saturdays, Feb. 4–May 5, 9 am–1 pm; no meetings Feb. 9, Feb. 18, Feb. 23, March 8, March 22, April 5 and April 7)
San Francisco: Art and Design Center • $575
# Sustainable Design

## COURSE INFORMATION

(415) 284-1041
designarts@unex.berkeley.edu
extension.berkeley.edu/subject/sustainable.html

## ONLINE COURSE INFORMATION

(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

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## FREE INFORMATION SESSION

**Professional Program in Sustainable Design**

Find out how this specialized program of study can help you advance or start your career in sustainable design. This no-obligation session also gives you an opportunity to meet students and teachers in the program, as well as tour the Art and Design Center at Third and Mission streets in San Francisco to see where courses are held and view examples of work produced by current students. For program details, see this page or visit extension.berkeley.edu/subject/sustainable.html.

**EDP 021550**

1 meeting
Tuesday, 6:30–8 pm
Dec. 13
San Francisco: Art and Design Center • FREE

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## Required Courses

### Principles of Sustainable Design

**X400.6** • 2 semester units in Architecture

*A requirement in the Professional Program in Sustainable Design, an elective in the Certificate Program in the Essentials of Green Chemistry*

Examine the history and development of sustainability as a social goal, and explore its implications for the design of built environments. Study concepts such as permaculture, biophilia, localism, life-cycle analysis, biomimicry, natural capitalism, cradle-to-cradle production, systems thinking and ecological design. Explore government programs, legislation, industry regulations and codes, green certifications, LEED and nonprofit organizations involved with sustainability.

**Sec. 1 EDP 843532**
Jessica Caryn Kraft, Ph.D.
Jan. 17–April 10
Online • $799

**Sec. 2 EDP 013680**
Antonio Pares, B.Arch.
10 meetings
Mondays, 6:30–9:30 pm
Jan. 30–April 9 (no meeting Feb. 20)
San Francisco: Art and Design Center • $750

### Practical Applications of Sustainable Design

**X470.1** • 2 semester units in Architecture

*A requirement in the Professional Program in Sustainable Design*

Translate your knowledge of sustainable design concepts into practical, deployable and tangible methods. Learn to take responsibility for your work by understanding the impact that your designs have on the environment and how to control this impact. Through research of materials, systems and construction methods, you explore ways to design and build in an environmentally responsible manner. Using case studies, look at how others are creating communities, solving economic problems and developing new solutions to design. Class involves lectures, discussions and student presentations exploring these ideas.

**Sec. 1 EDP 843524**
David Waldorf, M.Arch., B.Arch., BSID, CGBP
Jan. 17–April 10
Online • $799

**Sec. 2 EDP 013672**
David Waldorf, M.Arch., B.Arch., BSID, CGBP
10 meetings
Tuesdays, 6:30–9:30 pm
March 20–May 22
San Francisco: Art and Design Center • $750

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*Register using EDP 022418*
Electives

Urban Dirt: Designing Sustainable Landscapes On-Structure

X411.6 • 2 semester units in Architecture

An elective in the Professional Program in Sustainable Design

Explore the design of urban landscapes on-structure, those built on an assemblage of constructed ground created by architectural and engineering systems such as roofs, roads and bridges. Gain an awareness of how new ideas for a scarce and valuable resource can transform the urban landscape.

EDP 013698
Jesse Markman, M.L.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
San Francisco: Art and Design Center • $750

Sustainable Building Materials

X402.1 • 1 semester unit in Architecture

An elective in the Professional Program in Sustainable Design

This course presents a value system for selecting environmentally preferable products and an overview of the green building market. You learn how to evaluate building materials and product manufacturers through a lens of social, environmental and economic impacts, as well as learn where to find green building materials and available cutting-edge tools for evaluation and specification. You also learn about life-cycle analysis, cost, sourcing, energy efficiency, off-gassing, green specifications, value engineering and third-party certifications. Class features include guest speakers, case studies and field trips to local showrooms. You analyze award-winning sustainable products and environmental design and learn how to apply the triple-bottom-line approach to materials selection.

EDP 013664
Heather Gaddoniex, B.A.
6 meetings
Tuesdays, 6:30–9:30 pm
Feb. 7–March 13
San Francisco: Art and Design Center • $425

Ecology for Designers

X404.3 • 2 semester units in Architecture

An elective in the Professional Program in Sustainable Design

Get an introduction to the workings of land-based ecological systems. Gain a core understanding of the principles of ecology and learn to assess natural systems through class work and in-field studies. Focus on the applications of ecological analysis and how you can incorporate them into the planning and design of a more sustainable built environment.

EDP 013649
David Deppen, B.Arch., LEED AP, and Jennifer Berry, B.S., LEED AP
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
San Francisco: Art and Design Center • $750

Sustainable Project Development

X411.3 • 1 semester unit in Architecture

An elective in the Professional Program in Sustainable Design

Develop the tools to successfully manage a sustainable development project. Examine project phases from conception to construction, and learn to understand how integrated design, trade collaboration, eco-charrettes, systems thinking and commissioning come into play. Guest speakers, case studies and field trips illustrate the roles and responsibilities of all involved. Learn to apply eco-accounting concepts such as life-cycle analysis, embodied energy, triple bottom line and rebate programs. Learn the ins and outs of third-party certifications, municipal and federal green building incentives and ways to achieve LEED and beyond.

EDP 013656
Instructor to be announced
6 meetings
Mondays, 6:30–9:30 pm
April 16–May 21
San Francisco: Art and Design Center • $425
What Students Say About UC Berkeley Extension

Julia Chang credits her experience managing a marketing campaign for Daniel Chocolates in Canada with providing the epiphany to switch careers. “I was inspecting a store window display and thought, ‘That doesn’t speak to me,’” she says. “But then I worked with the designers on redesigning the storefront and realized, ‘Wow, I really want to go into design.’” After a move back to her native Taiwan and a period working for the Future Living furniture company, Chang is now living in the Bay Area to pursue Extension’s Certificate Program in Interior Design and Interior Architecture.

The certificate curriculum offers much more than Chang originally anticipated. “They’re not just teaching you the basic skills but also practical skills, such as how to run a business and interact with clients—skills that people don’t teach you anywhere unless you go into the field and learn,” she says.

Chang’s long-term goal is to travel for work in the commercial field. She has her experience at Extension to thank for opening her mind to different styles, in turn broadening her scope for international design. “The people you go to school with really affect your experience,” Chang says. “Seeing people’s designs can inspire you. Some may not be your taste, but they inspire you to try new things.”

See other student profiles on p. 261 and throughout the catalog.
Behavioral Health Sciences
Get the best training for mental health professionals. Whether you’re a licensed clinical social worker, marriage and family therapist, addictions counselor, registered nurse or psychologist, UC Berkeley Extension is the approved provider you want for your professional development and licensing needs. Instructors who are leading researchers and clinicians offer the latest approaches to challenging issues you face every day—from treating patients with mood or anxiety disorders to facilitating grief counseling groups to diagnosing psychiatric disorders in children or older adults.

Earn a certificate in alcohol and drug abuse studies or complete our new program in health advocacy. Or, enhance your assessment and treatment skills in a clinical case seminar or workshop. Each course and workshop offers the theoretical and practical information you need to stay up to date and build new expertise. For the education that helps you be your best in your practice, come to UC Berkeley Extension.

UC Berkeley Extension is an approved provider by the California Board of Behavioral Sciences, the American Psychological Association, the Board of Registered Nurses and the California Association of Alcoholism and Drug Abuse Counselors.

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Counseling and Psychotherapy

COURSE INFORMATION
(510) 643-3883
counspsych@unex.berkeley.edu
extension.berkeley.edu/subject/counspsych.html

Continuing Education Workshops

An Experiential Introduction to Art Therapy
1.4 ceu • 14 hours CE credit: BRN, LCSW/MFT and psychologists
An elective in the Professional Program in the Study of Loss and Grief
Learn innovative, classic and highly useful methods of engaging clients in personal and group expression of feelings, traumas, problems, insecurities and other states of the human condition. You learn psychodynamic, analytic, humanistic, behavioral and mind-body techniques that, when applied, should open up new pathways for working with your clients. This workshop includes a slide lecture, videos and discussion. You are encouraged to bring a case for discussion about how to develop an art-therapy treatment plan. Wear casual clothes for art making. This course is intended for therapists, educators, artists and those interested in the field of art; no previous art experience is required.
EDP 413815
Janet K. Long, M.A., MFT, ATR-BC, CTP
2 meetings
Saturday and Sunday, 9 am–5 pm
April 28–29
Berkeley: Golden Bear Center • $315

FREE PUBLIC EVENT
Making the Health Care System Work for You and Your Family
Understand some of the general trends that patients—as well as those who will be advocating for them either as family members, paraprofessionals or professional health advocates—need to know as they negotiate an increasingly complex health care system in the United States.
For course schedule, see p. 44.

NEW THIS TERM
Overview of Health Care Advocacy
This course gives those professionals and paraprofessionals considering the field an overview of the skills needed to be an effective advocate.
For course schedule, see p. 44.

NEW THIS TERM
Families and Health Care Advocacy
Examine how family systems theory can help advocates work collaboratively with families to better meet family goals.
For course schedule, see p. 44.

NEW THIS TERM
Helping Patients Make Informed Decisions
Learn to support and advocate for patients facing complex treatment decisions.
For course schedule, see p. 44.

NEW THIS TERM
Professional Program in Health Advocacy
With an increasingly complex and dynamic health care system in the United States and an aging population, there is a growing need for an informed group of health advocates who are qualified to advise patients and their families on health care issues.
See p. 44 for complete program details.

BeHAIVAR HEALTH SCIENCES

Behavioral Health Sciences

Free Information Session

Attend a free information session to discover how UC Berkeley Extension can help you achieve your goals. Learn more about courses and programs, meet other prospective students, talk to instructors and staff and ask questions. To reserve your space, call (510) 642-4111 or visit extension.berkeley.edu/infosessions.

Certificate Program in Alcohol and Drug Abuse Studies
EDP 423160
Monday, Jan. 9, 7–8:30
Berkeley: Golden Bear Center

Meet Licensing/Relicensing Requirements with Continuing Education Units
Many of our courses carry continuing education units (CEUs) to help you meet your professional licensure requirements. Continuing education (CE) credit, if available, is listed after the course title.

Note the following abbreviations:
BRN: Board of Registered Nursing (provider 00226), continuing education for registered nurses
CAADAC: California Association of Alcoholism and Drug Abuse Counselors (provider 4C-99-416-0803), continuing education for Certified Alcohol and Drug Counselors
LCSW/MFT: Board of Behavioral Sciences (provider PCE 1505), mandatory continuing education for licensed clinical social workers and marriage and family therapists
CE credit for psychologists: UC Berkeley Extension is approved by the American Psychological Association (APA) to sponsor continuing education for psychologists. UC Berkeley Extension maintains responsibility for program content.

Behavioral Health Sciences

Free Information Session

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CE credit for psychologists: UC Berkeley Extension is approved by the American Psychological Association (APA) to sponsor continuing education for psychologists. UC Berkeley Extension maintains responsibility for program content.
Loss and Grief

THREE-DAY INSTITUTE
Introduction to Loss and Grief
Issues: Refreshing Old Skills, Learning New Skills
1.8 ceu • 18 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in the Study of Loss and Grief

Loss and grief provide an opportunity to transform deep emotion into healing. This three-day workshop provides an overview of some of the recent approaches to grief counseling and focuses on key topics in the field, including community violence, long-term illness, sudden death, cross-cultural grief, family grief, children and grief and somatic aspects of grief.

This program is not recommended for the newly bereaved.

Guest speakers: Lyn Prashant, Ph.D., CT, CMT; Erika Maslan, MFT; Claire S. Chow, MFT; Gale Bell, Ph.D.; David Jull-Patterson, Ph.D.; and Jim Hernandez, former Concord Police Department youth violence/gang diversion specialist

EDP 413906
Susan Moore, M.A., FT
3 meetings
Friday–Sunday, 9 am–4 pm
Feb. 24–26
Berkeley: Golden Bear Center • $595

NEW THIS TERM
Clinical and Ethical Approaches to End-of-Life Care
1.4 ceu • 14 hours CE credit: BRN, LCSW/MFT and psychologists
An elective in the professional programs in Loss and Grief and in Aging and Mental Health

Care for those approaching death is an integral and important part of health care. Learn how to assess the overall quality of such care and to identify sources of suffering, as well as ways of alleviating them and determining what decisions need to be made and who needs to be involved in making and implementing them. Gain the skills and understanding necessary to achieve standards of care for mental health services at life’s end, including interpersonal strategies, clinical knowledge, technical proficiency and respect for individuals and their culture.

EDP 423301
David Jull-Patterson, Ph.D. (license PSY14765)
2 meetings
Saturdays, 9 am–5 pm
March 10 and 17
San Francisco: Downtown Center • $295

Clinical Case Seminar in Loss and Grief
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists
An requirement in the Professional Program in the Study of Loss and Grief

This seminar, an integral part of the Professional Program in the Study of Loss and Grief, offers you the opportunity to apply the learning acquired in other courses and to increase your understanding of your own counseling style and skills. Using case presentations, you enhance your intervention skills and expand your ability to work with people experiencing loss and grief.

Prerequisites: Completion of at least three workshops in the Professional Program in the Study of Loss and Grief or consent of instructor

EDP 413930
Erika Maslan, M.A., MFT
2 meetings
Saturday and Sunday, 9:30 am–4:30 pm
May 5–6
San Francisco: Art and Design Center • $305

An Experiential Introduction to Art Therapy
Learn innovative, classic and highly useful methods of engaging clients in personal and group expression of feelings, traumas, problems, insecurities and other states of the human condition.

For course schedule, see p. 30.

Post-Traumatic Stress Disorder: Assessment and Treatment
Gain a thorough understanding of the DSM-5 diagnostic criteria for PTSD; recognize clinical manifestations of the disorder; and review considerations for treatment, including psychotherapy and medications.

For course schedule, see p. 34.

Professional Program in The Study of Loss and Grief

If you are a professional who works with people who have experienced loss and grief and you seek to advance your learning in this specialized area of practice, the Professional Program in the Study of Loss and Grief is designed for you. Gain an understanding of current issues in the field of loss and grief counseling, and increase your ability to make assessments and informed referrals. The program includes a three-day introductory institute; the Clinical Case Seminar in Loss and Grief; and a series of advanced workshops on topics such as children and families, spirituality, violence and healing, cross-cultural aspects of loss and grief and somatics.

These workshops are not recommended for the newly bereaved.

Curriculum Requirements
The curriculum consists of 2 required workshops and 34 hours of electives for a total of 6.4 ceu (64 hours of instruction).

Required Workshops
• Clinical Case Seminar in Loss and Grief (offered this term)
• Introduction to Loss and Grief Issues: Refreshing Old Skills, Learning New Skills (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/loss.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/loss.html
(510) 643-3883
counpsych@unex.berkeley.edu

Register using EDP 402231
### Professional Program in Eating and Weight Disorders

The Professional Program in Eating and Weight Disorders offers mental health clinicians and other health care professionals a series of CEU workshops aimed at improving assessment, diagnostic and treatment skills in this growing field. In addition to learning different approaches to treating a range of eating disorders—including anorexia, bulimia and binge eating—you gain a better understanding of prevention approaches, nutritional issues and the psychology of weight disorders. Program electives focus on working with special populations such as teens, men, women, athletes and others.

**Curriculum Requirements**
The curriculum consists of 5 required courses and 1 elective (36 hours of instruction).

**Required Courses**
- Assessing Levels of Care and the Use of Family Therapy in the Treatment of Eating Disorders (offered this term)
- Assessment, Etiology and Diagnosis of Eating Disorders
- Cognitive-Behavioral and Psychodynamic Approaches to the Treatment of Eating and Weight Disorders
- Nutrition and Eating and Weight Disorders (offered this term)
- The Psychology of Weight Reduction: Eating, Exercise and Body Image

**Electives**
For a list of electives available this term, visit extension.berkeley.edu/spos/weight.html.

**Learn More and View the Flyer**
extension.berkeley.edu/spos/weight.html (510) 643-3883 counspych@unex.berkeley.edu

**Register using EDP 402412**

### Eating and Weight Disorders

#### Nutrition and Eating and Weight Disorders
0.6 ceu • 6 hours CE credit: BRN, MFT/LCSW and psychologists

A requirement in the Professional Program in Eating and Weight Disorders

Gain an understanding of the role that hunger and satiety cues have on the development and continuation of eating disorders, and learn to identify eating behaviors on the compulsive-eating and intuitive-eating spectrum. After attending this workshop, you should have a good understanding of the physiology of digestion and absorption of nutrients and be able to identify both macronutrients and micronutrients and their importance to the body.

**EDP 413773**

Sandi Liddicoat, B.S., RD
1 meeting
Saturday, 9 am–4 pm
May 5
San Francisco: Downtown Center • $195

#### Assessing Levels of Care and the Use of Family Therapy in the Treatment of Eating Disorders
0.6 ceu • 6 hours CE credit: BRN, MFT/LCSW and psychologists

A requirement in the Professional Program in Eating and Weight Disorders

**EDP 413864**

Jacquelyn Holmes, M.Ed., MFT
1 meeting
Saturday, 9 am–4 pm
Feb. 25
San Francisco: Downtown Center • $195

### Trauma-Informed Interventions

#### Overview of Trauma-Informed Assessment and Intervention
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Trauma-Informed Interventions

Learn how trauma is defined socially, culturally and clinically, as well as how to assess and identify trauma histories in your patients. Examine strategies to clinically explore these histories in healing ways with your clients, including specific interventions you may use in supporting clients in the clinical hour and managing your own feelings as you hear stories of trauma from your clients. You learn helpful self-care strategies for clients with post-traumatic stress disorder (PTSD), as well as psychoeducational materials that can help support clients to begin to reframe their trauma histories and start along the path to healing. Teaching techniques include large and small group discussions, exploration of vignettes and a guest speaker.

**EDP 413971**

Rick Nizzardini, J.D., M.S.W.
2 meetings
Saturday and Sunday, 9 am–4 pm
March 10–11
Berkeley: Golden Bear Center • $295

#### Neurobiology of Complex Trauma
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Trauma-Informed Interventions

Learn how complex trauma (repeated trauma) affects the chemistry, functioning and anatomy of the brain. You study these effects in the context of attachment, affect regulation and normative brain development, as well as how trauma disrupts each of these. You also examine some of the trauma symptomology and presentations that arise from these disruptions. Finally, you review a range of interventions that can help impact the neurophysiological effects of trauma. Plan to practice these interventions in the workshop. Teaching methods include lecture, case presentations, modeling and experiential exercises.

**EDP 413880**

Stefanie F. Smith, Ph.D.
1 meeting
Saturday, 9 am–4 pm
April 14
San Francisco: Downtown Center • $195
**Treatment of the Traumatized Child**

0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

*An elective in the professional programs in Child and Adolescent Treatment and in Trauma-Informed Interventions*

Examine the more common forms of trauma seen in psychotherapy, such as family violence and child abuse, in this advanced workshop. You study various interventions and treatment methodologies that can be used with children and briefly review how trauma affects a child at various developmental stages. You also study the impact of working with victims of child trauma, including secondary traumatization, countertransference and self-care. You should be prepared to give a 10-minute presentation of a case with specific questions by the end of the workshop. This workshop is designed for the clinician with at least two years of experience working therapeutically or clinically with children and adolescents.

**EDP 413955**

Julie Robbins, M.S.W., LCSW

1 meeting

Friday, 9 am–5 pm

April 27

Berkeley: Golden Bear Center • $215

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**Post-Traumatic Stress Disorder: Assessment and Treatment**

Gain a thorough understanding of the DSM-5 diagnostic criteria for PTSD; recognize clinical manifestations of the disorder; and review considerations for treatment, including psychotherapy and medications.

*For course schedule, see p. 34.*
Professional Program in The Treatment of Anxiety Disorders

In a given year, anxiety disorders affect as many as 40 million American adults age 18 years and older. An increasing number of evidence-based treatment approaches can help most people overcome some of the most common anxiety disorders, including generalized anxiety disorder, panic disorders, obsessive-compulsive disorders (OCD), post-traumatic stress disorders (PTSD) and social and more specific phobias. In the Professional Program in the Treatment of Anxiety Disorders, you and fellow clinicians learn about some of the major causes, diagnostic issues and prevention and treatment approaches that you can incorporate into your practice.

Curriculum Requirements
The curriculum consists of 5 required workshops and 1 elective for a total of 4.0 ceu (40 hours of instruction).

Required Workshops
- From Worry to Panic: Phobias, GAD and Panic Disorders (offered this term)
- Post-Traumatic Stress Disorder: Assessment and Treatment (offered this term)
- Treating Obsessive-Compulsive Disorder and Body Dysmorphic Disorder
- Understanding and Treating Anxiety Disorders: An Overview
- Clinical Case Seminar: Anxiety Disorders

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/anxiety.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/anxiety.html
(510) 643-3883
counspych@unex.berkeley.edu

Register using EDP 402347

Anxiety Disorders

Post-Traumatic Stress Disorder: Assessment and Treatment
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in the Treatment of Anxiety Disorders; an elective in the professional programs in the Study of Loss and Grief and in Trauma-Informed Interventions
It is estimated that as many as 7.7 million adults may have PTSD, and it can occur at any age, including childhood. The primary purpose of this workshop is to define PTSD, identify clinical manifestations and highlight treatment considerations. Participants gain a thorough understanding of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnostic criteria for PTSD; recognize clinical manifestations of the disorder; and review considerations for treatment, including psychotherapy and medications.
EDP 413849
Mark Balabanis, Ph.D.
1 meeting
Saturday, 9 am–5 pm
April 7
Berkeley Campus: 104 Barrows Hall • $205

From Worry to Panic: Phobias, GAD and Panic Disorders
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in the Treatment of Anxiety Disorders
Panic disorder, generalized anxiety disorder and phobias are believed to affect some 30 million Americans. All of these disorders can severely limit someone’s daily functioning. These disorders, however, are effectively treated with the use of specific cognitive-behavioral therapy techniques and medications. The focus of this class is on understanding key elements of each diagnosis and thoroughly reviewing treatment strategies.
EDP 413872
Daniel N. Weiner, Ph.D.
1 meeting
Saturday, 9 am–4:30 pm
Feb. 4
San Francisco: Downtown Center • $205

Aging and Mental Health

Alzheimer’s Disease and Memory Loss: Working With Families
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists
An elective in the Professional Program in Aging and Mental Health
Alzheimer’s disease is the most common cause of dementia in older adults. Although treatment with medications and behavioral interventions may help prevent some symptoms from becoming worse for a limited time, research shows that effective care and support can help improve the quality of life for individuals and their caregivers. Learn the causes, clinical presentation, prognosis and treatment of Alzheimer’s disease and mild cognitive impairment. You also learn about the assessment and diagnosis of Alzheimer’s disease and how to identify the needs of families that have loved ones with the disease.
Guest presenters: Craig Hou, M.D., and Jennifer Merrilees, RN, M.S.
EDP 413831
Julene Johnson, Ph.D.
1 meeting
Saturday, 10 am–5 pm
Feb. 4
Berkeley Campus: 155 Barrows Hall • $195

Addressing Alcohol and Drug Problems in the Treatment of Mood Disorders
Learn how alcohol and drug use can exacerbate symptoms of anxiety and depression, and explore some of the basic tools used to assess the severity of alcohol and drug problems.
For course schedule, see p. 40.

NEW THIS TERM
Clinical and Ethical Approaches to End-of-Life Care
Learn how to assess the overall quality of end-of-life care and how to identify sources of suffering, as well as ways of alleviating them and determining what decisions need to be made and who needs to be involved in making and implementing them.
For course schedule, see p. 31.
Professional Program in
Aging and Mental Health

As the U.S. population ages, the number of age-related morbidities will increase and the need for knowledgeable health, social service and mental health professionals will continue to grow. The Professional Program in Aging and Mental Health includes a series of continuing education unit (CEU) workshops offered by leading researchers and clinicians in the Bay Area. Workshops in this program provide an update on aging and mental health research and counseling tools used in a variety of settings. Courses are aimed at helping you stay current in this field and become a better clinician in your work with older adults and their families.

Curriculum Requirements
The curriculum consists of 2 required workshops and 36 hours of electives for a total of 6.0 ceu (60 hours of instruction).

Required Workshops
• Assessment and Treatment of Mental Illness in Older Adults
• Clinical Case Seminar on Aging and Mental Health

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/aging.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/aging.html
(510) 643-3883
counspych@unex.berkeley.edu
Register using EDP 402321

Professional Program in
The Treatment of Mood Disorders

Mood disorders are the most prevalent psychiatric condition, accounting for 25 percent of patients in psychiatric inpatient settings, 65 percent of psychiatric outpatients and as much as 10 percent of all patients seen in nonpsychiatric medical settings. The Professional Program in the Treatment of Mood Disorders is a series of workshops that review state-of-the-art assessment and treatment of this clinical problem. Gain an understanding of current issues in the field of mood disorders, and become better able to make assessments, informed referrals and other professional recommendations.

The curriculum consists of 2 required workshops and 3 electives for a total of 3.0 ceu (30 hours of instruction). At least one elective must focus on a specific population (such as adolescents, older adults or women).

Required Workshops
• Diagnosis and Treatment of Bipolar Mood Disorders
• Evidence-Based Psychotherapy for Mood Disorders (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/mood.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/mood.html
(510) 643-3883
counspych@unex.berkeley.edu
Register using EDP 402272

Mood Disorders

Evidence-Based Psychotherapy for Mood Disorders
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in the Treatment of Mood Disorders

This daylong workshop reviews best practices for the treatment of mood disorders in adults, with particular emphasis on evidence-based psychosocial treatments. The workshop also focuses on specific evidence-based treatment for unipolar and bipolar depression in adults, as well as cognitive-behavior therapy.

EDP 413898
Robert Reiser, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Jan. 28
San Francisco: Downtown Center • $195

Addressing Alcohol and Drug Problems in the Treatment of Mood Disorders

Learn how alcohol and drug use can exacerbate symptoms of anxiety and depression, and explore some of the basic tools used to assess the severity of alcohol and drug problems.

For course schedule, see p. 40.
Children and adolescents have unique issues that require treatment tailored to their specific emotional needs, developmental issues and family circumstances. The Professional Program in Child and Adolescent Treatment offers a series of advanced and topical workshops designed to help you and other mental health professionals stay current in your work with children, adolescents and their families. Choose from a range of electives featuring outstanding researchers and clinicians in the field, helping you to make better assessments and diagnoses as well as more informed referrals and other professional recommendations related to your current practice.

Curriculum Requirements
The curriculum consists of 2 required workshops and 48 hours of electives for a total of 7.2 ceu (72 hours of instruction).

You may specialize in age-specific practice, selected methods of intervention or common presenting problems. You are strongly encouraged to take at least one workshop on psychological testing or cross-cultural practice with children and families.

Required Workshops
- Psychiatric Disorders in Children and Adolescents: Diagnostic Evaluation and Treatment
- Treatments That Work: Evidence-Based Psychotherapy for Children and Adolescents (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/child.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/child.html
(510) 643-3883
counspsych@unex.berkeley.edu

Register using EDP 402206

Child and Adolescent Treatment

Treatments That Work: Evidence-Based Psychotherapy for Children and Adolescents
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in Child and Adolescent Treatment

The prevalence of psychiatric disorders in school-age children is estimated to be 20–30 percent and growing. Many of these psychiatric disorders do not remit spontaneously and appear to become more complex and treatment-resistant with time, underscoring the importance of training clinicians in treatments of established efficacy. This two-day workshop presents guidelines for conducting evidence-based psychotherapy and reviews psychosocial treatments proven to be efficacious for the most common childhood and adolescent disorders. For each condition, the efficacy of various treatments, the primary treatment targets and components and a typical treatment plan are presented. The workshop emphasizes treatments for anxiety and mood disorders, as clinicians commonly encounter these conditions in typical outpatient psychotherapy.

EDP 413963
Daniela Owen, Ph.D.
2 meetings
Saturdays, 9 am–4 pm
March 10 and 24
Berkeley Campus: 104 Barrows Hall • $295

Overview of Child/Adolescent Assessment Tests—How to Use Them in Your Practice
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the professional programs in Child and Adolescent Treatment and in Neuropsychological Assessment

Get a vigorous introduction to the most widely used assessment tools measuring cognitive and socio-emotional functioning and personality for children and adolescents. You learn how to match assessment instruments—WISC-IV, CAS, DAS, WJ-R, BASC, CBCL, Rorschach, Roberts, TAT, CAT, H-T-P drawing, Person-in-the-Rain drawing, PAI-A and MMPI-A—with a particular client based on language, culture, presenting problem and reason for requesting report, among other factors. You also learn the elements that make up a good report, including the importance of formulating referral questions that will maximize the likelihood you will receive a useful report.

EDP 413807
Stefanie F. Smith, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Feb. 4
San Francisco: Downtown Center • $205

ASD (Autism Spectrum Disorders) Chronic Conditions and Integrated Care Model
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the Professional Program in Child and Adolescent Treatment

Gain an understanding of autism spectrum disorders, and review the current research in the field. Learn the assessment and diagnostic skills you need to work with children and adolescents who are exhibiting signs of autism, and examine some of the most common treatment approaches in treating this chronic disease. You also get an introduction to an integrated care model that is used in a variety of health and mental health settings. This workshop is intended for licensed clinicians, child development professionals, nurses and other allied health professionals involved in the diagnosis and treatment of autistic disorders.

EDP 413799
Maria-Pilar Bernal-Estevez, M.D.
1 meeting
Saturday, 9 am–5 pm
May 5
San Francisco: Downtown Center • $205

Treatment of the Traumatized Child
Examine the more common forms of trauma seen in psychotherapy, such as family violence and child abuse, in this advanced workshop.

For course schedule, see p. 33.
Neuropsychological Assessment

**Neuropsychological Assessment, Rorschach and MMPI-2: An Update for Advanced Clinical Practice**

1.3 ceu • 13 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Neuropsychological Assessment

The psychological assessment field is quickly changing, and, with growing forensic demands, clinicians are expected to keep current. This course offers an advanced, up-to-date review of assessment methods. You examine specific strengths and limitations of each procedure to enhance your ability to select tests, as well as critically evaluate assessments by others. The issue of malingering, or symptom exaggerations in assessments, is explored. You examine the implications of restandardization of the MMPI for interpreting the basic MMPI-2 profile and develop an understanding of the new MMPI-2 validity scales. You also learn how to use the new structural variables, coding and interpretation and how to integrate Rorschach findings into treatment-planning recommendations. Instructors are experienced clinicians who draw extensively on current research and case material.

**Prerequisite:** Previous Rorschach/MMPI experience

**EDP 413856**

William Lynch, Ph.D., Philip Erdberg, Ph.D. and Roger Greene, Ph.D.

2 meetings

Saturdays, 9 am–4 pm

May 5 and 19

San Francisco: Downtown Center • $325

**Advances in Human Brain Science for Clinicians**

0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Neuropsychological Assessment

Through discussion of the structure and function of the human nervous system, brain-imaging technologies, advances in understanding sensory perception and the neuroscience of the mind, you gain an intuitive appreciation for how the brain operates and how it changes as a result of experience. This one-day class provides a solid foundation for further learning about neuropsychology, enables clinicians to incorporate the latest neuroscientific knowledge into practice and presents the latest research on the mind-body connection.

**EDP 413948**

David Presti, Ph.D. (license PSY12835), Extension Honored Instructor

1 meeting

Friday, 9 am–5 pm

April 6

Berkeley: Golden Bear Center • $215

**Overview of Child/Adolescent Assessment Tests—How to Use Them in Your Practice**

Get a vigorous introduction to the most widely used assessment tools measuring cognitive and socio-emotional functioning and personality for children and adolescents.

For course schedule, see p. 36.

**Introduction to Neurobiology**

This introductory course is designed to provide a general understanding of the nervous system, including how it functions, how it develops and how it changes with learning and memory, from the level of molecules to simple circuits to higher brain functions.

For course schedule, see p. 160.

**Neuroscience**

Get an overview of the fundamental principles of the organization, function and development of the human nervous system, including neural development and diseases of the nervous system.

For course schedule, see p. 160.

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**Professional Program in Neuropsychological Assessment**

Human brain science research is a growing area that has implications for clinical assessment and intervention with a variety of populations. Workshops in the Professional Program in Neuropsychological Assessment provide an update on brain research and neuropsychological assessment tools used in diverse settings. Courses are aimed at helping licensed health and mental health professionals stay current in the field of neuropsychology, become better clinicians in working with children and adults and make better assessments and informed referrals. Introductory and more advanced workshops are offered.

**Note:** Because clinical neuropsychology is a specialized area of practice requiring doctoral and postdoctoral training, this program does not prepare you to practice neuropsychology or use neuropsychological instruments.

**Curriculum Requirements**

The curriculum consists of 3 required workshops and 1 elective for a total of 2.8 ceu (28 hours of instruction).

**Required Courses**

- Advances in Human Brain Science for Clinicians (offered this term)
- Introduction to Neuropsychological Assessment
- Neuropsychological Assessment, Rorschach and MMPI-2: An Update for Advanced Clinical Practice (offered this term)

**Electives**

For a list of electives available this term, visit extension.berkeley.edu/spos/neuro.html.

**Learn More and View the Flyer**

extension.berkeley.edu/spos/neuro.html

(510) 643-3883

counpsych@unex.berkeley.edu

**Register using EDP 402214**
Licensing/Relicensing Workshops and Courses

Human Sexuality: Prelicensure Workshop
1.0 ceu • 10 hours CE credit: BRN
Meets the requirement of training in human sexuality for licensure in California by the Board of Psychology or the Board of Behavioral Sciences
Gain the knowledge required to meet licensing requirements, and deepen and enrich your understanding of the challenges both you and your clients confront. Explore the relationship between intimacy and sexuality, with an emphasis on the various ways people experience, express and draw meaning from their sexuality.
EDP 413914
Rick Nizzardini, J.D., M.S.W.
2 meetings
Saturday, 9 am–4 pm
Feb. 4 (also Sunday, Feb. 5, 9 am–1 pm)
Berkeley: Golden Bear Center • $285

Child Abuse and Incest: Assessment, Reporting and Treatment
0.7 ceu • 7 hours CE credit: BRN
Meets the requirement of training in child abuse and incest assessment, reporting and treatment for licensure in California by the Board of Psychology or the Board of Behavioral Sciences
Learn to place child abuse and neglect within its historical and cultural context, then proceed to a review of the requirements of California child-abuse reporting laws. Learn how to identify the signs of abuse and neglect. You also learn guidelines for assessment and discuss the special challenges of interviewing children.
EDP 413922
Julie Robbins, M.S.W., LCSW
1 meeting
Friday, 9 am–5 pm
Feb. 17
San Francisco: Downtown Center • $215

Licensure Workshop on Aging and Long-Term Care
0.3 ceu • 3 hours CE credit: BRN, LCSW/MFT and psychologists
Satisfies the Board of Psychology and the Board of Behavioral Sciences three-hour requirement for training in aging and long-term care
Get an overview of some of the most important aspects of geriatric neuropsychology and geropsychology. This workshop exceeds the relicensure requirement for a course in the biological, psychological and social aspects of aging and long-term care. Note: This workshop runs concurrently with Assessment and Treatment of Mental Illness in Older Adults.
EDP 413781
Melinda Ginne, Ph.D. (license PSY15272)
1 meeting
Saturday, 9 am–12:30 pm
March 3
San Francisco: Downtown Center • $95

Ethical Decision Making in Complex Cases
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists
Satisfies the law and ethics course requirement for psychologists, MFTs and LCSWs that is required during each license renewal cycle
Clinical dilemmas can present mental health professionals with circumstances in which they may have no clear legal, ethical or policy directives to guide them. This highly interactive workshop, designed by the American Psychological Association, teaches you a model to use in making sound, ethical decisions and provides practice in using the model with difficult cases.
EDP 413823
David Jull-Patterson, Ph.D. (license PSY14765)
1 meeting
Saturday, 9 am–4 pm
April 21
San Francisco: Art and Design Center • $195

Assessment and Treatment of Alcohol and Drug Problems
X437 • 1 semester unit in Public Health
1.5 ceu • 15 hours CE credit: BRN, LCSW/MFT and psychologists
Meets the requirement of training in assessment and treatment of chemical dependency for licensure and relicensure in California by the Board of Psychology or the Board of Behavioral Sciences
Get an overview of the diagnosis and treatment of chemically dependent clients, the basic physical effects and pharmacologic actions of commonly abused substances and the changing patterns of assessment and treatment of chemical dependency. Study models for understanding chemical addiction and its treatment, especially as it differs from other psychological approaches. Note: You are expected to visit one self-help meeting and do a brief writeup. Enrollment is limited.
EDP 897686
Nancy A. Piotrowski, Ph.D. (license PSY14254)
Enroll anytime
Online • $365

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
Certificate Program in Alcohol and Drug Abuse Studies

Making a difference in the lives of people with serious alcohol- and drug-related problems is a driving motivator behind addictions counseling. Rigorous, up-to-date and thorough training increases the quality and effectiveness of treatment services in the addictions field. Developed by UC Berkeley Extension in association with the UC Berkeley School of Public Health, the Certificate Program in Alcohol and Drug Abuse Studies features a curriculum based on a developmental sequence of study designed to challenge your current beliefs about drug and alcohol abuse, increase your knowledge and augment your skills. Instructors have extensive training and experience and represent a variety of professions and backgrounds.

Curriculum Requirements
The curriculum consists of 14 required courses (21–22 semester units) and 20 hours of electives (2.0 ceu) for a total of 340 hours of instruction. If you choose the CAADAC field seminar option, the program has a total of 355 hours of instruction.

Required Courses

Level I
- Behavioral Pharmacology and Biomedical Foundations of Chemical Dependency X126 (offered this term)
- Cultural, Social and Historical Overview of Alcohol- and Drug-Related Problems X128 (offered this term)
- Introduction to Counseling Techniques in Chemical Dependency X129 (offered this term)
- Psychological Foundations of Chemical Dependency X127 (offered this term)

Level II
- Addressing Co-Occurring Disorders in Addictions Counseling X413 (offered this term)
- Career Preparation and Self-Care in Addictions Counseling (offered this term)
- Continuing Care and Case Coordination in Chemical Dependency X134 (offered this term)
- Diagnosis and Assessment in Chemical Dependency X132
- Environmental Strategies for the Prevention of Alcohol and Drug Problems X151 (offered this term)
- Family Recovery in Chemical Dependency X116
- Group Process and Practice with Chemically Dependent Populations X144 (offered this term)
- Legal and Ethical Aspects of Chemical Dependency Treatment X135 (offered this term)

Level III
- Counseling Interventions in Chemical Dependency X133 (offered this term)
- Field Experience in Chemical Dependency X109 (offered this term)
- Field Experience in Chemical Dependency—CAADAC Option X159 (with a 255-hour CAADAC internship, offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/alcohol.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/alcohol.html
(510) 642-1061
alcdrug@unex.berkeley.edu
Register using EDP 402222

FIND THE QUALITY YOU WANT
- DEVELOPED WITH UC BERKELEY SCHOOL OF PUBLIC HEALTH
- MEETS CAADAC LICENSING REQUIREMENTS

GET THE KNOWLEDGE YOU NEED
- BEHAVIORAL PHARMACOLOGY
- PSYCHOLOGICAL FOUNDATIONS
- DIAGNOSIS AND ASSESSMENT
- CASE COORDINATION
- LEGAL ASPECTS OF TREATMENT
- FAMILY RECOVERY
- COUNSELING INTERVENTIONS
- PREVENTION STRATEGIES
Electives

Contemporary Perspectives in the Treatment of Addictions in Multicultural Populations

0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT, CAADAC and psychologists

An elective in the Certificate Program in Alcohol and Drug Abuse Studies

Learn to critically review the psychology of addiction, surveying models of addiction, recovery and harm reduction and the impact of these perspectives on diverse populations and oppressed communities in the United States. You pay particular attention to treatment considerations for women; people of color (especially African Americans); and the gay, lesbian and bisexual communities. You also examine the role of oppression and internalized oppression as impediments to the recovery process.

EDP 413989
Jimmie Turner, Ph.D., Extension Honored Instructor
1 meeting
Saturday, 9 am–5 pm
May 5
Berkeley: Golden Bear Center • $195

Family Interventions in the Treatment of Addicts and Their Families

0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT, CAADAC

An elective in the Certificate Program in Alcohol and Drug Abuse Studies

Understand family context to achieve better outcomes when working with addicts. Get an overview of the methods and techniques for family interventions, including family assessment, family therapy, and the use of role play. Learn how to treat partners and children of the chemically dependent individual and how to address the special needs of teen addicts and their parents and siblings. Learn practical skills for multifamily group therapy, as well as family sculpting and other nontalking techniques for working with this population.

EDP 423137
Karen Kaufman, Ph.D.
1 meeting
Saturday, 9 am–5 pm
March 10
Berkeley: Golden Bear Center • $205

Addressing Alcohol and Drug Problems in the Treatment of Mood Disorders

0.6 ceu • 6 hours CE credit: CAADAC, BRN, LCSW/MFT. CE credit for psychologists

An elective in the Certificate Program in Alcohol and Drug Abuse Studies and in the professional programs in the Treatment of Mood Disorders and in Aging and Mental Health

Alcohol and drug problems co-occur frequently with depression and anxiety disorders and can significantly complicate treatment. This workshop helps you to better understand and address these problems in your practice, and includes treatment adaptations for older adults. Learn how alcohol and drug use can exacerbate symptoms of anxiety and depression, and explore some of the basic tools used to assess the severity of alcohol and drug problems. The workshop covers brief interventions for alcohol and drug problems as well as combined interventions—such as relapse prevention—that address both mood states and the risk for substance misuse.

EDP 423335
Derek Satre, Ph.D.
1 meeting
Friday, 9 am–4 pm
March 23
San Francisco: Downtown Center • $205

CONTINUING EDUCATION HOURS

CAADAC: Continuing education for Certified Alcohol and Drug Counselors, California Association of Alcoholism and Drug Abuse Counselors (provider 4C-99-416-0803)
Introduction to Counseling Techniques in Chemical Dependency

X129 • 1 semester unit in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies

Get an introduction to the basic concepts and techniques of counseling in the field of substance abuse. Explore the characteristics of an effective counselor, the counselor role, ways to recognize dysfunctional patterns of communication and ethical considerations in counseling. Practice and develop skills in listening actively, building trust, reflecting feelings and content and using confrontation.

EDP 423111
Jimmie R. Turner, Ph.D., Extension
Honored Instructor

4 meetings
Wednesdays, 6:30–9:30 pm
Jan. 18–Feb. 1 (also Saturday, Jan. 21, 9 am–4 pm)
Berkeley: Golden Bear Center • $285

Cultural, Social and Historical Overview of Alcohol- and Drug-Related Problems

X128 • 2 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies

Get a current understanding of the causes of chemical dependency and the approaches to its treatment, including the psychotherapeutic, family systems, disease and medical models, as well as 12-step and other self-help methods. Behavioral-cognitive, social-psychological and developmental theories of motivation and behavior change are examined in terms of the contributions they can make to treatment strategies appropriate to the varied and complex needs of the addicted population. Special emphasis is given to such critical aspects of recovery as overcoming denial and resistance and working with codependents.

EDP 423095
Valerie Gruber, Ph.D.

8 meetings
Tuesdays, 6:30–9:30 pm
Jan. 10–Feb. 14 (also Saturdays, Jan. 21 and Feb. 4, 9 am–4 pm)
San Francisco: Downtown Center • $395
Environmental Strategies for the Prevention of Alcohol and Drug Problems

X151 • 1 semester unit in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Explore the social, political and economic factors that contribute to the rise of alcohol and other drug problems in communities. Investigate a range of policy options used to prevent alcohol and other drug problems, including conditional-use permits, responsible beverage-service programs, and restrictions on alcohol-industry marketing and advertising practices. You also review basic community organizing approaches to support progressive prevention policies.

EDP 423038
Andrew Treno, Ph.D.
5 meetings
Thursdays, 6:30–9:30 pm
March 22–April 19
Berkeley Campus: 136 Barrows Hall • $295

Career Preparation and Self-Care in Addictions Counseling

0.2 ceu • 2 hours CE credit
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Get a brief overview of current workforce issues and trends, and discover some tips on how to prepare for your career as an addictions counselor. Obtain individual advice on completing the program and preparing for the 255-hour (or 36-hour) internship as part of the Field Experience in Chemical Dependency X109 workshop.
Prerequisites: All Level I courses in the Certificate Program in Alcohol and Drug Abuse Studies

EDP 423053
Perri Franskoviak, Ph.D.
1 meeting
Wednesday, 6:30–8:30 pm
Feb. 22
Berkeley: Golden Bear Center • $65

Diagnosis and Assessment in Chemical Dependency

X132 • 2 semester units in Public Health
This course will be offered in summer 2012.

Family Recovery in Chemical Dependency

X116 • 1 semester unit in Public Health
This course will be offered in summer 2012.

Group Process and Practice With Chemically Dependent Populations

X144 • 1 semester unit in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Group intervention continues to be a major strategy to treat addictions. Gain an understanding of group process and dynamics in treating chemically dependent adults. In addition to the theory behind group work, you cover how to select patients, how to be a group leader and methods appropriate to the transitional (open) group and the closed group. Structured time lets you practice these strategies in small groups.

EDP 423061
Tony Scuderi, Psy.D., D.Min., CACD, CCS
5 meetings
Mondays, 6:30–9:30 pm
April 23–May 21
San Francisco: Art and Design Center • $295

Continuing Care and Case Coordination in Chemical Dependency

X134 • 2 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
This course provides an overview of continuing care, case coordination principles and the practices used to establish and maintain recovery and prevent relapse. The purpose of the course is to expose you to different ways of thinking about the recovery and potential relapse process for chemically dependent clients, as well as to identify effective treatment and case coordination approaches for these clients. Topics aim to serve a diverse population.

EDP 423087
Instructor to be announced
8 meetings
Wednesdays, 6–9 pm
March 21–May 23 (also Saturdays, Feb. 25 and March 10, 9 am–3:30 pm)
San Francisco: Downtown Center • $395

Level III

Counseling Interventions in Chemical Dependency

X133 • 3 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Get an overview of the basic strategies and skills needed for effective treatment of chemical dependency. Review approaches such as psychotherapy, self-help, 12-step programs and family models in residential/nonresidential and drug/drug-free settings. Other topics include using individual and group techniques, developing the most effective approach for a client’s needs and identifying the ways in which substance-abuse clients differ from mental-health clients. You also have an opportunity to practice and develop your skills.
Prerequisites: All Level I and II courses in the Certificate Program in Alcohol and Drug Abuse Studies

EDP 423020
Cynthia G. Mitchell, Psy.D.
6 meetings
Saturdays, 9 am–6 pm
Jan. 21–Feb. 25 (also Saturday, March 3, 9 am–2 pm; no meeting Feb. 18)
Berkeley: Golden Bear Center • $695

Field Experience in Chemical Dependency

X109 • 2 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
This field-study course provides an opportunity for candidates completing the Certificate Program in Alcohol and Drug Abuse Studies to apply what they have learned in an agency setting. Select a field placement in an agency of your choice, and spend a total of 36 hours at the placement completing a project or developing a product (noncounseling in nature) related to the agency’s mission. In addition to the project, you must complete a number of assignments designed to help you plan future employment and develop your ability to analyze and understand organizations and their impact on delivery of client services. The 30-hour classroom portion of the course provides a supportive setting for you to discuss, analyze and solve problems arising from your field experience and project. Enrollment is limited to 15.
Prerequisite: All Level I and II courses in the Certificate Program in Alcohol and Drug Abuse Studies or consent of instructor

EDP 413997
Herbert Singleton, LCSW
9 meetings
Wednesdays, 6:30–9:30 pm
Feb. 22–April 11 (also Saturday, March 24, 9 am–4 pm)
Berkeley Campus: 155 Barrows Hall • $560
Field Experience in Chemical Dependency—CAADAC Option
X159 • 3 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
This course covers all the material in Field Experience in Chemical Dependency X109 but extends the coursework and requires 250 CAADAC-eligible internship hours. The instructor approves placement sites and student assignments based on CAADAC acceptability and an individualized assessment of student capabilities. (Please see course description for Field Experience in Chemical Dependency X109.)
Prerequisite: All Level I and II courses in the Certificate Program in Alcohol and Drug Abuse

CAADAC Test Preparation Workshop
X55 • 2 semester units in Public Health
0.6 ceu
This one-day preparation workshop can help you pass the written CAADAC examination. You get the motivation and tools you need to move forward in your career as a CAADAC-certified addictions counselor. You improve your understanding of the written test process, review key content areas of study for the written exam, learn skill-building tips for addictions counselors and practice using a series of sample questions to identify keys for success.
EDP 423012
Herbert Singleton, M.S.W., LCSW
13 meetings
Wednesdays, 6:30–9:30 pm Feb. 22–May 2 (also Saturdays, March 24 and April 14, 9 am–4 pm)
Berkeley Campus: 155 Barrows Hall • $695
EDP 423178
Neil Miller, CADC-II
1 meeting
Saturday, 9 am–4 pm
April 28
Berkeley: Golden Bear Center • $185

Public Health and Health Management
X55 • 2 semester units in Public Health
COURSE INFORMATION
(510) 643-6901
pubhealth@unex.berkeley.edu
extension.berkeley.edu/counseling
ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Health Policy in the United States
X55 • 2 semester units in Public Health
An elective in the Post-Baccalaureate Health Professions Program and in the Professional Program in Health Advocacy
Get an overview of the U.S. health care system with specific focus on past and current public policies that have shaped health care in the United States. In particular, you examine health policy, health services financing and organization. Analyze current health policies and how these policies impact the cost, quality and access to services to better understand and critique them from an informed perspective.
EDP 423186
Robin Flagg, M.P.H.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 10–March 13
Berkeley: Golden Bear Center • $395

Principles of Epidemiology
X186 • 2 semester units in Public Health
3.0 ceu • 30 hours CE credit: BRN
An elective in the Post-Baccalaureate Health Professions Program and in the Professional Program in Health Advocacy
Epidemiology is the study of the distribution of disease and health in human populations. Learn the basic principles of epidemiology, their application to specific public health situations and criteria for critically evaluating epidemiology studies. You discuss epidemiological concepts and their application to sample problems. Topics include disease risk, methods of evaluating the causative factors of disease and the assessment of epidemiological study designs and research activities. Note: Please bring a calculator to class. Enrollment is limited.
EDP 423327
Abigail Eaton, M.P.H.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 18–March 21
Berkeley: Golden Bear Center • $385

Introduction to Health Economics
X52 • 2 semester units in Public Health
An elective in the Post-Baccalaureate Health Professions Program and in the Professional Program in Health Advocacy
Get an introduction to the applications of economics to health care and medical care issues. Discuss the special features of medical care as a commodity and the economic explanations for health care providers, insurance markets and technology diffusion. You also study policy issues such as universal health insurance and international comparisons. The training helps you to form your own vision of the economics of health care as a health services manager, analyst or civic leader.
Prerequisite: An undergraduate introductory economics course
EDP 423194
David Murray, M.Sc., MCRP
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 26–March 29
Berkeley: Golden Bear Center • $395

Current Issues and Careers in Public Health Practice
X55 • 2 semester units in Public Health
0.6 ceu
If you are a student or professional working or considering working in the public health field in the United States, this course explores public health practice as a strategic response to pressing social, political and health issues. You review the range of career choices available in this field and interact with a panel of public health professionals. You also review graduate-level training options in public health and the types of employment opportunities available.
EDP 423145
Bernard Griego, M.P.H.
2 meetings
Wednesdays, 6:30–9:30 pm
May 9 and 16
Berkeley: Golden Bear Center • $185

General Nutrition
X18 • 3 semester units in Nutritional Sciences
If you are a student in a health-related career or simply want a better understanding of the subject, this course teaches you to critically examine many of the popular myths about nutrition and gain a foundation for making wise nutritional choices. Learn about dietary nutrients and toxicants and the role of nutrition in optimal health. Topics include macro- and micronutrient needs; how to determine individual caloric and nutrient needs; digestion and absorption; and current food issues, including food safety.
A background in high school or introductory college-level chemistry, biology or physiology is recommended but not required.
EDP 877530
Alanna Nimau Vigil, M.S., RD
Enroll anytime
Online, proctored final exam • $770
NEW THIS TERM
Professional Program in Health Advocacy

With an increasingly complex and dynamic health care system in the United States and an aging population, there is a growing need for an informed group of health advocates who are qualified to advise patients and their families on health care issues. Learn about the health insurance industry as well as the key provisions of both Medicare and Medicaid/MediCal legislation. Gain an in-depth understanding of the continuum of options available for both in- and outpatient, including rehabilitation settings, skilled nursing facilities, home health and hospice services. Explore some of the key policy and ethical challenges in serving in a variety of roles as health advocate, geriatric case manager, discharge planner and family adviser.

Curriculum Requirements
The curriculum consists of 5 required courses (5 semester units) and 2 electives (1 semester unit and 0.6 ceu) for a total of 96 hours of instruction.

Required Courses
• Overview of Health Care Advocacy X493.5 (offered this term)
• Families and Health Care Advocacy X404.6 (offered this term)
• Overview of Health Care Insurance Options X403.3
• Navigating the Health Care System X404.6
• Ethical and Legal Issues for Health Advocates X403.4

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/healthadvocacy.html.

Learn More
extension.berkeley.edu/spos/healthadvocacy.html
(510) 643-3883
counspsych@unex.berkeley.edu
Register using EDP 402503

FREE PUBLIC LECTURE

Making the Health Care System Work for You and Your Family

This lecture and panel discussion covers some of the general trends that patients—as well as those advocating for them either as family members, paraprofessionals or professional health advocates—need to know as they negotiate an increasingly complex health care system in the United States. As health reform takes hold, as society ages, and as self-care and preventive health strategies become more important and new treatments emerge, learn how you and your family can become informed decision makers. Enrollment is limited.

Presenter:

EDP 42202
1 meeting
Thursday, 4–6 pm
Feb. 2
Berkeley: Golden Bear Center • FREE

Health Advocacy

NEW THIS TERM
Overview of Health Care Advocacy
X403.5 • 1 semester unit in Public Health
1.5 ceu • 15 hours CE credit: BRN and LCSW/MFT
A requirement in the Professional Program in Health Advocacy

Consumers are turning to health care advocates for assistance with a number of health-related issues, including new diagnoses, decision making in health care, placement issues, insurance and billing problems and community resources. This course gives professionals and paraprofessionals considering the field an overview of the skills needed to be an effective advocate.

EDP 423293
Joanna Smith, M.P.H., LCSW
5 meetings
Mondays, 6:30–9:30 pm
Feb. 6–March 12 (no meeting Feb. 20)
Berkeley Campus: 140 Barrows Hall • $265

NEW THIS TERM
Families and Health Care Advocacy
X404.6 • 1 semester unit in Public Health
1.5 ceu • 15 hours CE credit: BRN and LCSW/MFT
A requirement in the Professional Program in Health Advocacy

Examine how family systems theory can help you work collaboratively with families to better meet family goals. You learn a model for understanding illness within a multigenerational family context, targeting psychosocial interventions to support the family’s ability to mobilize resources in response to a health care challenge and intervening effectively in the cross-cultural communication between a family and the health care system.

EDP 423152
Jamie Bachman, LCSW
5 meetings
Wednesdays, 6:30–9:30 pm
April 4–May 2
Berkeley: Golden Bear Center • $265

NEW THIS TERM
Helping Patients Make Informed Decisions
0.6 ceu • 6 hours CE credit: BRN and LCSW/MFT
An elective in the Professional Program in Health Advocacy

Learn to support and advocate for patients facing complex treatment decisions. Review the effectiveness of decision and communication tools, and establish methodologies to make better decisions using these tools. You also learn and practice neutral, nondirective techniques for advising patients on their treatment options.

EDP 423319
Jeff Belkora, Ph.D.
1 meeting
Saturday, 9 am–4 pm
March 17
San Francisco: Art and Design Center • $195
Counseling and Psychotherapy as a Career Option

1.8 ceu

A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions

Investigate the training and licensing options available for mental health professionals. Designed to provide you with information as well as a support group, the course covers topics ranging from comparison of the various licenses and financial realities to multicultural issues and theoretical orientations. Group discussions help you examine the realities of the profession. You complete a personal inventory designed to aid your self-assessment for a career in mental health. Enrollment is limited.

EDP 42251
Richard J. Chiavarelli, Ph.D.
3 meetings
Saturday and Sunday, 9:30 am–4:30 pm
Jan. 21–22 (also Saturday, Jan. 28, 9 am–1 pm)
Berkeley: Golden Bear Center • $385

Abnormal Psychology

X146 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions

Designed for anyone interested in the way humans perceive and respond to experiences, and especially for people considering careers in psychology, this course helps you learn the dynamics and prevention of abnormal behavior, including neuroses, psychoses, character disorders, psychosomatic reactions, schizophrenia and other abnormal personality patterns.

Sec. 1 EDP 423236
Michael Shopshire, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–April 26 (no meeting March 29)
San Francisco: Art and Design Center • $595

Sec. 2 EDP 867564
Darrel Dean Richards, Ph.D.
Enroll anytime
Online, proctored final exam • $730

Biological Psychology

X155 • 3 semester units in Psychology

Explore brain-behavior relationships with special emphasis on clinical examples. Study how the brain and nervous system produce the human range of feelings and behaviors: sensation, emotion, sleep and dreams, reproductive behavior, language and memory. Clinical examples include depression, schizophrenia, eating disorders, sleep disorders, aggression, dyslexia and amnesia. Beginning with the basic structure and function of the nervous system, you examine the organic bases of behavior.

EDP 423244
Nicola Wolfe, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 24–May 8 (no meeting April 17)
San Francisco: Downtown Center • $595

Introduction to Developmental Psychology

X140 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions

Study the life-span developmental approach to developmental psychology, including prenatal life development. Gain perspective on biological, physical, cognitive, emotional, linguistic, sociocultural and spiritual changes across the life span, from prenatal and birth through the major stages of childhood, adolescence and adulthood. Examine fundamental theories, perspectives and critical thoughts about historical and current arguments in the field. Course requirements include research projects and brief class presentations.

EDP 423269
Richard Sprott, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–April 25 (no meeting Feb. 22)
Berkeley: Golden Bear Center • $595
Cognitive Psychology
X170 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

Cognitive psychology is the scientific study of mental processes. Gain a basic understanding of the properties of human cognition and the principles that govern how it works. Explore how the mind perceives information from the environment and where it goes from there. Course content includes a balance of classic and recent findings in core topics in cognitive psychology (perception, memory, language comprehension and problem solving, among others) accompanied by a variety of concrete examples from experiments and real life.

EDP 423210
Bernadette Guimberteau, Ph.D.
11 meetings
Sat, 9 a.m.–1 p.m.
Feb. 11–April 28 (also Saturday, May 5, 8:30 a.m.–1:30 p.m.; no meetings Feb. 18 and April 21)
Berkeley Campus: 170 Barrows Hall • $595

Research Methods in Psychology
X106 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions

Gain an understanding of the scientific methods behind psychological research in a course designed for those preparing for careers in psychology. Learn methods of designing, collecting, analyzing and interpreting data using examples from a variety of specialty areas in psychology. Conduct several research projects, including a final project of your own design that helps you think more critically about scientific research in general.

Prerequisite: A lower-division general psychology course

EDP 423228
Bernadette Guimberteau, Ph.D.
11 meetings
Sat, 2–6 p.m.
Feb. 11–April 28 (also Sunday, May 5, 1:30–6:30 p.m.; no meetings Feb. 18 and April 21)
Berkeley Campus: 170 Barrows Hall • $595

Psychology of Personality
X176 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions

Personality psychology, in contrast to abnormal and clinical psychology, is the study of normal and exceptional personalities, their assessment and development and the processes that define them. In this course, review current personality research and theories. Personality psychologists have been influenced by the “grand” theories of personality—philosophical positions that may have influenced research studies—that tend to have more historical significance than relevance for current personality theories and research. Contemporary personality theories are more specific but still fall under broad paradigms or approaches. Research some of these approaches, including trait, biological, psychodynamic, phenomenological, behavioral and learning, and social-cognitive theories.

EDP 423285
Michael Shoupshire, Ph.D.
15 meetings
Mondays, 6:30–9:30 p.m.
Jan. 9–April 30 (no meetings Jan. 16 and Feb. 20)
Berkeley Campus: 136 Barrows Hall • $595

Positive Psychology
X402 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

Gain an understanding of the new academic field of positive psychology, the study of optimal human functioning. Although psychologists have traditionally focused on fixing what is wrong with people by understanding the roots of suffering, such as depression and anxiety, positive psychology concentrates on building what is right in people by scientifically studying strengths and values, such as optimism, resilience and courage. Gain an understanding of the research into the different dimensions of happiness and subjective well-being, and acquire skills to implement positive-psychology-based concepts in your life and practice.

EDP 423277
Alan Bisarya, M.Ed.
15 meetings
Wed, 6:30–9:30 p.m.
Jan. 25–May 9 (no meeting April 18)
San Francisco: Art and Design Center • $595

General Psychology
XBW1 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

Important: Special academic policies apply to XBW courses. See p. 224.

Psychology is the scientific study of behavior. In a sense, everyone is a psychologist: People explore their surroundings, observe themselves and others and try to understand and explain their own and other’s behavior. Gain an introduction to the principal areas, problems and concepts of psychology, including topics such as development, learning, perception, emotion, personality, stress and pathology. Demonstrate your understanding of the course topics through a research paper and final exam.

EDP 897819
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $730

Adolescent Psychology
X139.1 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN

Explore current theories about the physical, mental, emotional, social and personality characteristics of adolescents. By examining research findings from growth studies in this and other cultures, you learn to identify the roles American adolescents play in the home, school, social realm and community.

EDP 867556
Darrel Dean Richards, Ph.D.
Enroll anytime
Online, proctored final exam • $730

Psychology of Communication
X156.1 • 3 semester units in Behavioral Health and Science
4.5 ceu • 45 hours CE credit: BRN

Recipient of the Meritorious Award for the Best College-Level Distance Course from the University Continuing Education Association (UCEA)

Understand the processes of perception, cognition, motivation, emotion, learning, memory and creativity in combination with social roles, group affiliations and cultural backgrounds to explore how people communicate to themselves, to other individuals, within small groups, within large organizations, with mass communication and in cross-cultural communications.

Prerequisite: Lower-division coursework in general psychology

EDP 867572
Michael Swett, Ph.D.
Enroll anytime
Online, proctored final exam • $730
Get started with a free information session

Discover how UC Berkeley Extension can help you achieve your goals. Learn more about programs. Get to know instructors. Meet your fellow students. Ask questions. Visit extension.berkeley.edu/infosessions.

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Professional Sequence in Sales Management (p. 85)
Open House: Specialized Sequence in Professional Writing (p. 187)
Professional Sequences in Personal Financial Planning and in Wealth Management (p. 86)
For Ashley Murphy, the key to career fulfillment is a social and altruistic connection—something missing from his previous positions in corporate finance, including a stint as a senior financial analyst at Visa. An Australia native and graduate of the University of Queensland in Brisbane, Australia, he recalls the catalyst for making a career shift into financial planning: “I was impressed with what I heard at the information session,” he says. “In financial planning, you’re making a difference in people’s lives. I realized that it was my calling, and there was no point in putting it off any longer.”

A graduate of the Professional Sequence in Personal Financial Planning, Murphy serves on the program’s Student Advisory Board, volunteers with the Financial Planning Association, works as a paraplanner supporting 18 financial advisers and is building his own client base. “I’m proud that I have the knowledge, skills and abilities to really add value to a client paying me for my investment advice,” he says.

Looking ahead, Murphy wants to help American and Australian expatriates with investment, tax and estate-investing issues. Through the network he’s built at Extension, he can make inroads toward that goal. “I’m an advocate for Extension because the business I’m in is incredibly social, and my program helped me interact with the broader financial planning community,” Murphy says. “Now I know people who can help clients with niche planning issues. The program helped broaden my network.”
UC Berkeley Extension provides the education to succeed in an ever-changing workplace. Earn a professional certificate that not only meets your profession’s highest standards but also commands the respect of your peers. Acquire technical savvy and the leadership and communication skills that make the difference in getting ahead. Take a course focused on exactly what you need to know now.

Instructors with senior-level experience at top companies in their fields ensure an education you can apply on the job. And the Berkeley name attests to outstanding academic quality in the classroom and online.

To break into business or advance in your career, come to UC Berkeley Extension for knowledge and skills critical to your success.

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### Business Free Information Sessions

Attend a free information session to discover how UC Berkeley Extension can help you achieve your goals. Learn more about courses and programs, meet other prospective students, talk to instructors and staff and ask questions. To reserve your space, call (510) 642-4111 or visit extension.berkeley.edu/infosessions.

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### Accounting

**COURSE INFORMATION**

(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/subject/accounting.html

**ONLINE COURSE INFORMATION**

(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

**CPA AND CMA EXAM PREPARATION**

Information about Certified Public Accountant (CPA) and Certified Management Accountant (CMA) licensing and renewal requirements is available at the following websites:

- California Board of Accountancy
  www.dca.ca.gov/cba
- Uniform CPA Examination
  www.cpa-exam.org
- Institute of Management Accountants
  www.imanet.org

**FREE INFORMATION SESSION Certificate Program in Accounting**

Find out how an accounting certificate, which you can complete in as little as a year, can help you become the kind of accountant businesses want. For certificate details, see p. 53 or visit extension.berkeley.edu/cert/account.html.

- **EDP 311233**
  1 meeting
  Wednesday, 6:30–7:30 pm
  Dec. 7
  San Francisco: Downtown Center • FREE

- **EDP 313189**
  1 meeting
  Tuesday, 5:30–6:30 pm
  April 17
  San Francisco: Downtown Center • FREE
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**Important:** Special academic policies apply to XBW courses; see p. 224.

A requirement in the Certificate Program in Accounting

Learn fundamental accounting concepts and principles developed in Introduction to Financial Accounting XB102A, and learn how enterprises account for liabilities and equity accounts, including current and noncurrent liabilities, leases, pensions, income taxes, contributed capital, retained earnings and stock options. Additional topics include earnings per share, the statement of cash flows, accounting changes and error corrections.

**Prerequisites:** Introduction to Financial Accounting XB102A or equivalent. This course typically follows Intermediate Financial Accounting I X421.1, but that course is not a prerequisite.

For more information, please visit extension.berkeley.edu.
Auditing and Attestation
X422.2 • 3 semester units in Business Administration
Get a solid theoretical and practical background in auditing. You learn to examine an organization’s financial statements to determine if they fairly present the organization’s current financial position and results of operations and are free of significant errors. You also gain a solid background for the auditing section of the CPA examination.

Prerequisite: Intermediate Financial Accounting I X421.1 and Intermediate Financial Accounting II X421.2 or consent of instructor

EDP 313254
Harry F. Lorsbach, M.B.A., CPA, CIA
15 meetings
Mondays, 6:30–9:30 pm
Feb. 6–May 21 (no meeting Feb. 20)
San Francisco: Downtown Center • $775

Auditing
XBW126 • 4 semester units in Business Administration
Important: Special academic policies apply to XBW courses. See p. 224.
Examine the professional responsibilities of auditors, the design of audits, technology and sampling approaches, appropriate tests of internal controls, substantive tests and other responsibilities of Certified Public Accountants (CPAs). You also prepare for the auditing section of the CPA exam and work as part of a team on an audit plan.

Prerequisites: Intermediate Financial Accounting I X421.1 and Intermediate Financial Accounting II X421.2, equivalent experience or consent of instructor

EDP 897926
Andrew Barnett, Ph.D., CPA, Extension
Honored Instructor
Enroll anytime
Online, proctored final exam • $770

Accounting for Managers
X421.5 • 3 semester units in Business Administration
A requirement in the Certificate Program in Business Administration
You do not need an accounting background, but you should have some aptitude for numbers to succeed in this course. After learning the basics of financial accounting, examine how to use accounting information for effective management. Topics include understanding financial statements, income measurement, cost-volume-profit relationships, budgeting, cost allocation, profit- and cost-center accounting, accounting for planning and control and data for decision making.

Sec. 1 EDP 313171
Gregory Sinclair, M.B.A., CPA
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–April 24
Berkeley: Golden Bear Center • $775

Sec. 2 EDP 313064
Eric Yap, M.B.A.
15 meetings
Mondays, 6:30–9:30 pm
Feb. 6–May 21 (no meeting Feb. 20)
San Francisco: Downtown Center • $775

Financial Statement Analysis
X419.2 • 2 semester units in Business Administration
A requirement in the certificate programs in Finance, Corporate Finance Specialization, and in Accounting, Accounting for Financial and Business Analysts Specialization
This course focuses on the effective analysis of financial statements, integrating the concepts and principles you learned in previous accounting courses. You examine the analytical tools for assessing a company’s performance, the concept of quality of earnings, approaches to valuation and other issues.

Prerequisites: Introduction to Financial Accounting X8102A, access to Microsoft Excel and basic Excel skills

Sec. 1 EDP 313981
Don Uy-Barreta, B.A., M.S.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
San Francisco: Downtown Center • $730

Sec. 2 EDP 897074
Donald R. Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $715

Taxation for Corporations and Other Flow-Through Entities
X414.5 • 3 semester units in Business Administration
A requirement in the Certificate Program in Accounting, Accounting for Controllers Specialization
This course provides a general description of the major provisions of the tax laws for filing in calendar years 2011–2012. You study the taxation of corporations; “S” corporations; partnership taxation; income taxation of estates, trusts and gifts; and tax accounting methods and periods. You also review rules governing the formation, operation and disposition of partnerships and corporations.

Sec. 1 EDP 323188
Sandra Van Keuren, CPA
9 meetings
Saturdays, 9:30 am–3 pm
April 14–June 6
San Francisco: Downtown Center • $775

Sec. 2 EDP 857383
Joseph McPeak, M.S., M.B.A., CPA, Extension
Honored Instructor
Enroll anytime
Online, proctored final exam • $815

Cost Accounting
X419 • 2 semester units in Business Administration
A requirement in the Certificate Program in Accounting, Accounting for Controllers Specialization
Take on an intensive study covering basic cost accumulation systems and refinements used to determine costs of products or activities in various types of enterprises. Prepare to emphasize managerial cost analysis and management decision planning.

Prerequisites: Introduction to Financial Accounting X8102A and Managerial Accounting X8102B or equivalent

Sec. 1 EDP 313460
Anna Lee, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
San Francisco: Downtown Center • $775

Sec. 2 EDP 897603
Joseph McPeak, M.S., M.B.A., CPA, Extension
Honored Instructor
Enroll anytime
Online, proctored final exam • $730

Federal Income Taxes for Individuals
X414.8 • 3 semester units in Business Administration
Master the fundamentals of individual income tax and the related issues of federal tax compliance. Understand the principles of individual taxation, and gain a working knowledge of tax laws. Study the tax-planning process and its application in an accounting-related environment. Some topics in the course include taxable income recognition and characterization, capital gains and disposition of property and personal exemptions.

EDP 313767
Joseph McPeak, M.S., M.B.A., CPA, Extension
Honored Instructor
15 meetings
Thursdays, 6–9 pm
Feb. 16–May 24
San Francisco: Downtown Center • $775
UC Berkeley Extension’s Certificate Program in Accounting is designed to provide you with a broad and thorough understanding of accounting principles and financial reporting practices to keep you abreast of innovations in the field and to enhance your proficiency in accounting-related functions, such as financial analysis and data interpretation. This professional certificate employs materials and techniques that are consistent with modern principles and best practices, providing knowledge and skills that you can use immediately. It also offers the advantage of a curriculum that is overseen by an advisory board of business and education leaders; approved by the University of California, Berkeley, Haas School of Business; and taught by working professionals with many years of practical business experience.

**Curriculum Requirements**

The curriculum consists of 7 required courses (3 core courses and 4 specialization courses) for a total of 18–19 semester units (at least 270 hours of instruction).

**Required Core Courses**

We recommend you begin the program with Introduction to Financial Accounting XB102A.

- Introduction to Financial Accounting XB102A (offered this term; online as XBW102A)
- Introduction to Managerial Accounting XB102B (offered this term; online as XBW102B)
- Intermediate Financial Accounting II X421.2 (offered this term)

**Accounting for Controllers Specialization**

- Advanced Financial Accounting X421.3 (offered this term)
- Cost Accounting X419 (offered this term)
- Principles of Business Law X410.1 (offered this term)
- Taxation for Corporations and Other Flow-Through Entities X419.5 (offered this term)

**Accounting for Financial and Business Analysts Specialization**

- Advanced Financial Accounting X421.3 (offered this term)
- Basic Corporate Finance X430.1 (offered this term)
- Business Valuation X431.9 (offered this term)
- Financial Statement Analysis X419.2 (offered this term)

**Learn More and View the Brochure**

extension.berkeley.edu/cert/account.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 152074
Professional Sequence in Agile Management

Agile Management is a framework of values, principles and practices that allows managers at all levels to plan work, engage teams and respond quickly to changing market conditions and business environments. In this practical program, learn how to apply an Agile approach to better involve your customers, embrace change, facilitate human interaction and achieve results. Explore how to use the intrinsic motivators of autonomy, mastery and purpose to accelerate and improve performance. Learn to leverage current systems-based thinking to craft a value strategy with a culture, currency and language around value so you can solve problems and bring improved productivity to your organization.

Curriculum Requirements
The curriculum consists of 2 required courses (4 semester units) and a minimum of 2 semester units of electives for a total of 6 semester units (90 hours of instruction).

Required Courses
- Agile Management: Principles and Practices X486.1 (offered this term)
- Agile Management Mastery X498.8

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/agile.html.

Learn More and View the Flyer
extension.berkeley.edu/spos/agile.html
business@unex.berkeley.edu
(510) 642-4231

Register using EDP 312124

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Agile Management

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business

FREE INFORMATION SESSION
Professional Sequence in Agile Management

Attend this free information session to meet instructors, program staff and other prospective students, and find out how the program can make a difference in your career as a manager. For details, see this page or visit extension.berkeley.edu/spos/agile.html.

EDP 323550
1 meeting
Thursday, 7–8 pm
Jan. 5
San Francisco: Downtown Center • FREE

EDP 323774
1 meeting
Thursday, 7–8 pm
May 24
Berkeley: Golden Bear Center • FREE

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Agile Management

0.7 ceu • 7 pdu; PMI provider 1173
An elective in the Professional Sequence in Agile Management

Agile Management is a framework of values, principles and practices for solving problems and increasing productivity. This highly interactive one-day course introduces the fundamentals of an Agile approach to problem solving. Through games, team exercises and discussion, you discover how an Agile framework can help you leverage change and reach a successful outcome.

EDP 313924
Ainsley Nies, M.S., PMP, and Sonja Koppensteiner, Ph.D., M.S., PMP
1 meeting
Friday, 5 am–5 pm
March 23
Berkeley: Golden Bear Center • $295

Agile Management: Principles and Practices

X486.1 • 2 semester units in Business Administration
A requirement in the Professional Program in Agile Management

An Agile Management framework of values, principles and practices allows managers at all levels to more effectively respond to change, work collaboratively with customers and increase productivity. Enroll in this course if you are interested in learning the core principles of Agile Management and how to apply them in an organization. Through highly interactive exercises, you learn how to use the Agile framework to successfully leverage change, improve team interaction and delight customers.

EDP 313932
Ainsley Nies, M.S., PMP, and Patricia Reed, M.B.A.
5 meetings
Saturdays, 9 am–4 pm
Jan. 28–March 3 (no meeting Feb. 18)
San Francisco: Downtown Center • $675

Emergent Strategies: Business Planning in Agile Management

X498.5 • 1 semester unit in Business Administration
An elective in the Professional Sequence in Agile Management

Learn how to create an emergent strategy through learning games and active planning exercises. Then, apply those concepts to case studies that require you to set up iterative planning cycles, make trade-off decisions and use Agile practices for decision making. Reflect on these experiences in the group, and develop a shared “lessons learned” retrospective.

EDP 313940
Volker Frank, M.A.
2 meetings
Saturdays, 9 am–5 pm
May 12 and 19
San Francisco: Art and Design Center • $450
Retrospective Facilitation

X472.9 • 1 semester unit in Business Administration

An elective in the Professional Program in Agile Management

Knowledge gained from experience is an investment you have already made. Retrospectives, reflective processes focused on the future, provide the framework for transforming that experience into knowledge and learning assets. This course provides experiential training for the facilitation of retrospectives at any point in project work. Learn to develop a process framework for commissioning, planning and conducting successful retrospectives. Gain practical experience from a set of exercises that provide immersion in retrospective facilitation skills.

EDP 312965
Ainsley Nies, M.S., PMP, and Diana Larsen, B.A.
2 meetings
Friday and Saturday, 9 am–5 pm
March 16–17
San Francisco: Art and Design Center • $395

Lean Practices

X498.7 • 1 semester unit in Business Administration

An elective in the Professional Program in Agile Management

Today’s business world is lean and mean, with fewer employees, fewer levels of management and increased global competition. This course—designed for people exploring the field of Lean management, as well as for experienced practitioners seeking to update their knowledge—defines Lean performance-improvement methods and ways to eliminate waste. Explore current and emerging models and theories and practical methods to effectively connect Lean practices to reaching organizational and business goals.

EDP 313957
Janice Linden-Reed
2 meetings
Friday and Saturday, 9 am–5 pm
April 27–28
San Francisco: Downtown Center • $450

Business Administration

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/subject/businessadmin.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

FREE INFORMATION SESSION
Certificate Program in Business Administration

Learn how a certificate in business administration from UC Berkeley Extension can benefit your career, whether you’re a new manager or a professional seeking a career transition with more management responsibilities. For certificate details, see p. 57 or visit extension.berkeley.edu/cert/busad.html.

EDP 311324
1 meeting
Wednesday, 5:30–6:30 pm
Dec. 7
San Francisco: Downtown Center • FREE

EDP 313346
1 meeting
Monday, 5–6 pm
April 16
San Francisco: Downtown Center • FREE

Essentials of Business

X406.6 • 2 semester units in Business Administration

A requirement in the Certificate Program in Business Administration; an elective in the Professional Program in Biopharmaceutical Business

Get an introduction to the goals, processes and operations of business enterprises, focusing on the functions that a company must manage effectively to be successful. These functions include accounting, finance, human resource management, marketing, operations management and strategic planning. You pay particular attention to the legal environment in which businesses operate and the importance of business ethics and corporate citizenship.

Sec. 1 EDP 313411
Eric Yap, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
San Francisco: Downtown Center • $715

Sec. 2 EDP 313429
Mark E. Bettini, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
Berkeley: Golden Bear Center • $715

Sec. 3 EDP 897991
Kevin M. Shea, M.B.A.
Enroll anytime
Online, proctored final exam • $715
Fundamentals of Finance
X412.5 • 2 semester units in Business Administration

A requirement in the Certificate Program in Business Administration; an elective in the Certificate Program in Leadership and Management

Get a broad, practical introduction to financial management even if you have no previous knowledge of finance or accounting. This course covers an overview of the three principal financial statements; the use of financial ratios to assess a firm’s financial health; financial planning and forecasting; the choice of debt or equity to finance business operations; and the evaluation of investment opportunities using tools such as discounted cash flow, net present value and risk analysis. Although the course emphasizes conceptual understanding over detailed numerical analysis, it does use basic math, such as solving an equation with one unknown.

Sec. 1 EDP 313809
Robert Coackley, B.S.
10 meetings
Mondays, 6:30–9:30 pm
Feb. 6–April 16 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $730

Sec. 2 EDP 313783
Eric Yap, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
Belmont: Belmont Center • $730

Sec. 3 EDP 313791
Robert Coackley, B.S.
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
San Francisco: Downtown Center • $730

Organization and Management
X490.1 • 2 semester units in Business Administration

A requirement in the Certificate Program in Business Administration; an elective in the Certificate Program in Leadership and Management and in the Professional Program in Biopharmaceutical Business

Study high-level leadership strategies, and gain skills in resolving disputes, managing diversity and building productive teams. Using case studies and small group discussions, you explore issues such as organizational conflict and power, management development, interpersonal influence and the advantages and drawbacks of participative management.

Sec. 1 EDP 303495
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Jan. 7–Feb. 11 (no meeting Jan. 14)
San Francisco: Downtown Center • $715

Sec. 2 EDP 303503
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
March 24–April 21
Belmont: Belmont Center • $715

Accounting for Managers
Get an overview of financial and cost accounting principles and ways to use them for effective management. To succeed in this course, you do not need an accounting background, but you should have some aptitude for numbers.

For course schedule, see p. 52.

Budgeting and Planning for Nonfinancial Managers
Get an introduction to concepts of accounting practices, financial statement management and analysis, costing methods and budgeting techniques.

For course schedule, see p. 85.

International Business
Communicating Across Cultures: Marketing and Sales Challenges Around the World
X495.7 • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Global transactions are becoming the norm in business, and marketing and sales professionals face a variety of communications challenges in adapting to the international marketplace. Examine the theories of specific culture-bridging tools and techniques needed by today’s international sales and marketing practitioners.

EDP 897181
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $575

International Business Management
X495.1 • 2 semester units in Business Administration

An elective in the Professional Program in Biopharmaceutical Business

Examine successful international business strategies, and learn how to internationalize your business and your career. Learn the basics of marketing, economics, finance and business negotiation in an international context. The course uses an entrepreneurial perspective but prepares you for participation in larger international businesses.

EDP 857391
Christopher Lai, M.B.A., Ph.D.
Enroll anytime
Online • $715
Certificate Program in Business Administration

The Certificate Program in Business Administration introduces the fundamental concepts, practices and vocabulary of business so that you can develop a broad-based practical understanding of its context, purpose and underlying functional areas: accounting, economics, finance, marketing and management. Whether you’re a new business manager or a professional seeking a career with greater business responsibilities, this certificate employs materials and techniques that are consistent with modern principles and best practices—providing knowledge and skills that you can use immediately. You also get the advantage of a curriculum that is overseen by an advisory board of business and education leaders; approved by the University of California, Berkeley, Haas School of Business; and taught by working professionals with many years of practical business experience.

Curriculum Requirements
The curriculum consists of 6 required courses and 1 elective for a total of 15 semester units (225 hours of instruction).

Required Courses
- Accounting for Managers X421.5 (offered this term)
- Essentials of Business X406.6 (offered this term)
- Essentials of Economics X402.8 (offered this term)
- Fundamentals of Finance X412.5 (offered this term)
- Introduction to Marketing X460.1 (offered this term)
- Organization and Management X475.2 (offered this term)

Electives
For a list of electives available this term, please visit extension.berkeley.edu/cert/busad.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/busad.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 152025
Business Analysis Essentials and Planning

X448.1 • 3 semester units in Business Administration
45 cdu: IIBA provider E234; IIBA Program Code: E234-001

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Learn business analysis fundamentals as well as the planning and monitoring knowledge areas—the first of the seven generally accepted areas that define the profession’s framework. Discover how practitioners determine and plan which activities are necessary to complete a business analysis effort. Master essential analysis theories that govern the performance of all other business analysis and transformation tasks. Those who intend to sit for the Certified Business Analysis Professional (CBAP®) exam should also meet the IIBA® testing requirements.

Sec. 1 EDP 303701
David Zhu, B.S., PMP, CISA
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 5–April 12 (also Tuesdays, Jan. 10, Jan. 24, Feb. 7, Feb. 21, March 6, March 10 and April 3, 6:30–9:30 pm; no meetings Jan. 12, Jan. 26, Feb. 9, Feb. 23, March 8 and March 22)
Belmont: Belmont Center • $795

Sec. 2 EDP 843227
Ashley Wright, B.S., M.B.A.
Jan. 3–Feb. 28
Online • $995

Sec. 3 EDP 843235
Ashley Wright, B.S., M.B.A.
March 1–April 26
Online • $995

Elicitation, Requirements Management and Communication
X448.2 • 2 semester units in Business Administration
30 cdu: IIBA provider E234; IIBA Program Code: E234-002

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Learn how to manage conflicts, issues and changes to ensure that stakeholders agree on the solution scope and the way requirements are communicated. Study the elicitation knowledge area. You also explore the requirements management and communication knowledge area, which describes the activities and considerations for managing and expressing requirements to a broad and diverse audience. Gain the training and knowledge necessary to become a Certified Business Analyst Professional (CBAP®). You should be familiar with business operations, and those who intend to sit for the CBAP exam should also meet IIBA® testing requirements.

Sec. 1 EDP 843243
David Zhu, B.S., PMP, CISA
Jan. 3–Feb. 28
Online • $995

Sec. 2 EDP 843250
David Zhu, B.S., PMP, CISA
March 1–April 26
Online • $995

Enterprise and Requirements Analysis
X448.3 • 3 semester units in Business Administration
45 cdu: IIBA provider E234; IIBA Program Code: E234-003

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Master the ability to identify a business need using enterprise and requirements analysis, which lets you refine and clarify the definition of that need and define a solution scope that the business can feasibly implement. Learn how enterprise analysis describes problem definition and analysis, business case development, feasibility studies and the definition of solution scope. Study how requirements analysis explains how business analysts prioritize stakeholder and solution requirements to better implement solutions. Gain the training and knowledge necessary to become a Certified Business Analyst Professional (CBAP®). Those who intend to sit for the CBAP exam should also meet the IIBA® testing requirements.

Sec. 1 EDP 843268
David Zhu, B.S., PMP, CISA
Jan. 3–Feb. 28
Online • $995

Sec. 2 EDP 843276
David Zhu, B.S., PMP, CISA
March 1–April 26
Online • $995

Solution Assessment and Validation, Underlying Competencies
X448.4 • 2 semester units in Business Administration
30 cdu: IIBA provider E234; IIBA Program Code: E234-004

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Learn to assess proposed solutions to determine which best fit the business need, as well as to identify gaps and shortcomings in solutions and determine necessary work-arounds or changes to the solution. Study how business analysts assess deployed solutions to see how well they met the original need of the sponsoring organizations. Examine underlying competencies such as behaviors, knowledge and other characteristics that support the effective performance of business analysis. Gain the training and knowledge necessary to become a Certified Business Analyst Professional (CBAP®). Those who intend to sit for the CBAP exam should also meet the IIBA® testing requirements.

Sec. 1 EDP 843284
Ashley Wright, B.S., M.B.A.
Jan. 3–Feb. 28
Online • $995

Sec. 2 EDP 843292
Ashley Wright, B.S., M.B.A.
March 1–April 26
Online • $995
Certificate Program in Business Analysis

Business transformation and process adaptation are critical to the competitive survival of business enterprises. Business analysis plays a key role in ensuring that strategic plans for transformation are implemented efficiently. Learn how a business analyst communicates requirements from subject matter experts to technical teams to ensure that optimized solutions can be designed and implemented. The Certificate Program in Business Analysis turns your familiarity with business operations into expertise in business analysis so that you can move your company confidently to future success. UC Berkeley Extension offers this professional certificate online, giving you the flexibility to master these new skills at your own convenience.

Curriculum Requirements
The curriculum consists of 4 required courses for a total of 10 semester units (150 hours of instruction).

Required Courses
- Business Analysis Essentials and Planning X448.1 (offered this term)
- Elicitation, Requirements Management and Communication X448.2 (offered this term)
- Enterprise and Requirements Analysis X448.3 (offered this term)
- Solution Assessment and Validation, Underlying Competencies X448.4 (offered this term)

Learn More and View the Flyer
extension.berkeley.edu/cert/busanalysis.html
(510) 642-4231
business@unex.berkeley.edu
Register using EDP 312109

Endorsed Education Provider
UC Berkeley Extension is an Endorsed Education Provider of the International Institute of Business Analysis. Our business analysis courses apply toward CDUs (EEP E234).

The IIBA logo is a registered trademark of the International Institute of Business Analysis.
Business Communication

**COURSE INFORMATION**
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business

**ONLINE COURSE INFORMATION**
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Business Communication: Writing and Speaking

X404.7 • 2 semester units in Business Administration
An elective in the certificate programs in Business Administration and in Leadership and Management
Learn to be more confident and effective when making written and oral presentations. Coursework includes drafting a wide range of documents—including emails, memos, letters and reports—as well as learning interpersonal communication techniques and presentation skills.

**EDP 302156**
Barbara Nelson, M.A.
4 meetings
Saturdays, 8:30 am–5 pm
Jan. 7–Feb. 4 (no meeting Jan. 14)
San Francisco: Downtown Center • $715

NEW THIS TERM

Interpersonal Communication Skills for Business

X497.9 • 1 semester unit in Business Administration
Effective communication skills help foster cooperation and teamwork within an organization. Businesses often fail to provide basic communication training that can improve organizational productivity. Learn key interpersonal skills that can boost your influence at work and make you more effective. Learn to overcome barriers, provide constructive feedback, identify strategies for communicating across cultures and understand gender roles and differences.

**EDP 323493**
Dan Clurman, M.A.
3 meetings
Saturdays, 9 am–4 pm
March 3–17
San Francisco: Downtown Center • $525

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Best Practices in Negotiation

0.8 ceu
Everyone negotiates, but some are much better at this vital skill than others and, consequently, more likely to reach ambitious goals and receive more recognition and rewards. In this seminar, you learn the best techniques for striking better bargains, making lasting agreements and sustaining positive relationships while also learning how to recognize and address the tactics of counterparts. Equally important, you learn to become a savvier negotiator, including scenarios in buying, selling and financing cars, housing and other big-ticket situations.

**EDP 303149**
Gary S. Goodman, Ph.D., J.D., M.B.A.
1 meeting
Friday, 9 am–5:30 pm
Jan. 27
San Francisco: Downtown Center • $325

Innovations in Negotiation

0.8 ceu
Imbalances in power and financial clout compel negotiators to find creative sources of leverage. Learn innovative models and formats that define value in new and persuasive ways to produce lasting agreements. Through discussions and simulations, you practice techniques for investing in relationships to gain more favorable financial terms and mutual satisfaction.

**EDP 303362**
Gary S. Goodman, Ph.D., J.D., M.B.A.
1 meeting
Friday, 9 am–5:30 pm
March 9
San Francisco: Downtown Center • $325

Women and Negotiation

0.7 ceu
Get a self-assessment of your negotiating style in this interactive seminar. Study real-life case examples to help you refine your techniques. Using a simple three-phase strategy and instructor-directed practice sessions, you learn tools and techniques to increase the likelihood you will get what you want and deserve in all types of negotiations.

**EDP 303537**
Denise Brouillette, M.B.A.
1 meeting
Tuesday, 9 am–5 pm
March 6
San Francisco: Art and Design Center • $295

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Grant and Proposal Writing for Professionals

1.3 ceu
In today’s competitive business climate, poorly written grant proposals that do not meet a funder’s requirements won’t make it through the first stage of review. Ensure that your organization remains competitive by learning to meet the challenges of proposal writing. In this introductory, two-day course, you gain the skills necessary to tackle the proposal-writing process. You explore the steps involved in finding funding opportunities, managing and scheduling projects, writing narratives that sell, and editing effectively. Class time focuses on research, planning and writing strategies; class time does not focus on program development.

**EDP 303305**
Melanie Wise, M.A.
2 meetings
Thursday and Friday, 9 am–4:30 pm
March 1–2
San Francisco: Downtown Center • $395

Two-Day Business Writing Workshop

1.2 ceu
Learn to get important points across quickly in your business writing. Examine how best to target readers, select and organize information, use clear language and fix common errors. The techniques learned in class can be applied to job-related memos, emails, letters and reports. This course is aimed at students who have a solid grasp of English but want a review of business-writing fundamentals.

**EDP 303123**
Margaret Steen, M.J., Extension Honored Instructor
2 meetings
Mondays, 9 am–4 pm
March 5 and 12
San Francisco: Downtown Center • $575

Two-Day Business Presentation Skills Workshop

1.2 ceu
Learn to represent yourself more effectively in today’s highly competitive business climate. Through a series of on-camera exercises, you receive coaching in the practical tools necessary to create dynamic, professional presentations. You learn how to produce a great first impression by projecting a confident image, organizing your content for impact, interacting effectively with visual aids and creating a stronger connection with your listeners so that they can better hear and retain your message. **Enrollment is limited to 16.**

**EDP 303115**
Ed Alter, B.A.
2 meetings
Wednesdays, 9 am–4 pm
Feb. 29 and March 7
San Francisco: Downtown Center • $575

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For course and schedule information visit extension.berkeley.edu/catalogue
**Business Writing Review**
X455 • 1 semester unit in English
Your skill in crafting letters, emails, memos and reports determines how effectively you deliver your message to, or on behalf of, your organization. In this course, refresh and refine your business writing skills by learning to edit your writing, identify your grammar and punctuation problems and organize your ideas for clarity. You review the basics of composing effective business letters, memos and reports, as well as how to find the style and format that fit your subject and audience.

EDP 877852
Margaret Steen, M.J., Extension Honored Instructor
Enroll anytime
Online • $550

**Mediation and Conflict Resolution Seminar**
In this intensive 40-hour training, you gain the skills and confidence to resolve almost any business dispute as a mediator, negotiator or representative.

For course schedule, see p. 73.

**Business Negotiating**
Learn the strategies and tactics needed to influence others and reach long-lasting, profitable agreements.

For course schedule, see p. 75.

**Organizational Communication Strategies for Managers**
Gain the skills needed to communicate effectively in a complex business environment.

For course schedule, see p. 75.

**NEW THIS TERM**
**The Coach Approach to Effective Communication and Leadership Development**
Learn eight core coaching competencies for effective communication, as well as how to start a coaching relationship, perform ongoing coaching and complete the relationship.

For course schedule, see p. 76.

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**Business Process Management**

**COURSE INFORMATION**
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business

**BPM I: Process Modeling and Analysis**
X441.1 • 1 semester unit in Business Administration
(formerly BPM 1: Business Process Modeling and Analysis)
A requirement in the Professional Program in Business Process Management

Process modeling can be an extremely powerful diagnostic tool for your organization. Learn to overcome obstacles that can cripple your processes and easily frustrate customers and employees. Study the key concepts and techniques found in the Business Process Management Common Book of Knowledge (BPM CBOK®) and apply them to your own, real-world situation. Gain insight that gets to the root cause of quality and timeliness issues, and learn how to identify short- and longer-term improvements.

EDP 303990
Shelley Sweet, M.A.
2 meetings
Saturdays, 8:30 am–5 pm
Feb. 11 and 25
Berkeley Campus: 155 Barrows Hall • $445

**BPM II: Business Process Measurement**
X441.2 • 1 semester unit in Business Administration
(formerly BPM 2: Process Design, Transformation and Organization)
A requirement in the Professional Program in Business Process Management

Process improvement is one of the most powerful strategies for enhancing business operations. That strategy can easily dissolve into subjective opinion and scattered problem solving, however. Good metrics translate high-level process objectives into something concrete and comprehensible. During this course, you work on a process from your own work environment, with the goal of supporting a vital conversation among key decision makers. To achieve this, you learn how to define the needed data, how to mine that data for insights on process performance and how to display the data in a way that motivates action. Examine a set of free and low-cost statistical tools and how to apply them to your process improvement plan.

EDP 313015
Jerry Talley, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
May 5 and 19
Berkeley: Golden Bear Center • $445

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**Learn how to optimize business processes by blending traditional business and IT theories and practices. Study strategies to use technology more efficiently to support your business goals. Develop strategies to create an IT and management environment that can react more quickly to changing business needs through a process that involves a cycle of design, modeling, execution, monitoring and optimization.**

**Curriculum Requirements**
The curriculum consists of a minimum of 3 courses (including at least 2 from the core course list) for a total of 3 semester units (45 hours of instruction).

**Core Courses**
Choose a minimum of 2 courses from this list:
- BPM I: Process Modeling and Analysis X441.1 (offered this term)
- BPM II: Business Process Measurement X441.2 (offered this term)
- BPM III: Performance Management, Enterprise and Technology X441.3

**Electives**
For a list of electives available this term, visit extension.berkeley.edu/spos/bpm.html.

**Learn More and View the Flyer**
extension.berkeley.edu/spos/bpm.html
(510) 642-4151

course@unex.berkeley.edu

**Register using EDP 312116**
**Economics**

**COURSE INFORMATION**
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business

**ONLINE COURSE INFORMATION**
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

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**Essentials of Economics**
X402.8 • 2 semester units in Economics
A requirement in the Certificate Program in Business Administration

Get an overview of general economic issues, principles and concepts in both microeconomics and macroeconomics. Topics include understanding how the economy works, making better business decisions and comprehending the powerful lessons of the economic approach. Enrollment is limited.

Sec. 1 EDP 323428
Martin A. Medeiros, M.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–March 15
Berkeley Campus: 104 Barrows Hall • $715

Sec. 2 EDP 313734
Ashish Sahni
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
San Francisco: Downtown Center • $715

Sec. 4 EDP 897694
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $745

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**Economic Indicators: Making Sense of Market Data**
X408.4 • 2 semester units in Business Administration
Recipient of the Distinguished Course Award for excellence in distance learning from the University Continuing Education Association (UCEA)

Focus on key economic indicators that are monitored closely by financial analysts, economists and governments around the world. Examine the business cycle to place each indicator in a context that allows you to understand seemingly contradictory market reactions to newly released indicators. Upon completion, gain the ability to critically analyze news and data from financial and economic news sources, as well as assess what impact a market reaction to a newly released indicator has on a particular situation.

EDP 897041
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $635

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**Introduction to Microeconomics**
X2 • 3 semester units in Economics
An elective in the Certificate Program in Business Administration

Study how markets work, and gain a real understanding of the role of economics in business and in public and private decision making. Learn ways to think about how humans allocate resources, including markets and prices, consumer and producer behavior, and risk and cost measurement. Use this knowledge for further study in economics, or apply it in your everyday business dealings to make more effective decisions.

Sec. 1 EDP 323055
Martin A. Medeiros, M.A., Extension Honored Instructor
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–April 24 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $715

Sec. 2 EDP 877670
Larry O’Connell, M.A., M.S., M.B.A.
Enroll anytime
Online, proctored final exam • $715

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**Introduction to Macroeconomics**
X3 • 3 semester units in Economics
An elective in the Certificate Program in Business Administration

This course introduces basic concepts and tools used in macroeconomic analysis: the theory, measurement and determination of national income; business cycles; the multiplier; fiscal policy, budget deficits and the national debt; aggregate supply and aggregate demand; exchange rates and balance of payments accounts; and stabilization policy for unemployment and inflation. You may take Introduction to Microeconomics X2 concurrently with this course.

Sec. 1 EDP 323055
Martin A. Medeiros, M.A., Extension Honored Instructor
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–April 24 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $715

Sec. 2 EDP 877670
Larry O’Connell, M.A., M.S., M.B.A.
Enroll anytime
Online, proctored final exam • $715

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**Economics**
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business

**ONLINE COURSE INFORMATION**
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online
Entrepreneurship and Small Business Management

INTRODUCTION TO ENTREPRENEURSHIP/OPPORTUNITY RECOGNITION
X408.9 • 1 semester unit in Business Administration
A requirement in the Certificate Program in Entrepreneurship and Small Business Management, an elective in the Professional Program in Health Advocacy

Learn the essentials to becoming a successful entrepreneur. Gain foundational knowledge, and explore the strengths and weaknesses of your entrepreneurial plan. Topics include defining and refining the idea, developing the opportunity and planning and delivering the business venture. You learn the importance of the business plan as preparation for launching your business venture, managing the business and obtaining investor dollars.

EDP 303263
Tracey Williams, M.S.
3 meetings
Saturdays, 9 am–4 pm
Jan. 21–Feb. 4
Berkeley: Golden Bear Center • $595

MARKETING STRATEGIES FOR ENTREPRENEURS AND SMALL BUSINESS OWNERS
X475.5 • 2 semester units in Business Administration
A requirement in the Certificate Program in Entrepreneurship and Small Business Management, an elective in the Certificate Program in Marketing and in the Professional Program in Health Advocacy

Learn practical ways to plan and execute cost-effective and innovative marketing strategies for entrepreneurs and small business owners. You also learn about new-media marketing, including blogging, viral marketing, video marketing, Twitter, Facebook, LinkedIn, word-of-mouth, networking, creative brainstorming in tandem and more. Guest speakers are a key component of this course; these successful, proven small business owners and entrepreneurs share tips, secrets and strategies to help you gain a competitive edge and attract more quality customers for your business and websites.

EDP 303479
Kathryn A. Gorges, M.A., M.B.A.
5 meetings
Saturdays, 9 am–4 pm
April 21–May 19
San Francisco: Downtown Center • $715

FINANCES FOR ENTREPRENEURS AND SMALL BUSINESS OWNERS
X475.6 • 1 semester unit in Business Administration
A requirement in the Certificate Program in Entrepreneurship and Small Business Management, an elective in the Professional Program in Health Advocacy

Every budding entrepreneur or small business owner needs to know how to leverage fundamental tools; read basic financial statements; understand product costing, initial profit-and-loss development and break-even analysis; manage cash flow; and understand various revenue models. In a hands-on environment, learn how to use integrated Microsoft Excel spreadsheets to develop practical financial projections that are immediately relevant to your business operation.

EDP 303297
Monika Hudson, D.M.
6 meetings
Thursdays, 6–9 pm
March 22–April 26
San Francisco: Downtown Center • $595

ACTION PLANNING AND MANAGEMENT FOR A NEW BUSINESS VENTURE
X443.8 • 2 semester units in Business Administration
A requirement in the Certificate Program in Entrepreneurship and Small Business Management, an elective in the Certificate Program in Leadership and Management and in the Professional Program in Health Advocacy

Learn the critical and practical aspects of managing a small business venture and implementing solutions that work. Focusing on the business owner, you study the skills needed to successfully start and effectively manage a small business, including project management, time management, decision making and the ability to manage others. In addition to gaining an understanding and appreciation of basic business operations and management systems, you learn how to implement a specific business action plan that focuses on effective management solutions.

EDP 313056
Paul Terry, B.Comm.
10 meetings
Mondays, 6–9 pm
Jan. 9–March 26 (no meetings Jan. 16 and Feb. 20)
San Francisco: Downtown Center • $715
Leadership for Entrepreneurs
X499.7 • 2 semester units in Business Administration

Learn to adapt your leadership style to enhance the growth potential of your business as it transitions through its startup, infrastructure development and enterprise-scale phases. Understand how to use transformational pyramids to create differential advantage for employees, customers and investors, and apply this analysis to your business model. This class is taught in a combination lecture and active discussion format and includes interactive exercises, small group work, simple case studies and group problem-solving sessions.

EDP 303388
Sandy McMahon, M.B.A., Ed.M.
10 meetings
Thursdays, 6–9 pm
Jan. 12–March 15
San Francisco: Downtown Center • $715

Small Business Management
X105 • 3 semester units in Business Administration

Gain the skills and knowledge you need to start a small business. Learn to coordinate operations to increase efficiency. Discover what technologies can help your business compete in the marketplace. Finally, learn how to best represent your business to potential investors and bankers if you are looking to expand.

EDP 877068
Judith L. Forbes, M.B.A., Ph.D.
Enroll anytime
Online • $770

New Product Development

Building on real-world market research concepts, learn what it takes to develop a successful new product.

For course schedule, see p. 80.

Viral Growth Techniques for Marketing, Sales and Business Development

Learn up to 100 specific viral-growth techniques, tools and channels, and gain expertise in how to use and apply them in real business scenarios and situations.

For course schedule, see p. 84.

Essentials of Business

For students without any previous business knowledge, this course provides an introduction to the goals, processes and operations of business enterprises.

For course schedule, see p. 55.

Fundamentals of Finance

Gain an understanding of financial management, and apply financial tools to business decisions.

For course schedule, see p. 56.
Certificate Program in Entrepreneurship and Small Business Management

The Certificate Program in Entrepreneurship and Small Business Management presents a strong instructional foundation for beginning and successfully operating a small business venture. The curriculum spans all stages of small business development, including financial planning and management, marketing strategies and operational management. This professional certificate’s capstone course teaches you how to finalize your business plan and practice the next steps to executing and managing a successful business. Aspiring entrepreneurs and existing business owners can benefit from this newly developed curriculum to better understand the business and market forces and entrepreneurial practices that can help create and sustain success.

Curriculum Requirements
The curriculum consists of 5 required courses for a total of 9 semester units (141 hours of instruction).

Required Courses
• Building, Presenting and Executing a Business Plan X445.5
• Finances for Entrepreneurs and Small Business Owners X475.6 (offered this term)
• Introduction to Entrepreneurship/Opportunity Recognition X408.9 (offered this term)
• Action Planning and Management for a New Business Venture X443.8 (offered this term)
• Marketing Strategies for Entrepreneurs and Small Business Owners X475.5 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/cert/entrepreneur.html
(510) 642-4231
business@unex.berkeley.edu
Register using EDP 312091
## Finance

### COURSE INFORMATION

(510) 642-4231  
business@unex.berkeley.edu  
extension.berkeley.edu/cert/finance.html  
ONLINE COURSE INFORMATION

(510) 642-7343  
online@unex.berkeley.edu  
(510) 642-4231  
extension.berkeley.edu/online

### FREE INFORMATION SESSION

Certificate Program in Finance

Find out how a certificate in finance from UC Berkeley Extension can prepare you for career advancement or an advanced degree. For certificate details, see p. 67 or visit extension.berkeley.edu/cert/finance.html.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Instructor</th>
<th>Credit</th>
<th>Time and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 311480</td>
<td>Behavioral Finance</td>
<td>E. Leung</td>
<td>3.5</td>
<td>Jan. 11–March 14</td>
</tr>
<tr>
<td>EDP 313775</td>
<td>Behavioral Finance</td>
<td>Patricia Muscatelli</td>
<td>3.5</td>
<td>Jan. 11–March 14</td>
</tr>
</tbody>
</table>

### Hands-on Session

Basic Financial Mathematics and Financial Calculators

This workshop provides a one-day, hands-on introduction to the basic mathematics used in finance, as well as instruction in Microsoft Excel. In-class examples and problems include bank accounts, mutual fund returns and home mortgages. **Note:** If you are unsure of your math skills, this class is helpful preparation for Basic Corporate Finance X430.1 and Survey of Personal Financial Planning X433. Please check course textbook requirements for the preferred calculator.

**Prerequisites:** High school–level algebra

<table>
<thead>
<tr>
<th>Section</th>
<th>Instructor</th>
<th>Time and Location</th>
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</thead>
<tbody>
<tr>
<td>Sec. 1</td>
<td>Martin Brook</td>
<td>Saturday, 10 am–5 pm</td>
</tr>
<tr>
<td>Sec. 2</td>
<td>Catherine Bradford</td>
<td>Saturday, 10 am–5 pm</td>
</tr>
</tbody>
</table>

### Accounting for Managers

Get an overview of financial and cost accounting principles and ways to use them for effective management. To succeed in this course, you do not need an accounting background, but you should have some aptitude for numbers.

**For course schedule, see p. 52.**
Certificate Program in Finance

The Certificate Program in Finance is an integrated sequence of courses that gives you a broad, thorough and up-to-date foundation in finance, as well as the practical tools needed to thrive as an effective financial investment manager or analyst. This professional certificate employs materials and techniques that are consistent with modern principles and best practices, providing knowledge and skills that you can use immediately. It offers the advantage of a curriculum that is overseen by an advisory board of business and education leaders and taught by working professionals with many years of practical business experience.

**Curriculum Requirements**
The curriculum consists of 4 required core courses, 3 required specialization courses and 1 elective for a total of 16 semester units (240 hours of instruction).

**Required Core Courses**
- Corporate Financial Analysis and Modeling X435.6 (offered this term)
- Fundamentals of Risk Management X436.5 (offered this term)
- Intermediate Corporate Finance X444.1 (offered this term)
- International Finance X430.8 (offered this term)

**Corporate Finance Specialization**
- Advanced Corporate Finance X431.5 (offered this term)
- Business Valuation X431.9 (offered this term)
- Financial Statement Analysis X419.2 (offered this term)

**Investment Management Specialization**
- Financial Securities Analysis X425.5 (offered this term)
- Investment Portfolio Management X431.2 (offered this term)
- Options and Other Financial Derivatives X435.1 (offered this term)

**Capital Markets Specialization**
- Advanced Portfolio and Risk Management X436.6 (offered this term)
- Debt Markets and Fixed-Income Securities X436.3 (offered this term)
- Derivative Securities X436.4 (offered this term)

**Electives**
For a list of electives available this term, visit extension.berkeley.edu/cert/finance.html.

**Learn More and View the Brochure**
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- FINANCIAL STATEMENT ANALYSIS
- BUSINESS VALUATION
- INVESTMENT PORTFOLIO MANAGEMENT
- SECURITY ANALYSIS

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Intermediate Corporate Finance
X444.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance
A continuation of Basic Corporate Finance X430.1, this course rounds out the comprehensive overview of corporate finance topics and examines the concepts, techniques and tools that financial managers use in their attempts to make effective investing, financing and working capital management decisions. You devote specific attention to advanced capital budgeting topics, financing decisions, working capital management and multinational finance.

Prerequisites: Basic Corporate Finance X430.1. You should also be proficient with computer spreadsheets and basic financial mathematics and financial calculators.

Sec. 1 EDP 313445
Tony Yeh, M.B.A., M.Engr.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–March 20
San Francisco: Downtown Center • $730

Sec. 2 EDP 897611
Lawrence Cox, B.S., M.B.A.
Enroll anytime
Online, proctored final exam • $715

Hands-On Corporate Financial Analysis and Modeling
X435.6 • 1 semester unit in Business Administration
A requirement in the Certificate Program in Finance
This hands-on computer course provides the skills to apply the theories, concepts and tools covered in Basic Corporate Finance X430.1 and Intermediate Corporate Finance X444.1 to developing spreadsheet knowledge that you can use for effective financial analysis and decision making. Topics include developing spreadsheet skills for financial statement analysis and forecasting, stock and bond valuation, target capital structure estimation and capital budgeting.

Note: The online section requires access to Microsoft Excel 2003 or later.

Prerequisites: Basic Corporate Finance X430.1, completion of or concurrent enrollment in Intermediate Corporate Finance X444.1 and basic proficiency with computer spreadsheets

Sec. 1 EDP 313452
Fabio Santini, M.B.A.
5 meetings
Saturdays, 9 am–12 pm
March 17–April 14
San Francisco: Downtown Center • $470

Sec. 2 EDP 897470
Catherine Pinkas, M.B.A., PMP
Enroll anytime
Online, proctored final exam • $575

Advanced Corporate Finance
X431.5 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Corporate Finance Specialization
Apply essential financial tools and techniques in a series of case studies selected to illustrate the analysis of critical corporate finance decisions. The cases deal with topics such as valuation, capital issues, dividend policy, mergers and acquisitions, derivative instruments and risk management and ethical issues. The case studies further examine the theoretical concepts and models of finance and how they apply to realistic situations.

Prerequisites: Basic Corporate Finance X430.1 and Intermediate Corporate Finance X444.1. You should also be proficient with computer spreadsheets and financial calculators.

Sec. 1 EDP 313437
Tony Yeh, M.B.A., M.Engr.
10 meetings
Tuesdays, 6:30–9:30 pm
March 27–May 29
San Francisco: Downtown Center • $730

Sec. 2 EDP 897801
Donald R. Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $715

Business Valuation
X431.9 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Corporate Finance Specialization, and in Accounting, Accounting for Financial and Business Analysts Specialization; an elective in the Professional Sequence in Personal Financial Planning
Learn to apply financial and economic theory to investment, financing and dividend decisions in order to identify ways to maximize shareholder returns. Practical methods to determine costs of capital, total invested capital, free cash flow and economic profits are used in the valuation analysis for mergers and acquisitions, divestitures, capital budgeting, initial public offerings and private placements, leveraged buyouts, performance-based executive compensation, agency costs, control premiums and costs of marketability and real options.

Prerequisites: Basic Corporate Finance X430.1, Introduction to Financial Accounting X8102A, Accounting for Managers X421.5 or consent of instructor and professional experience

Sec. 1 EDP 313353
Robert Coackley, B.S.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
San Francisco: Downtown Center • $730

Sec. 2 EDP 897975
Donald R. Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $715

Options and Other Financial Derivatives
X435.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Investment Management Specialization
Get a comprehensive understanding of how to analyze and use options and other related derivatives. Discuss case studies of real-life examples in class to demonstrate and evaluate equity, index options and flex options. Through class discussions, you learn about the tools and develop the skills necessary to evaluate and apply options and derivatives for income and investment hedging purposes, as well as income and speculation purposes. No prior knowledge of options and futures markets is assumed.

Prerequisite: Basic Corporate Finance X430.1 or equivalent

Sec. 1 EDP 323089
Richard Lehman, M.B.A.
10 meetings
Mondays, 6:30–9:30 pm
March 21–May 23
San Francisco: Downtown Center • $730

Sec. 2 EDP 897124
Richard Lehman, M.B.A.
Enroll anytime
Online, proctored final exam • $715

Financial Securities Analysis
X425.5 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Investment Management Specialization; an elective in the Professional Sequence in Personal Financial Planning
Acquire a solid framework to understand and practice fundamental analysis as it applies to stocks, bonds and fixed-income securities. Develop analytical tools to analyze a company for investment purposes, and learn guidelines for evaluating purchases of stocks and fixed-income securities. Topics include the theory and purpose of investment, financial statement analysis, ratio analysis, alternative methods for forecasting corporate profits, valuation techniques, technical analysis, fixed-income research and portfolio management. The course is intended for those making investment decisions and recommendations, including research assistants, registered representatives, financial planners and security salespeople. Individual investors can also develop their understanding of security analysis.

Prerequisite: Basic Corporate Finance X430.1 or consent of instructor

EDP 313973
Peter H. Lou, Ph.D., CFA, Extension Honored Instructor
10 meetings
Mondays, 6:30–9:30 pm
Feb. 6–April 15 (no meeting Feb. 20)
San Francisco: Downtown Center • $730
International Finance
X430.8 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance; an elective in the Certificate Program in Business Administration

Understand international finance from both corporate and international banking viewpoints, as well as financial constraints on international business and differences between domestic and international environments. You examine the international monetary system, the differences between foreign trade and foreign investments, international sales terms, measurement and management of foreign-exchange exposure, international financial markets and banking, import/export financing, current-asset management and international taxation.

Prerequisite: Basic Corporate Finance X430.1 or equivalent

Sec. 1 EDP 332022
Reggie Murray, B.S., M.B.A., Ed.D.
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
San Francisco: Downtown Center • $730

Sec. 2 EDP 897629
Grace Kalil, M.B.A.
Enroll anytime
Online, proctored final exam • $715

Fundamentals of Risk Management
X436.5 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance; an elective in the Professional Sequence in Personal Financial Planning

Learn the fundamentals of financial risk management as it is practiced by corporate treasury staffs and investment managers. You focus on current theory, best practices and financial products that can be used for risk mitigation.

Sec. 1 EDP 323154
Wayne Lee Price, M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–March 15
San Francisco: Downtown Center • $730

Sec. 2 EDP 323345
Lall Ramrattan, Ph.D.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–March 15
Berkeley: Golden Bear Center • $730

Sec. 3 EDP 834185
Lawrence Cox, M.B.A.
Jan. 17–April 10
Online • $725

Derivative Securities
X436.4 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance, Capital Markets Specialization

Get an introduction to options, futures and other derivative securities, and learn a core set of principles that underlie the pricing and use of derivatives. Explore these principles in a series of real-world examples that help you build intuition and familiarity with a broad spectrum of markets and risk-management applications. In particular, you cover the valuation and use of forwards, futures, Monte-Carlo valuation, credit derivatives and financial risk management.

Sec. 1 EDP 313510
Amy Hoffman, B.A., CFP
10 meetings
Mondays, 6–9 pm
Jan. 23–April 2 (no meeting Feb. 20)
Belmont: Belmont Center • $730

Sec. 2 EDP 323865
David Jiang, M.A.
10 meetings
Tuesdays, 6–9 pm
Jan. 17–March 20
Berkeley Campus: 54 Barrows Hall • $730

Debt Markets and Fixed-Income Securities
X436.3 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance, Capital Markets Specialization

Learn to analyze debt instruments and their derivatives, including money-market instruments, government bonds, repurchase agreements, interest-rate swaps, mortgage-backed securities, corporate bonds and credit derivatives. Examine the best ways to invest using these instruments and how they are issued. You emphasize analysis, pricing and hedging during the course.

EDP 313494
Peter H. Lou, M.B.A., CFA, Extension
Honored Instructor
5 meetings
Saturday, 9 am–4 pm
April 14–May 12
San Francisco: Downtown Center • $730

Advanced Portfolio and Risk Management
X436.5 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance, Capital Markets Specialization

Learn to manage financial risk from the standpoint of both the corporation and the financial institution. Study risk identification and risk-mitigation techniques for the management of cash flow and portfolio value. Review advanced techniques such as Monte-Carlo simulation and state-based risk mapping. Participate in class discussions on the latest developments in financial products and the capital markets as they pertain to financial risk management.

EDP 323139
Peter H. Lou, M.B.A., CFA, Extension
Honored Instructor
5 meetings
Saturday, 9 am–4 pm
April 14–May 12
San Francisco: Downtown Center • $730

Investment Portfolio Management
X431.2 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance, Investment Management Specialization

Get an overview of investment management. Topics include modern portfolio theory, fundamental and technical analysis of equities, concentrated equity positions, fixed-income analysis, benchmarking, capital markets, the appropriate use of mutual funds, the importance of asset allocation, IRAs, 401(k)s and tax-efficient portfolio design. You also pay attention to interest rates, inflation, Federal Reserve policies and general economic policy as they pertain to topics you examine in the course.

Prerequisite: Basic Corporate Finance X430.1 or equivalent

EDP 323030
Instructor to be announced
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
Berkeley: Golden Bear Center • $730

Finances for Entrepreneurs and Small Business Owners
X431.2 • 2 semester units in Business Administration

A requirement in the Certificate Program in Finance, Investment Management Specialization

Learn how to use integrated Microsoft Excel spreadsheets to develop practical financial projections that immediately impact your business operation.

For course schedule, see p. 63.

Fundamentals of Finance

Gain an understanding of financial management, and apply financial tools to business decisions.

For course schedule, see p. 56.
Talent Management and Workforce Development
X493.9 • 2 semester units in Business Administration
A requirement in the certificate programs in Human Resource Management and in Leadership and Management
Talent management has evolved beyond the hiring and firing of employees to cover all elements of human capital strategy, from employee selection, retention, performance management and compensation to succession planning, diversity and more. This course, intended for professionals who manage talent across a broad spectrum of organizations, surveys the core elements of talent management and teaches you how to develop effective talent management systems within your organization.

EDP 303669
Resa Peay-Wainwright, B.A.
5 meetings
Saturdays, 9 am–4 pm
Feb. 11–March 17 (no meeting Feb. 18)
San Francisco: Downtown Center • $715

Total Compensation
X493.8 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management
Compensation and benefits programs need to reflect the changing business landscape and unprecedented organizational challenges. Study total compensation and rewards programs that address a range of monetary and nonmonetary options beyond salary compensation and benefits. Learn how to integrate total compensation packages with other basic human resources functions, including recruitment, performance contributions, development and retention.

EDP 303677
Resa Peay-Wainwright, B.A.
10 meetings
Wednesdays, 6–9 pm
Jan. 4–March 7
San Francisco: Downtown Center • $715

Employee Benefit Plans
X450 • 2 semester units in Business Administration
An elective in the Certificate Program in Human Resource Management
Study the most common types of discretionary benefits, and learn how they are selected and administered. The instructor outlines legal requirements, administrative problems and available options, as well as government-mandated plans such as workers’ compensation and Social Security. You examine important policy issues on sick leave, vacation, jury duty and leaves of absence, and learn how they are related to organizational culture and policy. You also pay special attention to the effects of tax reform in benefits planning.

EDP 897157
Richard K. Takahashi, M.B.A.
Enroll anytime
Online • $695

Effective Performance Management
X452.3 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management
Get an overview of performance management, including its definition, benefits and application in most organizations. If you are a manager or supervisor in a company of any size and want to learn more about performance management, this course teaches you how to implement a successful program or partner with line managers to enhance the process. You learn how to develop effective performance management systems that involve goal setting, coaching and feedback, motivation, measuring performance against goals, performance appraisals and employee development.

EDP 303206
Aubrey Cramer, M.S.
10 meetings
Wednesdays, 6–9 pm
March 21–May 23
Berkeley: Golden Bear Center • $715

Human Resource Systems and Technology
X482.2 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management
Explore the strategic role of human resources systems in the effective management of an organization. You learn practical tools to develop a plan to use technology more effectively in the human resources department. This course is completely paperless; to succeed, you must bring a laptop with Wi-Fi capability to every class.

EDP 323444
Jun Cruzat, M.S.
10 meetings
Wednesdays, 6–9 pm
Jan. 11–March 14
Berkeley: Golden Bear Center • $715

FREE INFORMATION SESSION
Certificate Program in Human Resource Management
Discover how UC Berkeley Extension’s professional certificate, approved by the Human Resource Certification Institute, can help you make the most of growing opportunities in human resource management. For more information about the certificate, see p. 71 or visit extension.berkeley.edu/cert/hrm.html.
Certificate Program in Human Resource Management

The Certificate Program in Human Resource Management is designed to help human resource professionals develop the knowledge, methods and skills necessary to meet the challenges of today’s changing workplace and workforce. With courses developed by top HR professionals and approved for recertification credit by the HR Certification Institute, the certificate prepares you to be your organization’s internal consultant and strategic business partner.

Curriculum Requirements
The curriculum consists of 7 required courses and 2 electives for a total of 17 semester units (258 hours of instruction).

Required Courses
• Essentials of Human Resources X450.1 (offered this term)
• Effective Performance Management X452.3 (offered this term)
• Employee Recruitment, Selection and Placement X450.8 (offered this term)
• Employee Relations X454.4 (offered this term)
• Human Resource Systems and Technology X482.2 (offered this term)
• Talent Management and Workforce Development X493.9 (offered this term)
• Total Compensation X493.8 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/hrm.html.

Learn More and View the Brochure
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The required courses in this certificate have been approved for recertification credit hours toward Professional in Human Resources (PHR) and Senior Professional in Human Resources (SPHR) recertification through the HR Certification Institute. For more information about certification or recertification and which electives may also qualify, visit www.hrci.org. The use of this seal is not an endorsement by the HR Certification Institute of the quality of the program. It means that this program has met the HR Certification Institute’s criteria to be preapproved for recertification credit.
Employee Relations
X454.4 • 1 semester unit in Business Administration

A requirement in the Certificate Program in Human Resource Management
Examine current legal and social issues that affect employee relations, as well as the practical actions to deal with them. You learn a variety of key concepts, including communications, counseling, performance management, reward and recognition, work and family issues, employee assistance, sexual harassment, diversity management and ways to handle formal complaints and discipline.

EDP 303255
Susan J. Gallagher, M.S.
6 meetings
Wednesdays, 6:30–9:30 pm
March 14–April 18
San Francisco: Downtown Center • $595

Employee Recruitment, Selection and Placement
X450.8 • 2 semester units in Business Administration

A requirement in the Certificate Program in Human Resource Management
Develop in-depth employee-selection interviewing skills, and learn about the human resources function of selecting and placing employment candidates. Through extensive in-class practice and mock interviews, you learn how to identify and define selection standards, develop probing primary and secondary interview questions and evaluate candidates. Topics include systematic approaches to finding candidates, standardizing selection interviews and making hiring decisions. The course also offers techniques for recruiters who manage multiple openings.

EDP 303248
Nicole Jackson, M.B.A., M.S.
5 meetings
Saturdays, 9 am–4 pm
March 24–April 21
San Francisco: Downtown Center • $715

NEW THIS TERM
The HR Consultant’s Toolkit
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Broaden your HR professional skill set as an internal consultant to assess, address and resolve issues in order to improve organizational functioning, productivity and morale. The workshop combines theory, proven tactics and extensive skills practice providing you with a diverse toolkit you can use to effectively engage people at all levels of the organization. You are also armed with greater confidence to take on increasingly complex and challenging assignments that build your career while contributing to the organization’s success.

EDP 303859
Roberta Streimer, M.Ed.
2 meetings
Fridays, 8:30 am–5:30 pm
March 9 and 16
San Francisco: Downtown Center • $495

HR Metrics: Measuring and Analyzing Human Capital
X496.9 • 2 semester units in Business Administration

An elective in the Certificate Program in Human Resource Management
Learn to assess and measure employee and organizational performance to gain an understanding of the scope of your human capital investments. Develop and make critical HR recommendations to senior management and key decision makers. Gain the skills to formulate both qualitative and quantitative recommendations that affect key management decisions.

EDP 303339
Jan Hunter, M.B.A.
10 meetings
Tuesdays, 6–9 pm
March 20–May 22
San Francisco: Downtown Center • $715

Employee Engagement: Increasing Innovation, Productivity and Commitment
0.8 ceu

Employee turnover is costly. Are your workers engaged or ready to jump ship at the earliest opportunity? Analyze your leadership style and your organization’s programs and policies so you can retain the talent to be optimally competitive. Learn strategies to engage your employees and encourage them to become productive and innovative in their current positions.

EDP 303800
Barbara Miller, M.A.
1 meeting
Friday, 8:30 am–5:30 pm
April 20
San Francisco: Downtown Center • $295

Optimal Performance on the Job: Achieving Work-Life Integration
Learn tools and strategies to help you get more productivity out of your efforts and more satisfaction from your job.
For course schedule, see p. 78.

Budgeting and Planning for Nonfinancial Managers
Get an introduction to concepts of accounting practices, financial statement management and analysis, and costing methods and budgeting techniques.
For course schedule, see p. 85.

FOR COURSE AND SCHEDULE INFORMATION VISIT extension.berkeley.edu/catalog
Paralegal Studies

FREE INFORMATION SESSION
Paralegal Studies Program
UC Berkeley Extension’s Paralegal Studies Program is a comprehensive, accelerated course of study that is designed by paralegals for paralegals and taught by practicing attorneys. Come meet instructors, staff and other prospective students and find out how you can prepare for a career as a paralegal. The program is available in a classroom format in Belmont, San Francisco and Berkeley. It is also available in an online format that you can begin at any time. For more information, see p. 74 or visit extension.berkeley.edu/spos/paralegal.html.

EDP 303560
1 meeting
Tuesday, 6–7:30 pm
Jan. 17
San Francisco: Downtown Center • FREE

Essential Paralegal Studies Part I: Foundational Skills
X418 • 2 semester units in Law
A requirement in the Paralegal Studies Program
Study the foundational paralegal qualities most sought by attorneys and law firms. Learn various aspects of paralegal skills, including legal terminology, court structure, legal ethics, evidence, investigation, interviewing, analysis and other areas relevant to becoming an excellent paralegal. Note: Online section must be completed within three months of enrollment date.

Sec. 1 EDP 303271
Tod I. Zuckerman, J.D., Extension Honored Instructor
10 meetings
Thursdays, 6–9 pm
Jan. 5–March 8
San Francisco: Downtown Center • $1,550

Sec. 2 EDP 317073
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750

Essential Paralegal Studies Part II: Authority, Research and Writing
X419 • 2 semester units in Law
A requirement in the Paralegal Studies Program
Study the advanced paralegal skills most sought by attorneys and law firms. Learn all aspects of advanced paralegalism, including legal research, legal writing, breaking rules into elements, applying rules to facts, pleading preparation, discovery coordination, digesting discovery documents, file maintenance, billable hours, form manipulation, electronic research, motion preparation and other areas relevant to becoming an excellent paralegal. Note: Online section must be completed within three months of enrollment date.

Prerequisite: Essential Paralegal Studies Part I: Foundational Skills X418

Sec. 1 EDP 303289
Tod I. Zuckerman, J.D., Extension Honored Instructor
10 meetings
Thursdays, 6–9 pm
Jan. 5–March 8
San Francisco: Downtown Center • $1,550

Sec. 2 EDP 317081
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750

Paralegal Tort Law
X403 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Get an overview of personal injury, product liability and malpractice law. Examine the intentional torts of battery, assault, false imprisonment, intentional infliction of mental distress, trespass to chattel, trespass to property and conversion, as well as analysis of negligence, breach of duty, causation and damages, liability issues and defenses, and malpractice. Note: Online section must be completed within two months of enrollment date.

Sec. 1 EDP 303552
Larry Sager, J.D.
5 meetings
Tuesdays, 6–9 pm
Jan. 24–Feb. 21
San Francisco: Downtown Center • $795

Sec. 2 EDP 307991
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Mediation and Conflict Resolution Seminar
X499.2 • 2 semester units in Business Administration
40 hours MCLE credit for attorneys (3 hours Ethics) • 40 hours CE credit: BRN, LCSW/MFT and psychologists
The Award of Completion satisfies training requirements for most court and agency mediation programs.
Do you want to successfully resolve business disputes with confidence? With courts clogged and lawsuits and business conflict on the rise, mediation skills can become an essential part of your skill set. In this intensive 40-hour training, you gain the ability and confidence to resolve almost any business dispute as a mediator, negotiator or representative. Through lecture, discussion, dispute simulations and video, you learn the skills and strategies of a successful mediator.
A complete set of model forms for your practice or program is also included.

EDP 313908
Ron Kelly, Extension Honored Instructor
5 meetings
Saturdays, 9 am–6 pm
March 3–31
Berkeley: Golden Bear Center • $1,095
Paralegal Program

Make the most of your professional opportunities with UC Berkeley Extension’s Paralegal Studies Program. Designed by paralegals for paralegals and taught by practicing attorneys approved by the University of California, Berkeley, the program offers the skills and knowledge to become a practicing paralegal. In just six months, you can fulfill California’s requirements for paralegals and take the next step in your career.

Two convenient learning formats enable you to continue working while you complete the curriculum: Proceed at your own pace with the online program, which you can begin anytime, or choose the hybrid format, a combination of classroom and online study.

Curriculum Requirements
The curriculum for both hybrid and online programs consists of 2 required courses and 4 electives for a total of 8 semester units (360 hours of instruction).

Required Courses
• Essential Paralegal Studies I: Foundational Skills 418 (offered this term)
• Essential Paralegal Studies II: Authority, Research and Writing 419 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/paralegal.html.

Learn More and View the Brochure
extension.berkeley.edu/spos/paralegal.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 302687
Statement Regarding California Regulatory Requirements
The UC Berkeley Extension online and hybrid Paralegal Studies Program is in compliance with California Business & Professions Code 6450 through 6456. The California regulations require that a paralegal program offer either 24 semester units or an equivalent amount of hours related to law. This program meets or exceeds the regulatory standard of 360 classroom hours. In addition, students earn up to 8 semester units of academic credit for the program.

Paralegal Contract Law
X405 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Learn how to form effective legal contracts, how contracts are performed and how to remedy for nonperformance or breach of contract. Contracts are involved in virtually every field of law, and the contract drafting, analysis and litigation skills you learn in this course can be applied to a wide variety of legal situations. Note: Online section must be completed within two months of enrollment date.
EDP 317032
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal California Procedures
X407 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Study California court rules and procedures, as well as how to properly access and cite those rules and procedures. Learn strategies to locate rules relevant to a variety of situations. Investigate documents and filing procedures in California so you are able to assist attorneys in identifying and applying trial court rules. You also learn about the ongoing educational requirements for paralegals in California. Note: Online section must be completed within two months of enrollment date.
Sec. 1 EDP 303529
David Yang, J.D., LL.B.
5 meetings
Mondays, 6–9 pm
Jan. 9–Feb. 13 (no meeting Jan. 16)
San Francisco: Downtown Center • $795
Sec. 2 EDP 317057
Julie Goren, J.D.
Enroll anytime
Online • $875

Paralegal Business Law
X404 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Gain an accessible and straightforward understanding of the law of business organizations. Study relevant examples from the day-to-day practices of business lawyers and their paralegals. You learn the four basic business organizations: sole proprietorships, partnerships, corporations and limited liability companies. Note: Online section must be completed within two months of enrollment date.
Sec. 1 EDP 303586
Darek DeFreece, J.D.
5 meetings
Tuesdays, 6–9 pm
March 20–April 17
San Francisco: Downtown Center • $795
Sec. 2 EDP 317024
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Intellectual Property Law
X409 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Explore trademark, copyright and patent law as it relates to a paralegal’s role within intellectual property representation. By the end of the course, you gain the quantifiable skills in intellectual property law to function under an attorney’s supervision. Specifically, you learn terminology relevant to intellectual property law and can identify the elements of trademark procedures, including infringement. Learn to identify the elements of copyright procedures, including patent application, ownership, transfer and infringement. Note: Online section must be completed within two months of enrollment date.
Sec. 1 EDP 303545
Emmalena Quesada, J.D.
5 meetings
Wednesdays, 6–9 pm
April 25–May 23
San Francisco: Downtown Center • $795
Sec. 2 EDP 317065
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Criminal Law
X406 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Learn how to assist a criminal attorney as a paralegal. You study substantive and procedural criminal law and learn to identify the elements of offenses and defenses against criminal charges. You examine levels of criminal intent, the rationale of criminal law, the purpose of criminal punishment and the role that the U.S. Constitution plays in the criminal justice system. Note: Online section must be completed within two months of enrollment date.
EDP 307983
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Family Law
X410 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Learn the paralegal’s role in family law practice. Topics covered include jurisdictional issues, child custody and visitation matters, child support issues, property rights and division, and spousal support considerations. You also examine issues of traditional marriage and alternative marriage, as well as paternity proceedings, adoption and surrogacy rights. Note: Online section must be completed within two months of enrollment date.
EDP 317016
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875
Leadership and Management

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/cert/mgt.html.

FREE INFORMATION SESSION
Certificate Program in Leadership and Management
Find out how this UC Berkeley Extension professional certificate can help you build the essential skills for effective management and make a tangible difference in your career. For information about the certificate, see p. 77 or visit extension.berkeley.edu/cert/mgt.html.

EDP 301432
1 meeting
Monday, 6:45–7:45 pm
Dec. 12
San Francisco: Downtown Center • FREE

EDP 303370
1 meeting
Monday, 6:45–7:45 pm
May 14
San Francisco: Downtown Center • FREE

Effective Leadership and Management: Understanding and Influencing the Dynamics of Organizations
X498.4 • 2 semester units in Business Administration
A requirement in the Certificate Program in Leadership and Management
Learn how to apply concepts and strategies to navigate and influence your organization’s behavior. By understanding how individual and organizational behavior impact the achievement of business goals, you can increase your employees’ and company’s overall performance. Discover a tactical versus strategic approach to address challenges, and learn concrete skills to improve your ability to lead teams and achieve business goals. Note: Course requirements include taking an assessment test, offered at a discounted rate of $100, to track your mastery in essential leadership functions and to create an action plan for your leadership development and improvement.

EDP 303198
Eleni Pallas, M.B.A.
10 meetings
Mondays, 6–9 pm
Jan. 2–March 19 (no meetings Jan. 16 and Feb. 20)
San Francisco: Downtown Center • $715

Organizational Communication Strategies for Managers
X498.9 • 2 semester units in Business Administration
A requirement in the Certificate Program in Leadership and Management
Gain the skills needed to communicate effectively in a complex business environment. Learn how to be flexible so you can communicate both upstream and downstream, as well as with vendors, clients, stakeholders and other partner organizations from a variety of business cultures. Study communication theory, review case studies, discuss topical communication issues from the weekly news and practice communication strategies that you can apply right away in your current position or as preparation for career advancement.

EDP 303511
Mary Lynn Wilson, Ph.D.
5 meetings
Saturdays, 9 am–4 pm
Feb. 25–March 24
San Francisco: Downtown Center • $715

Business Negotiating
X451.3 • 2 semester units in Business Administration
A requirement in the Certificate Program in Leadership and Management, an elective in the Professional Program in Biopharmaceutical Business
Don’t get mad. Don’t get even. Get what you want. Learn the strategies and tactics needed to influence others and reach long-lasting, profitable agreements. This highly interactive course teaches you successful negotiation skills through role play and case studies from real life, giving you the knowledge and experience to handle difficult conversations, communicate with people from different cultures, uncover hidden value, discover optimal job interview techniques and negotiate salary. In short, you learn techniques to overcome obstacles that prevent you from reaching your goals.

EDP 303164
Terence K. Hird, M.B.A., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Jan. 7–Feb. 11 (no meeting Jan. 14)
San Francisco: Downtown Center • $715

Leadership, Influence and Power in Organizations
X499.3 • 2 semester units in Business Administration
A requirement in the Certificate Program in Leadership and Management
Explore how leaders use power and influence to achieve organizational commitment and effectiveness. Discuss topics of organizational culture, appropriate types of power, influence with and without authority, business ethics and effective goal setting and planning. Research and case studies about the global economy, Silicon Valley innovation and current events provide you with tools for developing personal leadership skills and styles.

EDP 303412
Elie Asmar, M.S.E., PMP, CKM, Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Jan. 10–March 13
San Francisco: Downtown Center • $715
Managing Change and Ambiguity in the Workplace
X411.9  1 semester unit in Business Administration
A requirement in the Certificate Program in Leadership and Management; an elective in the Professional Sequence in Agile Management
Learn valuable insights on how to foster goodwill and commitment during times of transition to create and maintain a high-performance organization. Discover how to design and manage change more effectively, gain an awareness of principles used to address people’s readiness and capability for change, and learn how to make people more receptive to and prepared for change. Bring an example of an organizational change in which you have been involved as your case study; this example could be an initiative that you have led, participated in or observed. Learn to apply the principles of change management to your specific case. Note: Check the website for reading assignments to complete before the first class meeting.
EDP 303420
Anna Ewins, Ph.D.
2 meetings
Saturdays, 9 am–5:30 pm
March 31 and April 14
San Francisco: Downtown Center • $525

Essentials of Management
X475.4  2 semester units in Business Administration
An elective in the Certificate Program in Leadership and Management
Survey the history of the management field; explore the planning, organizing, leading and controlling dimensions of the manager’s job; and analyze the transition that takes place as an individual professional takes on a management position. You also learn key interpersonal and managerial skills.
Sec. 1 EDP 303396
Gene Hendrix, Ph.D., Extension Honored Instructor
10 meetings
Mondays, 6–9 pm
Jan. 9–March 26 (no meetings Jan. 16 and Feb. 20)
San Francisco: Downtown Center • $715
Sec. 2 EDP 303404
Gene Hendrix, Ph.D., Extension Honored Instructor
4 meetings
Saturdays, 8:30 am–5 pm
Feb. 25–March 17
Belmont: Belmont Center • $715

Moving on Up: Women and Leadership
X474.1  2 semester units in Business Administration
A requirement in the Professional Program in Women and Leadership; an elective in the Certificate Program in Leadership and Management
Learn practical and simple techniques to become an effective leader. Explore Equilibrium Dynamics, a practical approach to emotional competence. Examine strategies to help advance your career, including how to create a communicative and collaborative environment, build teams, capitalize on better retention and improved performance, communicate across ethnic and generational differences and use intuition to build confidence. Through lecture, discussion and interactive exercises, you learn skills, strategies and techniques that help you excel and advance in today’s workplace.
EDP 303487
Amy Levine, Ed.D.
10 meetings
Thursdays, 6–9 pm
Jan. 12–March 15
Berkeley: Golden Bear Center • $625

NEW THIS TERM
1.4 ceu
Explore concepts and practices of business ethics and corporate social responsibility. Examine profitable businesses with high ethical standards to learn what strategies have proven to be successful. Discuss concepts of sustainability—triple bottom line, ISO 26000 CSR Guidance, employee engagement, character education and many others—to develop your understanding of ethical behavior. Understand how to apply these ethical positions to day-to-day business situations.
EDP 323485
Elie Asmar, M.S.E., PMP, CKM, Extension Honored Instructor
2 meetings
Saturdays, 9 am–5 pm
Jan. 28 and Feb. 4
San Francisco: Art and Design Center • $450

NEW THIS TERM
The Coach Approach to Effective Communication and Leadership Development
2.0 ceu
Business professionals can benefit from learning how to assess, appreciate and communicate more effectively through a coach approach. Gain the knowledge and confidence needed to create value for your organization and the people involved. Learn eight core coaching competencies for effective communication, as well as how to start a coaching relationship, perform ongoing coaching and complete the relationship.
EDP 313130
Barbara Russo, B.A.
8 meetings
Wednesdays, 6:30–9 pm
April 4–May 23
San Francisco: Downtown Center • $450

NEW THIS TERM
Strategic Management for Executives
2.4 ceu
Learn to think and act strategically to have more impact on the development and execution of company strategy. Examine how strategy is formulated and changed, how to recognize and respond to market changes, what is required to successfully execute strategic plans and how to avoid common pitfalls. You also learn how to recognize the need for strategic change and how to successfully influence that change within an existing corporate structure.
EDP 313072
Curt Francis, M.B.A.
3 meetings
Saturdays, 8:30 am–5:30 pm
Jan. 28–Feb. 11
Belmont: Belmont Center • $595

NEW THIS TERM
Design Thinking for a Sustainable World: Amplify Your Impact at Work and for the Planet
X458.7  1 semester unit in Business Administration
Explore concepts of sustainability with hands-on training in innovative design-thinking techniques. Apply triple-bottom-line sustainability principles to current challenges. Learn how to create enhanced innovation quickly while decreasing risks and costs. Acquire an understanding of the principles of sustainability as they apply to organizations, products and individual choices. This course is designed for those in business, nonprofits or education who want to make meaningful change.
EDP 323501
Helene Cahen, M.S., and Nancy Roberts, M.B.A.
3 meetings
Fridays, 9 am–5 pm
March 2–16
San Francisco: Art and Design Center • $495
Certificate Program in Leadership and Management

Get the necessary training to successfully lead and manage people in organized settings. Courses in how to build managerial excellence equip you to better understand the latest principles, strategic concepts, philosophies and advanced applications in management and leadership. Instructors from the business world share their leadership knowledge and strategies, and you gain the skills to take on higher-level job responsibilities and develop a big-picture view of management. Learn to communicate more effectively and become a better manager of people. The Certificate Program in Leadership and Management helps improve your advancement opportunities even if you are not in a formal management role.

Curriculum Requirements
The curriculum consists of 5 required courses and 2 electives for a total of 13 semester units (195 hours of instruction).

Required Courses
- Business Negotiating X451.3 (offered this term)
- Effective Leadership and Management: Understanding and Influencing the Dynamics of Organizations X498.4 (offered this term)
- Leadership, Influence and Power in Organizations X499.3 (offered this term)
- Managing Change and Ambiguity in the Workplace X411.9 (offered this term)
- Organizational Communication Strategies for Managers X498.9 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/mgt.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/mgt.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 302695
Professional Program in Women and Leadership

The Professional Program in Women and Leadership provides concrete skills for using power and influence successfully in everyday work situations. Designed for women seeking advancement to leadership positions, this three-course sequence encourages women to lead business teams with honesty, respect, courage and compassion.

Curriculum Requirements
The curriculum consists of 3 required courses for a total of 6 semester units (90 hours of instruction).

Required Courses
• Making Power Moves: Women and Leadership X454.8
• Moving on Up: Women and Leadership X474.1 (offered this term)
• Power and Influence: Women and Leadership X474.8

Learn More and View the Flyer
extension.berkeley.edu/spos/womenleaders.html
business@unex.berkeley.edu
(510) 642-4231

Register using EDP 312075

Optimal Performance on the Job: Achieving Work-Life Integration
0.6 ceu
Learn tools and strategies to help you get more productivity out of your efforts and more satisfaction from your job. Examine the three essential qualities for peak performance. Study the best ways to set goals effectively and focus on top priorities. This interactive seminar teaches how sharpening your leadership skills can remove the inner conflict, procrastination and self-sabotage that may be holding you back.
EDP 303826
Neil Fiore, Ph.D.
2 meetings
Thursdays, 6–9 pm
March 22 and 29
Berkeley: Golden Bear Center • $295

Leading Across the Generations
0.8 ceu
The generation gap has become the generation chasm with four generations coexisting in today’s workforce: seniors, boomers, Generation Xers and millennials. Each generation has different work styles, values and expectations. Leaders must understand each group in order to recruit, retain, build intergenerational teams and communicate effectively across the generations. Team members must understand how to work effectively with their colleagues to achieve personal and organizational goals. HR staff must understand how to adapt systems to appeal across the generations. This workshop offers concrete strategies that you can apply immediately.
EDP 303818
Barbara Miller, M.A.
1 meeting
Thursday, 8:30 am–5:30 pm
Feb. 9
San Francisco: Downtown Center • $295

Emotional Intelligence (EQ) and Improvisation: Building Your Leadership Toolkit
0.7 ceu
Learn to cultivate a high EQ to better understand and develop self-awareness, self-management, social awareness and relationship management. Improvisational training and spontaneous thinking can develop skills for intuitive and creative action “in the moment.” Led by experienced improv performers with organizational experience, this workshop combines the art of improvisation with emotional intelligence and business management skills to enhance your leadership toolkit.
EDP 303230
Allison Gilmore, B.A.
1 meeting
Friday, 9 am–5 pm
April 20
San Francisco: Art and Design Center • $350

Public Service Leadership Boot Camp
X478.3 • 2 semester units in Business Administration
Are you interested in becoming an effective leader, organizer or candidate in your community? This course is for people who hear a call to service and seek a road map to transform dreams into actions through social networks, nonprofits and political campaigns. Taught by author and activist Christine Pelosi, this boot camp course is made up of short, concentrated lessons that hone your skills in the key areas of message, management, mobilization and money. Connect with other aspiring community leaders influencing public policy. This course is offered in partnership with the Bay Area Business Roundtable.
EDP 323832
Christine Pelosi, J.D., B.S.F.S.
10 meetings
Tuesdays, 6:30–9:30 pm
March 13–May 15
San Francisco: Downtown Center • $395

Organization and Management
Using case studies, small-group discussions and examples from Bay Area organizations, explore issues such as organizational conflict and power, management development, interpersonal influence and the advantages and drawbacks of participative management.
For course schedule, see p. 56.

Business Communication: Writing and Speaking
Gain experience in drafting a wide range of business communications, including emails, memos, letters and reports. In addition, you give several oral presentations that are recorded and critiqued in class.
For course schedule, see p. 60.

Agile Management
Through project games, learn how Agile’s planning tools help to address ongoing changes in requirements and show ways to successful outcomes.
For course schedule, see p. 54.

Business Intelligence With SQL Server
Explore the analysis and development of a business intelligence system, including programming examples using Microsoft SQL Server.
For course schedule, see p. 98.

Certificate Program in Project Management
Acquire the skills you need to complete high-quality projects on task, on time and within budget. Most Extension project management courses apply toward professional development units (PDUs) recognized by the Project Management Institute.
See p. 91 for complete certificate details.
FREE INFORMATION SESSION
Certificate Program in Marketing and Professional Sequences in Marketing Metrics and in Integrated Marketing Communications
Find out how UC Berkeley Extension’s Certificate Program in Marketing and the professional sequences in Marketing Metrics and in Integrated Marketing Communications equip you with a solid understanding of marketing’s most up-to-date concepts and techniques. For more information about the Certificate Program in Marketing, see p. 81 or visit extension.berkeley.edu/cert/marketing.html. For more information about the Professional Sequence in Integrated Marketing Communications, see p. 82 or visit extension.berkeley.edu/spos/imc.html. For more information about the Professional Sequence in Marketing Metrics, see p. 83 or visit extension.berkeley.edu/spos/metrics.html.

EDP 303453
1 meeting
Monday, 6:45–7:45 pm
May 7
San Francisco: Downtown Center • FREE

Introduction to Marketing
X460.1 • 2 semester units in Business Administration
A requirement in the certificate programs in Marketing and in Business Administration; an elective in the Certificate Program in Leadership and Management and in the Specialized Program in Professional Writing.
Learn key information regarding marketing concepts, terminology and practices that can increase your organization’s profitability. You study consumer, industrial and service marketing; market selection; product planning; pricing and distribution; and the integration of marketing with other business activities.

Sec. 1 EDP 303834
Jim Prost, M.B.A., two-time Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Jan. 10–March 13
San Francisco: Downtown Center • $715

Sec. 2 EDP 303685
William Hess, M.A., Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
Belmont: Belmont Center • $715

Sec. 3 EDP 303693
Warren L. Brown, M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
Berkeley Campus: 104 Barrows Hall • $715

Sec. 4 EDP 843318
Woody Alexander, M.B.A.
Jan. 17–April 10
Online • $735

Marketing Research: Concepts and Techniques
X460.6 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing and in the Professional Sequence in Marketing Metrics.
Learn to conduct focus groups and surveys on the Internet and offline, design questionnaires, interpret data and present findings. Expect to place special emphasis on using market research to develop new products and improve service, as well as on how to target the most profitable customers.

Sec. 1 EDP 303461
Scott Worthge, B.S.
10 meetings
Thursday, 6–9 pm
March 22–May 24
San Francisco: Downtown Center • $715

Sec. 2 EDP 843326
Nicki Shovar, Ph.D.
Jan. 17–April 10
Online • $725

FREE PUBLIC LECTURE
The Millennial and the Emerging Changes in Consumer Behavior
Understand the changes to buying behavior as Generation Y—those born between 1978 and 2000—become the nation’s tastemakers. In this lively talk, Kit Yarrow, chair of the Department of Psychology at Golden Gate University, explains how this latest generation thinks differently about consumption and how businesses can best tailor their campaigns and products to serve this growing market. Spend an evening with an expert consumer psychologist as she details the tips and tactics that can help you understand and adapt to the ideas and motivations of Gen Y.

Kit Yarrow, Ph.D., chair of the Department of Psychology at Golden Gate University, is a consumer psychologist and the co-author of Gen BuY: How Tweens, Teens and Twenty-Somethings Are Revolutionizing Retail (Jossey-Bass, 2009).

EDP 323709
1 meeting
Monday, 6–8 pm
Jan. 30
San Francisco: Downtown Center • FREE
Strategic Marketing Planning

**X415** • 2 semester units in Business Administration

*A requirement in the Certificate Program in Marketing*

Learn to market new and existing products and services for growth and increased profitability. Also study how to use the latest and most sophisticated marketing strategies to create a sustainable competitive advantage. Topics include strategy formulation, linking strategy and tactics, brand positioning, relationship marketing, ways to thrive in competitive markets and how to avoid commoditization.

**Sec. 1 EDP 303842**
Jim Prost, M.B.A., two-time Extension Honored Instructor

10 meetings
Thursdays, 6–9 pm
March 22–May 24
San Francisco: Downtown Center • $715

**Sec. 2 EDP 843219**
Suzanne Powers, M.B.A.

Jan. 17–April 10

Online • $735

Strategic Marketing Planning

**X411.3** • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Learn how to develop and write a comprehensive marketing plan. Examine how marketing plans change with the life cycle or market conditions of a product or service. You develop a model marketing plan that includes an analysis of competition, pricing, promotion, distribution and the value proposition. Prepare to place special emphasis on adopting and maintaining a customer orientation when creating marketing plans.

**Sec. 1 EDP 303644**
Carin Capolongo, M.F.A., M.B.A.

10 meetings
Tuesdays, 6–9 pm
March 20–May 22
San Francisco: Downtown Center • $715

**Sec. 2 EDP 897454**
Woody Alexander, M.B.A.

Jan. 17–April 10

Online, proctored final exam • $715

Strategic Brand Management

**X459.2** • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Learn to identify strategies and tactics in brand management, including brand concepts, brand equity and mapping and differentiation. You also develop an understanding of brand design; packaging; naming; profit and loss statements; and product strategies, including legal and global issues.

**EDP 303628**
Scott Worthge, B.S.

10 meetings
Mondays, 6–9 pm
Jan. 9–March 26 (no meetings Jan. 16 and Feb. 20)
San Francisco: Downtown Center • $715

New Product Development

**X405.8** • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Learn what it takes to develop a successful new product, using the same book and many of the same techniques used in similar courses taught at Stanford and MIT. You study a variety of topics from a do-it-yourself (DIY) perspective so that you learn how to apply concepts such as customer need identification, concept generation and selection, product design, patents and market introduction to real-world situations. The instructor uses readings, case studies, videos, and venture capital and intellectual property guest speakers to create a vibrant learning experience.

**EDP 303446**
Stephan Sorger, M.S., M.B.A.

4 meetings
Saturdays, 8:30 am–5 pm
April 7–28
San Francisco: Downtown Center • $715

Copywriting Seminar: Putting Your Words to Work

**X416.2** • 1 semester unit in Business Administration

An elective in the Certificate Program in Marketing

Study copywriting basics, and begin to create a professional writing portfolio. Combine your writing skills, creativity, interest in advertising and love of brands and trends into a new career. Learn how to create punchy, inspired copy for both traditional and nontraditional media, and practice conceptual thinking.

**EDP 303172**
Carin Capolongo, M.F.A., M.B.A.

5 meetings
Mondays, 6–9 pm
April 2–30
San Francisco: Downtown Center • $495

Special Events Project Planning

**X415.3** • 1 semester unit in Business Administration

Learn how to produce special events of varying sizes for either public relations or fundraising outcomes. Understand how strategically planned special events can gain favorable media attention; convey a specific message or secure recognition; and significantly contribute to the image and reputation of a company, organization, product or program. Master basic event-planning tools and concepts critical to successful event coordination. Topics include strategic event design; evaluation methods; fundraising strategies; site selection and inspection; and promotional websites, printed materials and social media.

**EDP 323238**
Helena Weiss-Duman, M.A., PMP

2 meetings
Fridays, 9 am–5 pm
April 20 and 27
San Francisco: Downtown Center • $450

Introduction to High-Tech Product Management and Marketing

**X448** • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Gain the knowledge necessary to become a successful product manager or product marketing manager. Learn practical tools and solutions for product management—launch, marketing, positioning and life cycle—and for brand management. Additional topics include analyst and public relations, customer relationship management (CRM) and lead-generation programs. You also learn how to conduct competitive analyses and write marketing requirements documents.

**EDP 303313**
Fabio Santini, M.B.A., and Mark Gaydos, M.B.A.

10 meetings
Wednesdays, 6–9 pm
March 14–May 16
San Francisco: Downtown Center • $715
Certificate Program in Marketing

With the Certificate Program in Marketing from UC Berkeley Extension, you gain crucial skills and a credential to advance your career. You’re ready to contribute more to your organization or take on a new professional role. You’re also equipped with in-depth knowledge of the latest marketing concepts and techniques in less time and at less cost than a master’s degree requires. Get an overview with courses on marketing research and planning, strategic marketing and emerging trends in social media and other innovative technologies. Learn from some of the best in the business—leading professionals with the marketing acumen and teaching experience to provide both a theoretical foundation and practical training.

Curriculum Requirements
The curriculum consists of 4 required courses and 2 electives for a total of 12 semester units (180 hours of instruction).

Required Courses
- Introduction to Marketing X460.1 (offered this term)
- Marketing Research: Concepts and Techniques X460.6 (offered this term)
- Strategic Marketing X415 (offered this term)
- Strategic Marketing 2.0—Social Media and Other Innovative Technologies X464.5 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/market.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/market.html
(510) 642-4231
business@unex.berkeley.edu
Register using EDP 152033
Integrated Marketing Communications

Integrated Marketing Communications

X466.1 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Integrated Marketing Communications; an elective in the Certificate Program in Marketing

Successful marketers maximize their sales opportunities by using integrated marketing communications (IMC), which include advertising, personal selling, promotion, direct marketing, public relations, customer relationship management (CRM) and electronic media. In this course, you prepare an integrated marketing communications plan.

Prerequisites: Introduction to Advertising X401.7 or consent of instructor

EDP 313080
Rodrigo Espinosa, M.S.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
Berkeley Campus: 136 Barrows Hall • $715

Introduction to Advertising

X401.7 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Integrated Marketing Communications; an elective in the Certificate Program in Marketing

Learn the role of advertising in marketing plans. You also study different types of advertising and media selection; buyer behavior; ad creation; media planning; ways to measure effectiveness; and relations among the client, the agency and people in the media.

Sec. 1 EDP 323451
Instructor to be announced
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
Berkeley Campus: 80 Barrows Hall • $715

Sec. 2 EDP 897447
Deborah Medsker, B.A.
Enroll anytime
Online, proctored final exam • $715

Introduction to Direct Marketing

X463.5 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Integrated Marketing Communications; an elective in the Certificate Program in Marketing

Today’s competitive environment rewards marketers who can prove profitability and return on investment (ROI). Learn strategies and tactics in planning, designing and executing successful direct-marketing programs using a variety of online and offline media, including the Web, lead-generation programs, direct mail, catalogs, telemarketing and broadcast. Apply this knowledge to professional, financial, business-to-business, technology, consumer and nonprofit services.

EDP 303214
Gwen Kaplan, B.A.
10 meetings
Thursdays, 6–9 pm
Jan. 12–March 15
San Francisco: Downtown Center • $715

Introduction to Public Relations

X466 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Integrated Marketing Communications; an elective in the Certificate Program in Marketing

Learn public relations strategies that you can implement quickly and inexpensively, including how to create public relations materials such as positioning statements and press releases. You also get hands-on experience solving problems, identifying solutions and understanding reporters’ interviewing styles. With the public relations strategies you learn in this course, you can help your company or organization sell products to the general public and improve its corporate image.

Sec. 1 EDP 303578
Rodrigo Espinosa, M.S.
10 meetings
Tuesdays, 6–9 pm
Feb. 28–May 1
San Francisco: Downtown Center • $715

Sec. 2 EDP 897462
Larry Flegle, D.B.A., M.A., CSE, CEC, MAPPA, MPM, CIPM
Enroll anytime
Online, proctored final exam • $715
Email and Online Marketing

0.8 ceu

A requirement in the Professional Series in Strategic Online Marketing

Power up your email marketing to maximize business profits. This class presents winning marketing strategies for acquiring and retaining valuable customers in a world of legislative restrictions and spam blockers. Topics include 90 percent deliverability; offer types and contact strategies; response rates and personalization preferences; creative tips for balancing text and graphics; and compliance with the Federal CAN-SPAM Act, the California Online Privacy Act and the Child Online Privacy Act.

EDP 303222
Laurie Beasley, B.S.

1 meeting Saturday, 8:30 am–5 pm May 5
San Francisco: Downtown Center • $425

HANDS-ON Advanced Email and Online Marketing

0.8 ceu

A requirement in the Professional Series in Strategic Online Marketing

Increase your email campaign click-through and conversion rates using strategies and techniques you learn in this course. Optimize your email design for devices such as smartphones and PDAs and for settings such as preview panes and blocked images. In addition to how email broadcast engines work, you learn advanced techniques you can use to interface email response data with your customer relationship management (CRM) system. See how to set up triggered email campaigns for lead nurturing. Also learn how segmentation, dynamic content and personalized email and landing pages can help increase conversion on your campaigns by 50 to 150 percent.

EDP 303131
David Beasley, B.S.

1 meeting
Saturday, 8:30 am–5 pm
May 19
San Francisco: Downtown Center • $425

Online Marketing Techniques and Analytics

Marketing Analytics

X466.8 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Marketing Metrics; an elective in the Certificate Program in Marketing

Learn how to predict and measure the effectiveness of your marketing efforts. Acquire hands-on experience with spreadsheet-based models, marketing metrics and social-media measurement tools. Business case studies cover analytics in product positioning, advertising budgeting, forecasting and other areas. In a world where marketers are held accountable for results, the mastery of marketing analytics is an indispensable competitive advantage. Note: Please bring a laptop with Microsoft Excel to the first day of class.

Prerequisites: Introduction to Marketing X460.1 or equivalent, proficiency with Excel spreadsheets

EDP 303438
Stephan Sorger, M.S., M.B.A.

4 meetings
Saturdays, 8:30 am–5 pm
March 3–24
San Francisco: Downtown Center • $715

Strategies and Technology for Online Multimedia Ad Campaigns

X464.4 • 1 semester unit in Business Administration

A requirement in the Professional Sequence in Marketing Metrics and in the Professional Series in Strategic Online Marketing; an elective in the Certificate Program in Marketing

Even if you are not involved in e-commerce, learning to use the Internet as an advertising channel can help attract new customers and retain current customers who are moving online. This course, intended for small business owners and Internet professionals, shows you how businesses of all sizes can now target customers with exceptional precision and measure the return on their advertising dollars. Note: as part of the course project, you must spend $50 to set up an account to run an online ad campaign.

EDP 303610
Nadir Hussain, M.S., M.B.A.

4 meetings
Saturdays, 9 am–1 pm
April 28–May 19
San Francisco: Downtown Center • $595

Professional Sequence in Marketing Metrics

Begin to measure the effectiveness of your marketing campaigns using the latest approaches and best practices to analyze and use metrics. The Professional Sequence in Marketing Metrics helps you increase your marketing success through analytics, market research, pricing strategies and tactics, and online technology. Learn how to apply marketing metrics to a wide range of real-world advertising techniques, as well as how those quantitative measurements affect your company’s profitability. Validate your success and enhance your career now with the skills and information you gain from this four-course integrated curriculum.

Prerequisite
Introduction to Marketing X460.1 or equivalent

Curriculum Requirements
The curriculum consists of 4 required courses for a total of 7 semester units (105 hours of instruction).

Required Courses
• Marketing Analytics X466.8 (offered this term)
• Marketing Research: Concepts and Techniques X460.6 (offered this term)
• Pricing: Strategies and Tactics X483.6
• Strategies and Technology for Online Multimedia Ad Campaigns X464.4 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/spos/metrics.html
business@unext.berkeley.edu

Register using EDP 302919

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
### Professional Series in Strategic Online Marketing

The Professional Series in Strategic Online Marketing trains you to become a practicing professional consultant in strategic online marketing. It also teaches online marketing musts and strategic applications such as search engine marketing and optimization, email marketing, online advertising, social media marketing, Web 2.0, the customer engagement cycle, customer relationship management (CRM), lead nurturing and return on investment (ROI). Expand your target audience, and attract, serve and sell prospective customers. Learn recession-proof best practices to generate marketing buzz and increase sales for products or services.

#### Curriculum Requirements

The curriculum consists of 3 required workshops and 1 required course for a total of 1 semester unit and 2.4 ceu (39 hours of instruction).

#### Required Courses and Workshops

- Email and Online Marketing (offered this term)
- Advanced Email and Online Marketing (offered this term)
- Search Engine Marketing (offered this term)
- Strategies and Technology for Online Multimedia Ad Campaigns X464.4 (offered this term)

#### Learn More

extension.berkeley.edu/spos/som.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 312033

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### Search Engine Marketing

**0.8 ceu**

A requirement in the Professional Series in Strategic Online Marketing

With more than 90 percent of Internet users finding products, services and information through search engines, search engine marketing (SEM) remains a critical medium to create brand awareness and gain new customers. Learn SEM techniques and tools so that you can effectively incorporate SEM into your marketing efforts and enhance your career prospects.

**EDP 303602**

Nadir Hussain, M.S., M.B.A.

1 meeting

Saturday, 9 am–5:30 pm

Feb. 25

San Francisco: Downtown Center • $395

### Strategic Marketing 2.0—Social Media and Other Innovative Technologies

**X464.5** • 2 semester units in Business Administration

A requirement in the Certificate Program in Marketing

Master the next generation of strategic marketing planning and tactics made possible by the latest media channels and technologies. Learn how to establish realistic business and performance goals and systematically evaluate new technologies, as well as evaluate in-market results against specific return-on-investment metrics. You also gain the ability to strategically plan and cost-efficiently execute new-channel programs in tandem with more conventional marketing approaches.

**Sec. 1 EDP 303651**

Peter Young, M.A.

10 meetings

Wednesdays, 6–9 pm

Jan. 11–March 14

San Francisco: Downtown Center • $715

**Sec. 2 EDP 843334**

Susan Gaide, M.B.A.

Jan. 17–April 10

Online • $725

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### Viral Growth Techniques for Marketing, Sales and Business Development

**X499.8** • 2 semester units in Business Administration

Viral marketing can be one of the most explosive, sustainable, scalable, organic and inexpensive forms for growing your customer base. Some of the fastest-growing businesses successfully deploy viral strategies. Learn as many as 100 specific viral-growth techniques, tools and channels, and gain expertise in how to use and apply them in real business scenarios and situations.

**EDP 303792**

Igor Shoifot, M.B.A., Ph.D.

10 meetings

Wednesdays, 6–9 pm

Jan. 4–March 7

San Francisco: Downtown Center • $715

### Consumer Buying Behavior in an Age of Social-Media-Driven Relationships

**X461.7** • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Successful firms use consumer attitudes and behaviors to segment markets and design marketing strategies. Today, however, consumer trust of corporations is declining while the influence of online communities on buyer behavior is growing. Learn about and examine buyer behavior, and gain a better understanding to leverage the role that new media (online communities, Facebook, Twitter, LinkedIn, YouTube and mobile applications) have on how buyers glean information, connect with one another and interact with brands they trust.

**EDP 303180**

Kathy Klotz-Guest, M.A., M.B.A.

10 meetings

Wednesdays, 6–9 pm

March 21–May 23

San Francisco: Downtown Center • $715

### Social Media Marketing

**0.8 ceu**

Learn to use social media as a low-cost marketing tool, and develop competitive strategies to make your business or product stand out from the crowd. Whether it’s a blog, Facebook, LinkedIn or Twitter, social platforms are driving purchasing decisions in both the online and offline worlds. Enroll in this exciting workshop, and learn how to create a powerful voice in this “influence economy,” where anyone with an opinion can effect great change.

**EDP 303636**

Peter Young, M.A.

1 meeting

Tuesday, 9 am–5:30 pm

Feb. 14

San Francisco: Downtown Center • $350
Introduction to Sales Management I
X479.2 • 2 semester units in Business Administration
(formerly Introduction to Sales Management)
A requirement in the Professional Sequence in Sales Management; an elective in the Certificate Program in Leadership and Management

Use the skills and strategies you study in this class to become a more marketable executive. Learn how to better estimate sales potential and efficiently gauge your sales staff requirements. Understand how a sales manager communicates with other departments—such as human resources, finance, and engineering—to more effectively represent a company’s products. Through case method, textbooks, quizzes, lectures and in-class discussions, you develop skills that can enhance your sales-management career prospects.

EDP 323162
Vince Canobbio, M.B.A.
10 meetings
Mondays, 6:30–9:30 pm
March 19–May 21
San Francisco: Downtown Center • $715

Budgeting and Planning for Nonfinancial Managers
X415.6 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Sales Management

Get an introduction to concepts of accounting practices, financial statement management and analysis, and costing methods and budgeting techniques. Nonfinancial managers can gain proficiency in the use of accounting information and business planning to further develop their managerial toolkit. You study accounting techniques such as financial statement analysis, cost analysis, and budget control. You also study techniques for making shrewd investment decisions, including issues such as return on investment and risk vs. return.

EDP 323675
Instructor to be announced
5 meetings
Saturdays, 9 am–4 pm
April 7–May 5
San Francisco: Downtown Center • $730

NEW INFORMATION SESSION
Professional Sequence in Sales Management
Meet UC Berkeley Extension instructors and staff members, and find out how this program can help advance your sales management career. An opening presentation is followed by a Q&A session. For Professional Sequence in Sales Management details, see this page or visit extension.berkeley.edu/spos/salesmanagement.html.

EDP 323840
1 meeting
Monday, 6–7 pm
Feb. 6
San Francisco: Downtown Center • FREE

EDP 323857
1 meeting
Thursday, 6–7 pm
Feb. 9
Belmont: Belmont Center • FREE

EDP 323469
1 meeting
Tuesday, 5:30–6:30 pm
May 1
San Francisco: Downtown Center • FREE

EDP 323162
Vince Canobbio, M.B.A.
10 meetings
Mondays, 6:30–9:30 pm
March 19–May 21
San Francisco: Downtown Center • $715

Budgeting and Planning for Nonfinancial Managers
X415.6 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Sales Management

Get an introduction to concepts of accounting practices, financial statement management and analysis, and costing methods and budgeting techniques. Nonfinancial managers can gain proficiency in the use of accounting information and business planning to further develop their managerial toolkit. You study accounting techniques such as financial statement analysis, cost analysis, and budget control. You also study techniques for making shrewd investment decisions, including issues such as return on investment and risk vs. return.

EDP 323675
Instructor to be announced
5 meetings
Saturdays, 9 am–4 pm
April 7–May 5
San Francisco: Downtown Center • $730

Learn More
extension.berkeley.edu/spos/salesmanagement.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 312166
Personal Financial Planning and Wealth Management

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/subject/financialplanning.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

FREE INFORMATION SESSION
Professional Sequences in Personal Financial Planning and in Wealth Management

Meet UC Berkeley Extension instructors and staff members, and find out more about the curriculum and direction of these programs. An opening presentation is followed by a Q&A session. To reserve your space, please call (510) 642-4111. For Professional Sequence in Personal Financial Planning details, see this page or visit extension.berkeley.edu/spos/pfp.html. For Professional Sequence in Wealth Management details, see p. 88 or visit extension.berkeley.edu/spos/wealth.html.

EDP 311654
1 meeting
Thursday, 6:30–7:30 pm
Dec. 8
San Francisco: Downtown Center • FREE

EDP 323097
1 meeting
Tuesday, 6:30–7:30 pm
April 17
San Francisco: Downtown Center • FREE

Survey of Personal Financial Planning
X433  • 2 semester units in Business Administration
2 CE units for life agents—LX

A requirement in the Professional Sequence in Personal Financial Planning

Learn to prepare a comprehensive financial plan for an individual client. Master the technical skills required in areas such as income tax, investments, insurance, employment benefits, estate planning and mathematical analysis. Learn how to provide comprehensive service and create an optimum client-practitioner relationship. Individuals who wish to learn about financial planning fundamentals for themselves can also benefit from this course, though it is geared toward those who are pursuing professional certification.

If you don’t have experience using financial calculators, we recommend that you take Basic Financial Mathematics and Financial Calculators before enrolling in this course.

Sec. 1 EDP 323170
Catherine Bradford, M.S., CFP, ChFC
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–March 15
San Francisco: Downtown Center • $750

Sec. 2 EDP 397116
Christina Woo, M.B.A.
Enroll anytime
Online, proctored final exam • $730

Income Taxes and Personal Financial Planning

X433.1  • 2 semester units in Business Administration
2 CE units for life agents—LX


Focus on the interrelation of income tax rules and regulations and on financial planning techniques applicable to individuals, partnerships and corporations. Topics include income, deductions, rates and credits; sales and exchanges; real estate; tax shelters; corporations and planning vis-à-vis the individual shareholders and employees; partnerships and subchapter "S" corporations; retirement plans; and overall coordination of various planning techniques. Practical problems are analyzed in light of current and proposed tax laws. Enrollment is limited.

EDP 313999
Frank Pare, M.B.A., B.A., CFP
10 meetings
Tuesdays, 6:30–9:30 pm
March 27–May 29
San Francisco: Downtown Center • $750

CFP® and CERTIFIED FINANCIAL PLANNER™ are federally registered marks of the Certified Financial Planner Board of Standards. CFP® certification is granted only by the Certified Financial Planner Board of Standards to those persons who, in addition to completing an educational requirement such as UC Berkeley Extension’s registered program, have met its ethics, experience and examination requirements.
Investments in Personal Financial Planning: General Principles and Methods
X433.3 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Personal Financial Planning; an elective in the Certificate Program in Finance
Study subjects basic to understanding securities markets and applying investment theory to individual portfolio management. Review the organization and structure of securities markets and common sources of information about them. Learn to analyze stocks and bonds, focusing on pricing, quality, liquidity, risk and reward. Enrollment is limited.
EDP 323048
Kurt Carrasquilla, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–March 15
San Francisco: Downtown Center • $750

Insurance in Personal Financial Planning
X433.8 • 2 semester units in Business Administration
2 CE units for life agents—LX
A requirement in the Professional Sequence in Personal Financial Planning
Survey risk management in the areas of life and health insurance, annuities, and property and casualty and liability coverage. Learn how to determine insurance needs, evaluate various insurance plans and evaluate contract selection criteria from a cost-benefit standpoint. You pay particular attention to the practical aspects of insurance planning and the analysis of in-depth case studies. Enrollment is limited.
EDP 323014
Carolyn Collins, B.A., J.D.
10 meetings
Mondays, 6:30–9:30 pm
March 19–May 21
San Francisco: Downtown Center • $750

Employment Benefits and Personal Financial Planning
X433.6 • 2 semester units in Business Administration
2 CE units for life agents—LX
A requirement in the Professional Sequence in Personal Financial Planning
Examine retirement and other investment-oriented employment benefits available to business clients and their employees, planning opportunities for tax deferral and capital accumulation and the advantages and disadvantages of each alternative. Topics include stock options, capital accumulation devices, tax-favored corporate retirement plans and taxation of benefits. Enrollment is limited.
EDP 313742
Lynn Paringer, Ph.D., CFP
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–March 14
San Francisco: Downtown Center • $750

Estate Planning
X433.2 • 2 semester units in Business Administration
2 CE units for life agents—LX
A requirement in the Professional Sequence in Personal Financial Planning; an elective in the Professional Sequence in Wealth Management
Study the tax-oriented decisions and personal considerations that constitute an effective estate plan. Topics include the federal estate gift tax structure and application; basic documents in estate planning; gifts to reduce income and estate taxes; charitable giving; and specialized planning for the executive, the business entrepreneur and the wealthy. Enrollment is limited.
EDP 313759
Ralph Hochstein, J.D.
10 meetings
Wednesdays, 6–9 pm
March 28–May 30
San Francisco: Downtown Center • $750

Real Estate Investments for Financial Planners
X433.5 • 2 semester units in Business Administration
An elective in the Professional Sequence in Personal Financial Planning
Get the tools you need to make informed decisions about real estate investments. Topics include investment analysis methodology, using discounted cash-flow techniques and traditional analytical methods; and understanding the impact of financing and leverage on financial returns, valuation methods, acquisition, operation and disposition under current tax law, including the impact of exchanges and installment sales. Note: A financial calculator, preferably the HP 10b, is required. Enrollment is limited.
EDP 323147
Richard P. Arzaga, B.S., CCIM
10 meetings
Tuesdays, 6–9 pm
Jan. 17–March 20
San Francisco: Downtown Center • $750

Personal Financial Planning Practicum
X433.4 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Personal Financial Planning
Apply the substantive knowledge you gained in prior courses to prepare and present a complete financial plan in an environment of nonliability. Considerable role playing is involved, and you receive feedback on written work. Computer spreadsheet experience is strongly advised. Enrollment is limited.
Prerequisites: Successful completion of all six prior courses in the Professional Sequence in Personal Financial Planning
EDP 323105
George Noceti, M.B.A.
10 meetings
Tuesdays, 6–9 pm
March 27–May 29
San Francisco: Downtown Center • $750
Professional Sequence in
Wealth Management

Wealth management is an advanced area of financial planning incorporating financial engineering, philanthropy, tax issues and portfolio management. Educating the individuals who serve high-net-worth investors, the Professional Sequence in Wealth Management provides financial planners with the training to help wealthy investors navigate their particular challenges and opportunities. You also focus on developing critical relationship-building and client-retention skills. This specialized program of study employs materials and techniques that are consistent with modern principles and best practices, providing knowledge and skills that you can use immediately. It also offers the advantage of a curriculum that is overseen by an advisory board of business and education leaders and taught by working professionals with many years of practical business experience.

Curriculum Requirements
The curriculum consists of 5 required courses and 1 elective for a total of 12 semester units (180 hours of instruction).

Required Courses
- Understanding Wealth Management X414.3 (offered this term)
- Financial Engineering and Wealth Management X414.4 (offered this term)
- Counseling Skills for Financial Services Professionals X465
- Philanthropy as a Wealth Management Tool X414.5 (offered this term)
- Wealth Management Practicum X414.6 (capstone)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/wealth.html.

Learn More and View the Flyer extension.berkeley.edu/spos/wealth.html
(510) 642-4231 business@unex.berkeley.edu

Register using EDP 302828

Wealth Management

Philanthropy as a Wealth Management Tool

X414.5 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Wealth Management; an elective in the certificate programs in Business Administration and in Finance and in the Professional Sequence in Personal Financial Planning

Review charitable giving techniques, including charitable remainder trusts, charitable lead trusts, pooled income trusts, nontrust giving techniques, gift annuities, use of private foundations, use of donor-advised funds and supporting organizations, postmortem charitable planning and a number of significant related topics.

EDP 323121
Thomas Horton, J.D.
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
San Francisco: Downtown Center • $730

Financial Engineering and Wealth Management

X414.4 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Wealth Management

Learn financial engineering and risk-management techniques for managing equity, bond, financial derivatives and asset allocation. Topics include measurement of portfolio risk exposure and value at risk (VAR), modern portfolio theory, portfolio benchmarking and rebalancing, the importance of asset allocation and tax-efficient portfolio design, and risk and diversification.

EDP 313866
Peter H. Lou, M.B.A., CFA, Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Jan. 28–March 3 (no meeting Feb. 18)
San Francisco: Art and Design Center • $730

Understanding Wealth Management

X414.3 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Wealth Management; an elective in the Certificate Program in Finance and in the Professional Sequence in Personal Financial Planning

Review the development of the wealth management industry, including the evolution of the high-net-worth-investor segment. In addition to developing an understanding of specific wealth management needs, you explore alternative approaches to asset management, understand benchmarks for evaluating both portfolio and adviser performance, and recognize the tax and estate planning issues of an effective wealth management plan.

EDP 323204
Peter Eric Philipp, M.B.A., CFA
10 meetings
Thursdays, 6–9 pm
Jan. 12–March 15
San Francisco: Downtown Center • $730

Project Management

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/subject/project.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

FREE INFORMATION SESSION
Certificate Program in Project Management

Discover how you can excel in the expanding field of project management with a UC Berkeley Extension certificate that meets the high professional standards of the Project Management Institute. For information about the certificate, see p. 91 or visit extension.berkeley.edu/cert/project.html.

EDP 323246
1 meeting
Thursday, 6–7 pm
Jan. 5
San Francisco: Downtown Center • FREE

EDP 323766
1 meeting
Thursday, 6–7 pm
May 24
Berkeley: Golden Bear Center • FREE

Software Project Management

X433 • 2 semester units in Business Administration and EECS
30 pdu: PMI provider 1173

A core course in the Post-Baccalaureate Certificate Program in Information Systems and Management

Review software project management and discuss the latest approaches, methodologies, and standards of software development. You learn to evaluate initial development costs and schedules: defining testing and prototype activities, determining risk management approaches, and managing the full software life cycle from the proposal stage to the retirement stage. This course is intended for software managers and principal computer scientists.

Prerequisite: B.A. or B.S., or consent of the instructor

EDP 323329
Alka Jarvis, M.B.A.
5 meetings
Saturdays, 9 am–5 pm
March 31–April 28
Belmont: Belmont Center • $645
Project Management

X470  ●  2 semester units in Business Administration
30 pdu: PMI provider 1173


The online course is the recipient of the Outstanding Course Award from the University Continuing Education Association (UCEA).

Proper management plays a crucial role in executing and completing projects efficiently. Get a step-by-step introduction to the project management process, and review the differences between theory and practice. You’ll use the tools and knowledge you acquire to create your own project plan. This course is a prerequisite for all other Extension project management courses.

Sec. 1 EDP 843672
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 3–Feb. 28
Online  ●  $735

Sec. 2 EDP 843680
Edmond Matevosian, B.S., PE, PMP
Jan. 3–Feb. 28
Online  ●  $735

Sec. 3 EDP 313205
Joseph Mudd, B.S.
5 meetings
Saturdays, 9 am–4 pm
Jan. 7–Feb. 11 (no meeting Jan. 14)
Belmont: Belmont Center  ●  $695

Sec. 4 EDP 313213
Robert L. Judd III, M.S., PE, PMP
8 meetings
Mondays, 6:30–9:45 pm
Jan. 9–March 12 (no meetings Jan. 16 and Feb. 20)
San Francisco: Downtown Center  ●  $695

Sec. 5 EDP 313221
Ravikiran Kalluri, M.B.A., PMP
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–March 20
Belmont: Belmont Center  ●  $695

Sec. 6 EDP 843698
Mark Angel, B.S., M.B.A., PMP
Jan. 17–April 10
Online  ●  $735

Sec. 7 EDP 313329
Helena Weiss-Duman, M.A., PMP
5 meetings
Fridays, 9 am–4 pm
Jan. 27–Feb. 24
San Francisco: Downtown Center  ●  $695

Sec. 8 EDP 313395
Ali Aiyed, B.S., M.A., Ph.D., PMP
10 meetings
Thursdays, 6:30–9:30 pm
Feb. 9–April 12
Berkeley: Golden Bear Center  ●  $695

Sec. 9 EDP 313247
Sherman Luk, B.S., MCP, PMP, CBAP, CBIP
10 meetings
Tuesdays, 6:30–9:30 pm
Feb. 21–April 24
San Francisco: Downtown Center  ●  $695

Sec. 10 EDP 313270
Robert Hull, B.S., PE, PMP
5 meetings
Saturdays, 9 am–4 pm
Feb. 25–March 24
San Francisco: Downtown Center  ●  $695

Sec. 11 EDP 843706
Alex Brown, PMP, IPMA-C
March 1–April 26
Online  ●  $735

Sec. 12 EDP 843714
Mark Angel, B.S., M.B.A., PMP
March 1–April 26
Online  ●  $735

Sec. 13 EDP 313296
Lisa Bausell, B.S., M.B.A.
5 meetings
Sundays, 9 am–4 pm
March 18–April 22 (no meeting April 1)
Berkeley: Golden Bear Center  ●  $695

Sec. 14 EDP 313361
Elaine Law, B.S., PMP, CSM
5 meetings
Saturdays, 9 am–4 pm
April 21–May 19
San Francisco: Downtown Center  ●  $695

Sec. 15 EDP 313379
Cheryl Alley, M.A., CAPM
5 meetings
Saturdays, 9 am–4 pm
April 28–June 2 (no meeting May 26)
Berkeley: Golden Bear Center  ●  $695

Sec. 16 EDP 313387
Ahmet Taspinar, M.B.A., PMP
5 meetings
Fridays, 9 am–4 pm
May 4–June 1
Berkeley: Golden Bear Center  ●  $695

Project Procurement Management

X474.3  ●  2 semester units in Business Administration
30 pdu: PMI provider 1173


Procurement of products and services is an essential part of a project manager’s responsibilities. Learn the fundamentals of the procurement process, from developing procurement documents and specifications to evaluating vendor proposals, crafting appropriate contractual arrangements and overseeing successful execution of contracts. You also examine a variety of contractual arrangements and fee options.

Prerequisite: Project Management X470

Sec. 1 EDP 843813
Timothy Donahue-Bombosch, Ph.D.
Jan. 3–Feb. 28
Online  ●  $735

Sec. 2 EDP 843821
Timothy Donahue-Bombosch, Ph.D.
Jan. 17–April 10
Online  ●  $735

Sec. 3 EDP 313403
Evelyn Launius, M.B.A., PMP
5 meetings
Saturdays, 9 am–4 pm
Jan. 28–March 3 (no meeting Feb. 18)
Berkeley: Golden Bear Center  ●  $695

Sec. 4 EDP 843829
Catherine Pinkas, M.B.A., PMP
March 1–April 26
Online  ●  $735

Sec. 5 EDP 313478
William L. Teiser, M.Ch.E.
5 meetings
Saturdays, 9 am–4 pm
March 10–April 7
San Francisco: Downtown Center  ●  $695

Sec. 6 EDP 313486
Timothy Donahue-Bombosch, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
March 27–May 29
Belmont: Belmont Center  ●  $695
Quality Management
X470.9 • 2 semester units in Business Administration
30 pdu: PMI provider 1173
A requirement in the Certificate Program in Project Management
Get a comprehensive overview of quality management. Understand the philosophies and strategies of prominent quality authorities, and explore ways to implement a management improvement program effectively.
Prerequisite: Project Management X470

Sec. 1 EDP 843755
Murray R. Millet, M.B.A., M.S.
Jan. 3–Feb. 28
Online • $735

Sec. 2 EDP 843763
Mark Angel, B.S., M.B.A., PMP
Jan. 17–April 10
Online • $735

Sec. 3 EDP 313502
Sonja Koppensteiner, Ph.D., M.S., PMP
10 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–April 4
Belmont: Belmont Center • $695

Sec. 4 EDP 313544
Doug Hawley, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Feb. 9–April 12
San Francisco: Downtown Center • $695

Sec. 5 EDP 843771
Murray R. Millet, M.B.A., M.S.
March 1–April 26
Online • $735

Sec. 6 EDP 313528
Catherine Pinkas, M.B.A., PMP
5 meetings
Saturdays, 9 am–4 pm
March 10–April 7
San Francisco: Downtown Center • $695

Sec. 7 EDP 313526
Doug Hawley, M.B.A., Extension Honored Instructor
5 meetings
Fridays, 9 am–4 pm
April 20–May 18
Berkeley: Golden Bear Center • $695

Human Factors and Team Dynamics for Project Management
X469.2 • 3 semester units in Business Administration
45 pdu: PMI provider 1173
A requirement in the Certificate Program in Project Management and in the Professional Sequence in Project Human Resource Management
Learn the leadership and communication skills needed to promote and support quality management in your organization. Through team-based projects, you also learn how to master the most difficult aspects of quality management: creating, nurturing and sustaining an organizational climate based on best principles and practices. Discover how quality management ensures that concepts—such as teamwork, employee empowerment and continuous improvement—don’t degenerate into buzzwords that increase cynicism and decrease employees’ responsiveness to organizational goals.
Prerequisite: Project Management X470

Sec. 1 EDP 843722
Alex Brown, PMP, IPMA-C
Jan. 3–Feb. 28
Online • $830

Sec. 2 EDP 843730
Catherine McKnight, M.A.
Jan. 17–April 10
Online • $830

Sec. 3 EDP 313551
Zachary Wong, Ph.D., Extension Honored Instructor
6 meetings
Saturdays, 9 am–5:30 pm
Jan. 21–March 3 (no meeting Feb. 18)
Berkeley: Golden Bear Center • $775

Sec. 4 EDP 313569
Jim O’Donnell, M.B.A.
15 meetings
Thursdays, 6:30–9:30 pm
Feb. 23–May 31
San Francisco: Downtown Center • $775

Sec. 5 EDP 843748
Catherine McKnight, M.A.
March 1–April 26
Online • $830

Sec. 6 EDP 313577
Ali Aiyed, B.S., M.A., Ph.D., PMP
6 meetings
Saturdays, 8:30 am–5 pm
April 14–May 19
Belmont: Belmont Center • $775

Project Risk Management
X440.4 • 2 semester units in Business Administration
30 pdu: PMI provider 1173
A requirement in the Certificate Program in Project Management; an elective in the Certificate Program in Construction Management
Projects today are more time constrained, pose greater technical challenges and are less likely to have adequate resources than in the past. Specific techniques, however, can help you deal with project risk and recognize and manage potential problems. Learn practical methods for completing difficult projects, and explore how to apply these methods to your own projects.
Prerequisite: Project Management X470

Sec. 1 EDP 843631
Madeleine Bronstone, MLHR, PMP
Jan. 3–Feb. 28
Online • $735

Sec. 2 EDP 843649
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 17–April 10
Online • $735

Sec. 3 EDP 313585
Deann Smith, B.A., PMP, CKM
5 meetings
Saturdays, 9 am–4 pm
Jan. 21–Feb. 25 (no meeting Feb. 18)
Berkeley Campus: 104 Barrows Hall • $695

Sec. 4 EDP 843656
Madeleine Bronstone, MLHR, PMP
March 1–April 26
Online • $735

Sec. 5 EDP 313593
Lifong Liu, B.S., PMP
5 meetings
Fridays, 9 am–4 pm
March 2–April 6 (no meeting March 30)
San Francisco: Downtown Center • $695

Sec. 6 EDP 313601
Roger Warren, M.B.A., PMP
10 meetings
Mondays, 6:30–9:30 pm
March 19–May 21
Berkeley: Golden Bear Center • $695

Sec. 7 EDP 313619
Ravikiran Kalluri, M.B.A., PMP
10 meetings
Thursdays, 6:30–9:30 pm
March 29–May 31
Berkeley: Golden Bear Center • $695
Certificate Program in Project Management

The Certificate Program in Project Management gives you the skills you need to keep projects on task, on time and within budget. The highly interactive curriculum builds from theories of project management to real-world practices applicable to all industries and fields, including marketing, financial services, business administration, information technologies, international trade, health sciences, government, construction and more. You learn from highly qualified instructors with substantial project management experience. Moreover, all of our project management courses apply toward professional development units (PDUs) for the Project Management Institute (PMI).

Curriculum Requirements

The curriculum consists of 6 required courses for a total of 14 semester units (210 hours of instruction).

Required Courses

We recommend taking these courses in the following sequence:

- Project Management X470 (offered this term)
- Project Procurement Management X474.3 (offered this term)
- Quality Management X470.9 (offered this term)
- Human Factors and Team Dynamics for Project Management X469.2 (offered this term)
- Project Risk Management X440.4 (offered this term)
- Project Planning and Control X471.9 (offered this term)

Learn More and View the Brochure

extension.berkeley.edu/cert/project.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 152249

UC Berkeley Extension is recognized by the Project Management Institute Registered Education Provider Program and accepts and adheres to all of its policies, requirements and rules concerning the provision of professional education activities and materials.
For course and schedule information visit extension.berkeley.edu/catalog

Project Planning and Control
X471.9 • 3 semester units in Business Administration
45 pdu: PMI provider 1173

A requirement in the Certificate Program in Project Management

A successful project manager relies on an effective management plan that provides a baseline for monitoring progress, identifying variances and taking timely action to mitigate the impact of problems. Learn how to create an effective plan and implement it through completion and evaluation. You also explore the tools and techniques you learned in Project Management X470 in greater detail.

Prerequisite: Project Management X470

Sec. 1 EDP 843789
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 3–Feb. 28
Online • $820

Sec. 2 EDP 843797
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 17–April 10
Online • $820

Sec. 3 EDP 843805
Deann Smith, B.A., PMP, CKM
March 1–April 26
Online • $820

Sec. 4 EDP 313627
Joseph Mudd, B.S.
6 meetings
Saturdays, 8:30 am–5 pm
March 3–April 7
Belmont: Belmont Center • $775

Sec. 5 EDP 313635
Lifong Liu, B.A., PMP
6 meetings
Saturdays, 8:30 am–5 pm
April 14–May 19
Berkeley: Golden Bear Center • $775

Sec. 6 EDP 322113
Alan Tsuda, M.B.A.
6 meetings
Saturdays, 8:30 am–5 pm
April 28–June 9 (no meeting May 26)
San Francisco: Downtown Center • $775

Exam Preparation
Intensive PMP/CAPM Exam Preparation
X474.9 • 2 semester units in Business Administration
35 pdu: PMI provider 1173

This 35-hour course prepares you to take the Project Management Institute (PMI) Project Management Professional (PMP) or Certified Associate Project Manager (CAPM) examination. The course is taught in hybrid format, which combines online and classroom training. There are four classroom sessions and eight online sessions. Topics include management of integration, scope, time, cost, quality, human resources, communications, risk and procurement. The course also covers ethics and professional responsibility.

Prerequisite: Internet access

Sec. 1 EDP 313882
Cheryl Allen, M.S., PMP
4 meetings
Fridays, 9 am–4 pm
Feb. 10–March 23 (no meetings Feb. 17, March 2 and March 16)
Belmont: Belmont Center • $1,650

Sec. 2 EDP 313890
Cheryl Allen, M.S., PMP
4 meetings
Saturdays, 9 am–4 pm
April 7–May 19 (no meetings April 14, April 21 and May 5)
San Francisco: Downtown Center • $1,650

PMP/CAPM Exam Preparation
X459.3 • 3 semester units in Business Administration
45 pdu: PMI provider 1173

This 45-hour course prepares you for the Project Management Institute (PMI) Project Management Professional (PMP) and Certified Associate Project Manager (CAPM) examinations. In addition to in-depth coverage of PMI’s Project Management Body of Knowledge (PMBOK), you analyze sample exam questions, tips and tricks to help you pass each exam. Chat room interaction, teleconferences with the instructor, virtual desktop sharing (with audio) and threaded discussions allow you to experience the full multimedia of this course.

EDP 843664
Edmond Matevosian, B.S., PE, PMP
March 1–April 26
Online • $1,599

Advanced Project Management
Advanced Human Factors: Improving Personal Effectiveness and Influence
X496.6 • 2 semester units in Business Administration
30 pdu: PMI provider 1173

A requirement in the Professional Sequence in Project Human Resource Management

Human factors are the underlying elements of human behavior that motivate people and organizational performance. This advanced course strengthens your ability to lead, motivate, coach and influence others. It aims to help you gain more self-confidence and self-direction in your business career and to be more skillful in managing interpersonal conflicts and relationships. This course is applicable to a wide range of fields, such as project management, marketing, engineering, computer technology, manufacturing, architecture, construction, service, government and biotechnology.

Prerequisites: Project Management X470 and Human Factors and Team Dynamics for Project Management X469.2

EDP 313874
Zachary Wong, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
March 24–April 21
Berkeley: Golden Bear Center • $775

Project Economic Analysis
X408.6 • 1 semester unit in Business Administration
15 pdu: PMI provider 1173

Every project involves money. Every project requires an economic basis for approval. Being able to make the right business decisions and recommendations about money is critical to effective project management. The most valuable project managers are those who have a strong understanding of economic analysis and how to manage the economics of small and large projects. This practical, hands-on course is designed for nonfinancial professionals who want to gain a solid understanding of the key concepts and techniques of economic analysis in a concentrated, two-day format.

EDP 313916
Sherman Luk, B.S., MCP, PMP, CBAP, CBIP
2 meetings
Saturdays, 9 am–5 pm
May 12 and 19
San Francisco: Art and Design Center • $450
**Short Courses**

**Project Portfolio Management/Leadership**
Projects compete for organizational dollars, management attention and scarce human resources. The impact of projects on the organization is felt throughout the supplier-customer-consumer chain. An effective and efficient process by which projects are initiated, managed and implemented simply does not exist in most organizations. This session outlines a proven project portfolio management and leadership process designed to achieve a high degree of project success.

**EDP 323212**
Gopal Kapur, B.S.
1 meeting
Saturday, 9 am–4 pm
March 31
San Francisco: Downtown Center • $295

**Disruptive Leadership**
0.7 ceu
An elective in the Professional Program in Agile Management

Managers work in a world where expectations are off the charts, commitments are tenuous, priorities shift and responsibility is given with marginal authority. In this highly interactive course, learn proven disruptive leadership practices to keep your customers out of harm’s way, leverage personal strengths, stimulate creative solutions and inspire innovation. Learn how to apply out-of-the-box management techniques to solve performance problems, promote creativity, encourage innovative thinking in your team, improve communication and unleash your personal potential.

**EDP 323196**
Gopal Kapur, B.S.
1 meeting
Saturday, 9 am–5 pm
March 17
San Francisco: Downtown Center • $295

**Project Management Made Simple**
0.7 ceu

More organizations are recognizing that project management is a core competency of everyone in their organization. Get a simple framework for organizing and managing project-like work within your organization. Through interactive lectures and hands-on exercises and simulations, you gain the knowledge to improve your project management skills. You learn when to treat work as a project and how to define steps for managing a project. You also gain project communication skills and learn how to motivate others.

**EDP 323907**
Cheryl Allen, M.S., PMP
1 meeting
Friday, 9 am–5 pm
May 18
San Francisco: Downtown Center • $295

**Real Estate**

**ONLINE COURSE INFORMATION**
(510) 642-7343
tom.gee@unex.berkeley.edu
extension.berkeley.edu/online

**Principles of Real Estate**
X406.8 • 3 semester units in Business Administration

This course is required for those preparing to take California real estate licensing examinations and is also appropriate for those preparing to purchase homes or other properties. You learn the basic laws and principles of California real estate and how to apply those principles to current real estate opportunities in your own community. You also gain the understanding, background research and terminology necessary for specialized courses. California law is emphasized, but many aspects are applicable to real estate interests in other states.

**EDP 897033**
Tom Gee, B.S.
Enroll anytime
Online, proctored final exam • $770

**Professional Sequence in Project Human Resource Management**

If you’re especially interested in learning how to manage a project team effectively, the three-course Professional Sequence in Project Human Resource Management provides exactly what you need. It begins with an overview of project management and includes intermediate and advanced courses that strengthen your communication skills and your ability to lead, motivate, coach and influence others to complete projects successfully.

**Curriculum Requirements**
The curriculum consists of 3 required courses for a total of 7 semester units (105 hours of instruction).

**Required Courses**
- Project Management X470 (offered this term)
- Human Factors and Team Dynamics for Project Management X469.2 (offered this term)
- Advanced Human Factors: Improving Personal Effectiveness and Influence X496.6 (offered this term)

**Learn More and View the Flyer**
extension.berkeley.edu/spos/projecthrm.html
(510) 642-4231
business@unex.berkeley.edu
Register using EDP 302901

UC Berkeley Extension is recognized by the Project Management Institute Registered Educational Provider Program and accepts and adheres to all of its policies, requirements and rules concerning the provision of professional education activities and materials.
Databases may not seem like an exciting topic of study, but **James Botsford** recognizes the power and ubiquity of databases in the information age. A certified public accountant and experienced financial manager, with a bachelor’s degree in business from the University of Southern California, Botsford wants to enhance his skill set with UC Berkeley Extension’s Post-Baccalaureate Certificate in Information Systems and Management.

“Through Extension, I’ve come to an awareness of how databases permeate our society,” Botsford explains. “Databases are the underpinning of everything we do. They are extraordinary and powerful tools, and the Internet has jumped on that horse and ridden it.” By studying information technology, Botsford is positioned to use his new knowledge to inform his expertise in financial management.

However, Botsford’s interests are not limited to information management. Botsford is also interested in other areas of educational enrichment—for instance, fiction writing and blogging. Thanks to the Successful Blogging course, Botsford is now publishing his own blog about databases. “Extension is like a candy store of knowledge,” he says. “It’s so easy to get distracted by all the courses I want to take.”
From analyzing support for business processes to cloud computing platforms,
UC Berkeley Extension’s programs and courses in computer technology and information
management provide the innovative training you need to thrive in today’s dynamic markets.
UC Berkeley Extension gives you the latest approaches to the fastest-growing technology
segments: information business systems, business analysis, database management,
UNIX/Linux and computer-based image processing.

Increase your conceptual understanding of practical computational software methods used
for financial risk management. Learn the advanced language features of MATLAB and
SCILAB to solve on-the-job scientific and engineering problems. Or explore the growing
field of competitive analytics.

Whether you’re a systems manager, a software programmer or a business analyst,
UC Berkeley Extension offers the powerful tools you need for your professional career.
Business Process Management

**COURSE INFORMATION**
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business

**BPM I: Process Modeling and Analysis**
Study the key concepts and techniques found in the Business Process Management Common Body of Knowledge (BPM CBOK®) and learn to apply them to your own real-world situation.
For course schedule, see p. 61.

**BPM II: Business Process Measurement**
Process improvement is one of the most powerful strategies for enhancing business operations. Work on a process from your own work environment, with the goal of supporting a vital conversation among key decision makers.
For course schedule, see p. 61.

SAS, SPSS, Quantitative Analysis and Analytics

**COURSE INFORMATION**
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/it

**Business Intelligence and SAS Analytics**
For more information about the software requirements for SAS courses, please contact the department at (510) 642-4151.

**SAS Techniques for Risk Management**
X402 • 2 semester units in Statistics
A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software
Learn SAS to better understand and evaluate financial risk, database marketing statistics and customer relationship management (CRM) approaches. Gain familiarity with business intelligence applications from an analytical point of view, and study the role of statistical data mining in maximizing profit through customer behavior analysis, acquisition, cross-selling, customization, retention and win-back efforts. Learn how to implement computational methodologies, predictive models and other business-intelligence-based strategies to create practical risk-management solutions for real-world situations.
EDP 303974
Jianmin Liu, Ph.D.
10 meetings
Wednesdays, 6–9 pm
March 21–May 23
San Francisco: Downtown Center • $945

Learn More
extension.berkeley.edu/spos/sas.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 122119

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**Professional Sequence in Business Intelligence and SAS Analytics Software**

Improve your practical skill set in the mechanics of analysis using numerical methods with the Professional Sequence in Business Intelligence and SAS Analytics Software. Develop your ability to use this powerful software program to analyze and mine data. Then, generate comprehensive reports that are meaningful to senior managers—and can get you noticed within your organization. Instructors with extensive experience in statistical modeling and data mining ensure that you receive the proper knowledge to handle large data sets and a full range of SAS skills to manipulate that data quickly, with definitive statistical confidence levels.

**Curriculum Requirements**
The curriculum consists of 5 required courses for a total of 10 semester units (150 hours of instruction).

**Required Courses**
Choose 5 courses from this list:

- Introduction to the SAS System X405 (offered this term)
- Advanced Programming Using the SAS System X405.5
- Data Analysis Using the SAS System X446 (offered this term)
- Data Mining Using SAS/Enterprise Miner X405.6
- Database Marketing and Data-Driven Customer Relationship Management X481.9
- SAS Graphing and Output Delivery System (ODS) X405.7 (offered this term)
- SAS Techniques for Risk Management X402 (offered this term)
- Visual Data Discovery Using SAS Enterprise Code X403

**Learn More**
extension.berkeley.edu/spos/sas.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 122119
Introduction to the SAS System
X405 • 2 semester units in Statistics
A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software
The SAS system for information delivery is the international standard for data management, manipulation, storage, retrieval and analysis. Gain rigorous exposure to core SAS elements, and get ground up in the fundamentals of the SAS system programming language and procedures.
EDP 303958
Jianmin Liu, Ph.D.
10 meetings
Tuesdays, 6–9 pm
Jan. 17–March 20
San Francisco: Downtown Center • $945

SAS Graphing and Output Delivery System (ODS)
X405.7 • 2 semester units in Statistics
A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software
SAS/Graph is a SAS program module that allows you to translate complex data sets into easily understood and persuasive graphics. Learn about and compare real-world case studies, and see how SAS/Graph solves problems by providing virtually limitless options in displaying analytical results tailored to your audience’s needs and expectations.
EDP 303966
Jianmin Liu, Ph.D.
10 meetings
Tuesdays, 6–9 pm
March 27–May 29
San Francisco: Downtown Center • $945

Data Analysis Using the SAS System
X446 • 2 semester units in Statistics
A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software
Understand how to use the SAS programming language to analyze and interpret data more effectively. Learn how to identify statistical techniques and apply data analysis in real-life business scenarios.
EDP 303982
Jianmin Liu, Ph.D.
10 meetings
Wednesdays, 6–9 pm
Jan. 11–March 14
San Francisco: Downtown Center • $945

Database Management

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/it
ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Concepts of Relational Database Management Systems
X408 • 3 semester units in EECS-DCS
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management
Study techniques for creating and using database applications in depth. You learn requirements analysis and specification; logical database design; normalization; database implementation; recovery, concurrency, integrity and security concerns; and database usage. The course curriculum focuses mainly on the relational database model and SQL.
Prerequisite: A programming course in any language or equivalent experience
Sec. 1 EDP 843110
Andrew J. Oppel, B.A.
Jan. 17–April 10
Online • $799

Sec. 2 EDP 303719
Patrick McDermott, B.A., M.S.I.S.
6 meetings
Saturdays, 8:30 am–5 pm
March 3–April 7
Berkeley Campus; 104 Barrows Hall • $645

Professional Sequence in Database Management

The Professional Sequence in Database Management is designed to be more abstract or theoretical than tied to a specific database program. Although you give special consideration to cross-platform issues, expect to use specific database programs to complete examples and assignments. From designing a database and using SQL to interact with that database to developing a user interface (stand-alone, client-server, Web-based), prepare to take the entire database application into consideration.
Curriculum Requirements
The curriculum consists of 4 required courses and 1–2 electives for a total of 144 hours of instruction.
Required Courses
• Building Database Systems X478 (offered this term)
• Data Modeling and Database Design X402.5 (offered this term)
• Introduction to Relational Database Management Systems X409.1 (offered this term)
• Managing Database(s) Using SQL X401.9
Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/dbmgmt.html.
Learn More
extension.berkeley.edu/spos/dbmgmt.html
(510) 642-4151
course@unex.berkeley.edu
Register using EDP 302844

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Introduction to Relational Database Management Systems
X409.1 • 2 semester units in EECS-DCS

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management; a requirement in the Professional Sequence in Database Management; an elective in the Specialized Program in Professional Writing

Learn effective relational database design, and gain a general overview of relational database management systems. This class introduces you to the terminology and methods used to create and modify database management systems (DBMS). Emphasis is given to accessing large databases and developing methods for working with data on different DBMSs. The course concentrates on helping you gain confidence in using DBMS and understanding data structures. A previous programming course in any language or equivalent experience is recommended.

EDP 313031
Andrew J. Oppel, B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–March 20
San Francisco: Downtown Center • $795

Business Intelligence With SQL Server
X404.8 • 2 semester units in EECS

Business intelligence (BI) is revealed by combining operational information from various departments into a data mart and then providing insightful queries and reports to decision makers. BI has become an essential tool for strategic management, finance, customer service, marketing, sales and other business aspects. Learn to analyze and develop a BI system, including programming examples using Microsoft SQL Server. You learn to design insightful inquiries and reports as well as gain an understanding of BI applications, SQL data mart features and trends in the BI industry.

EDP 303909
Erick Ahrens, M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 12–March 15
San Francisco: Downtown Center • $625

Mining Business Intelligence With Machine Learning
X414.7 • 2 semester units in EECS

Learn advanced data-mining concepts for generating cost-effective business intelligence to support excellent decision making. Gain familiarity with machine learning tools, and quickly grasp the data-mining concepts and processes. Explore the two principal data-mining approaches—pattern discovery and predictive modeling—with practical examples to prepare you for working in real-world environments. Cover a variety of data preprocessing, classification, association, clustering and results validation.

EDP 303883
Lee-Hong Chang, M.S., Ph.D.
10 meetings
Thursdays, 6:30–9:30 pm
Feb. 16–April 19
Belmont: Belmont Center • $545

Data Modeling and Database Design
X402.5 • 2 semester units in EECS

A requirement in the Professional Sequence in Database Management; an elective in the Post-Baccalaureate Certificate in Information Systems and Management

Learn how to create data models from business requirements and to transform them into logical and physical database designs for both transactional (OLTP) and analytical (OLAP) databases, including data warehouses and data marts. This course introduces data-modeling concepts as well as the process for creating and managing them. In-class exercises enhance learning and prepare you to complete three design assignments outside of class. Learn to explain how data modeling and data mapping are used to represent expert business knowledge.

EDP 313049
Andrew J. Oppel, B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 27–May 29
San Francisco: Downtown Center • $595

Introduction to MySQL and PHP
X495.1 • 2 semester units in EECS

Find out why project managers, marketers and developers love the combination of PHP’s easy-to-learn server-side programming tools and MySQL’s blazing-fast speed for accessing and manipulating data. Discover why MySQL, the world’s most popular open-source database, is often used instead of Oracle, MSSQL or Microsoft Access for many in-house and Web-based projects. You also discover why PHP, with its C-like syntax, is a popular alternative to Java.

EDP 303891
Hans Yip, M.S.
8 meetings
Tuesdays, 6:15–10 pm
Feb. 14–April 3
Belmont: Belmont Center • $545
Microsoft Access

HANDS-ON
Designing, Building and Using Databases

X405.4 • 2 semester units in EECS

A requirement in the Microsoft Access Series; an elective in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Sequence in Database Management

This course introduces fundamental relational database management system (RDBMS) concepts and data normalization principles, providing a foundation for creating simple tables, queries, forms and reports. You learn to design basic databases using data normalization rules; create tables and set properties and constraints; create table relationships; design and create queries for viewing, sorting, filtering and analyzing data; design and create simple forms for data input and data output; use basic database functions in queries; and create charts in forms and reports. Note: Sign up for all three courses now (X405.4, X405.5 and X405.6) and get a $200 discount on your final course. For further information, visit www.ucb-access.org.

Prerequisite: You should be comfortable navigating in a Windows environment and performing file management tasks such as copying, moving and renaming. No database experience is necessary.

EDP 303735
Michael Kremer, Ph.D.
5 meetings
 Saturdays, 9 am–4 pm
Jan. 21–Feb. 25 (no meeting Feb. 18)
San Francisco: Downtown Center • $695

Microsoft Access Series

Microsoft Access is a scalable, powerful relational database management system that allows you to manage data sets from simple customer lists to more complex inventory and order tracking systems. The Microsoft Access Series offers a three-tiered approach to meet differing levels of experience. Each course provides hands-on instruction at the UC Berkeley Extension computer training facilities.

Curriculum Requirements
The curriculum consists of 3 required courses for a total of 6 semester units (90 hours of instruction).

Required Courses
• Designing, Building and Using Databases X405.4 (offered this term)
• Developing Database Applications X405.5 (offered this term)
• Database Automation Using VBA X405.6 (offered this term)

Learn More
extension.berkeley.edu/spos/access.html (510) 642-4151
course@unex.berkeley.edu

Register using EDP 312041
Professional Program in Formal Software Development

Formal software development, with its mathematical foundation, is the root of some of the most exciting projects in software today. Propel your career to new heights with UC Berkeley Extension’s highly specialized and rigorous Professional Program in Formal Software Development. Learn to judge the effectiveness of available formal tools, their trade-offs and their suitability for certain practical applications. Prepare to study a range of methodologies, beginning with type-checking systems, static program analysis, model checking and theorem proving. Industry leaders and pioneers leading the program ensure that you receive the most practical, applicable and cutting-edge instruction available.

Curriculum Requirements

The curriculum consists of 3 required courses and at least 2 electives for a total of 10 semester units (150 hours of instruction).

Required Courses

- SMT Solvers X408.6
- Interactive Provers X408.7
- Imperative Programs X408.8

Elective

For a list of electives available this term, visit extension.berkeley.edu/spos/software.html.

Learn More and View the Flyer

extension.berkeley.edu/spos/software.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 312141

HANDS-ON Developing Database Applications

X405.5 • 2 semester units in EECS

A requirement in the Microsoft Access Series; an elective in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Sequence in Database Management

This course covers data import and export, advanced table properties, advanced queries and basic SQL forms and reports, macros for automating database tasks and building menu-driven applications. Topics include data and object import and export features; sophisticated tables using customized formats, input masks and validation rules; advanced Select queries and SQL subqueries; forms and reports from scratch using all types of controls, including ActiveX; conditional formatting; macros for data validation and database automation; and menu-driven applications. **Note:** Sign up for all three courses now (X405.4, X405.5 and X405.6) and get a $200 discount on your final course. For further information, visit www.ucb-access.org.

**Prerequisite:** Designing, Building and Using Databases X405.4 or equivalent. Previous programming experience is helpful but not required.

**EDP 303743**

Michael Kremer, Ph.D.
5 meetings
Saturdays, 9 am–4 pm
March 10–April 14 (no meeting April 7)
San Francisco: Downtown Center • $695

HANDS-ON Database Automation Using VBA

X405.6 • 2 semester units in EECS

A requirement in the Microsoft Access Series; an elective in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Sequence in Database Management

This course introduces Visual Basic for Applications (VBA) syntax, the Visual Basic Editor programming interface, the event-driven programming model in Microsoft Access and data access technologies (DAO/ADO). Learn to navigate the VBA environment, create basic programming units and apply VBA programming elements such as variables and controlling executions. Implement dynamic coding using object models; use form, report and control events to link program units to your application; create error-handling routines; and use DAO/ADO to automate database tasks. **Note:** Sign up for all three courses now (X405.4, X405.5 and X405.6) and get a $200 discount on your final course. For further information, visit www.ucb-access.org.

**Prerequisite:** Developing Database Applications X405.5 or equivalent. Previous programming experience is helpful but not required.

**EDP 303750**

Michael Kremer, Ph.D.
5 meetings
Saturdays, 9 am–4 pm
April 21–May 19
San Francisco: Downtown Center • $695

Building Database Systems

X478 • 2 semester units in EECS

A requirement in the Professional Sequence in Database Management, an elective in the Post-Baccalaureate Certificate in Information Systems and Management

Get an overview of database applications, from simple desktop applications to Web applications. You pay special attention to designing forms and reports, along with additional class exercises, tests and projects to enhance your learning experience. Upon successful completion, you are able to design and develop effective database applications using simple development tools. You gain broad knowledge of the different types and their underlying technologies.

**Prerequisite:** Introduction to Relational Database Management Systems X409.1 or basic understanding of databases

**EDP 303727**

Michael Kremer, Ph.D.
10 meetings
Thursdays, 6–9 pm
Jan. 12–March 15
San Francisco: Downtown Center • $625
Information Systems and Management

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/it

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Information Technology Service Management
X427.2 • 2 semester units in EECS

Develop a solid understanding of the history, components and infrastructure of information technology (IT). Discuss the economics of service systems in the context of industry and the U.S. and world economies. Get demonstrations of fundamental IT service management skills, strategies and methodologies, as well as IBM service experience. As part of your skill building, you provide solutions to a wide range of service activity problems, including information technology, customer service, technical support and project and service management. Learn to develop IT service solutions in business process analysis, career development and organizational behavior. This course is ideal for IT product and project managers, IT service designers and engineers, service quality inspectors and those who are seeking service-related positions.

EDP 313197
Zong Ling, Ph.D.
5 meetings
Saturday, 9am–4pm
March 17 – May 12 (no meetings March 24, April 7, April 21 and May 5)
San Francisco: Downtown Center • $545

Introduction to Information Systems Analysis and Design
X422 • 3 semester units in EECS-DCS

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management

This is the first course in a series covering information analysis and logical specification of the system development process in an organizational context. It emphasizes the interactive nature of the analysis and design process.

Sec. 1 EDP 303768
Patrick McDermott, B.A., M.S.I.S.
6 meetings
Saturdays, 8:30am–5pm
Jan. 7–Feb. 25 (no meetings Jan. 14 and Feb. 18)
Berkeley Campus: 140 Barrows Hall • $675

Sec. 2 EDP 843128
Mark Angel, B.S., M.B.A., PMP
Jan. 17 – April 10
Online • $820

Business Analysis Essentials and Planning

Learn business analysis fundamentals as well as the planning and monitoring knowledge areas— the first of the seven generally accepted areas that define the profession’s framework.

For course schedule, see p. 58.

Advanced Business Systems Analysis
X423 • 3 semester units in EECS-DCS

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management

Learn the practical application of structured analysis and design techniques. You build on the information covered in Introduction to Information Systems Analysis and Design X422 by going through an entire system design cycle as a case study.

Prerequisite: Introduction to Information Systems Analysis and Design X422 or equivalent

EDP 843193
Todd Landreneau, Ph.D.
Jan. 17 – April 10
Online • $820

Concepts of Relational Database Management Systems

Study techniques for creating and using database applications.

For course schedule, see p. 97.

Software Project Management

Review software project management and discuss the latest approaches, methodologies, and standards of software development.

For course schedule, see p. 88.

Open Source and Operating Systems

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/it

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

UNIX/Linux System Administration

Using the UNIX Operating System
X415 • 3 semester units in EECS-DCS

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management

This comprehensive overview of the UNIX operating system introduces you to logging in, the visual editor, file management, text processing, email, the directory structure, UNIX handling of files and processes, basic shell utilities and writing shell scripts. (Using UNIX to write programs is not covered.) You learn a conceptual framework and a series of successful interactions with UNIX. Much of the course involves individualized, self-paced learning. Note: The course requires access to a UNIX system or a system capable of running the Linux operating system.

EDP 897264
James A. Connor, B.S., M.B.A.
Enroll anytime
Online, proctored final exam • $815

HANDS-ON UNIX/Linux System Fundamentals
X426.1A • 2 semester units in EECS-DCS

A requirement in the Certificate Program in UNIX/Linux System Administration and a Core Course in the Post-Baccalaureate Certificate in Information Systems and Management

Master fundamental skills of the UNIX operating system, including file editing, file management, command interpretation and electronic communication. You also learn how to create and use directories, access data on a local network and on the Internet, use online documentation, manage user processes, employ utilities, protect files and directories, use variables, program structures, access resources throughout the file system and write shell scripts. No previous UNIX experience is required.

EDP 313098
John Muster, Ph.D.
11 meetings
Wednesdays, 6:45–10pm
Jan. 11 – March 14 (also Thursday, March 15, 6:45–10pm)
Berkeley: Golden Bear Center • $895
**UNIX/Linux System Administration Capstone: Case Studies**

X462.3 • 2 semester units in EECS

A requirement in the Certificate Program in UNIX/Linux System Administration

This certificate-culminating course is designed to expose you to real-world scenarios that occur in the practice of system administration. Gain hands-on experience building a computer from components, installing and configuring an operating system, setting up a network connection and related services, properly securing a system, documenting system configuration, installing and configuring third-party applications (Apache, Perl, MySQL and PHP), troubleshooting problems and recovering from a disaster.

**Prerequisites:** All other courses in the UNIX/Linux System Administration certificate curriculum

**EDP 323287**

Marcelo Carvalho, M.A.

10 meetings

Thursdays, 6:30–9:30 pm

March 29–May 31

Berkeley: Golden Bear Center • $695

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**NEW THIS TERM**

**Building Your Private Cloud With Linux**

X422.7 • 2 semester units in EECS

Discover the practical side of cloud computing using the Linux operating system. In this course, you acquire hands-on experience to install, configure, test and troubleshoot cloud system platforms, as well as tools and techniques to manage and monitor these platforms. Start by examining and discussing cloud computing concepts such as infrastructure, platform and software as a service (SaaS). Next, build two different cloud computing systems available on the Linux operating system: the Xen Cloud Platform (XCP) and the Kernel-based Virtual Machine (KVM). Finally, implement several managing and monitoring cloud system tools to ensure you fully understand how to realize the potential of cloud computing using Linux.

**EDP 332253**

Marcelo Carvalho, M.A.

10 meetings

Wednesdays, 6:30–9:30 pm

Jan. 11–March 14

San Francisco: Downtown Center • $645

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**HANSD-ON**

**UNIX/Linux System Administration Programming: Shell, C and Perl**

X426.1B • 2 semester units in EECS-DCS

- A requirement in the Certificate Program in UNIX/Linux System Administration and a Core Course in the Post-Baccalaureate Certificate in Information Systems and Management

Master essential skills of the UNIX operating system, including manipulating data using grep, sed, awk, join and other power utilities; programming advanced applications using the shell; customizing user accounts; and performing fundamental system operations.

**Note:** This course offers lectures and demonstrations as well as online assignments. Internet access is required; a login and password will be issued to you by the second class meeting.

**Prerequisites:** See Web.

**EDP 313106**

John Muster, Ph.D.

11 meetings

Wednesdays, 6:45–10 pm

March 21–May 23 (also Thursday, March 22, 6:45–10 pm)

Berkeley: Golden Bear Center • $845

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**HANSD-ON**

**UNIX/Linux System Administration I: Essentials**

X422.8 • 2 semester units in EECS

- A requirement in the Certificate Program in UNIX/Linux System Administration

Cover the bases and mechanisms of UNIX system administration. Starting with the key concepts, system administration duties, system organization, system configuration and system startup, the course moves on to file-system architecture, device and system configuration and process management. Exercises covering these aspects of system administration are an integral part of the course. Although the course covers general system administration, prepare to discuss variation among operating systems.

**Prerequisites:** A general understanding of UNIX operating system externals and command interfaces; access to a UNIX or Linux system

**EDP 323261**

Marcelo Carvalho, M.A.

5 meetings

Saturdays, 9 am–4 pm

Jan. 28–March 3 (no meeting Feb. 18)

San Francisco: Downtown Center • $795

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**Hands-on**

**UNIX/Linux System Administration II: Networking**

X420.8 • 2 semester units in EECS

- A requirement in the Certificate Program in UNIX/Linux System Administration

This course follows UNIX/Linux System Administration I: Essentials X422.8. It introduces the TCP/IP Protocol suite and examines its different layers and protocols. Both theory and application are covered in depth. You experience hands-on UNIX/Linux network configuration and troubleshooting tools. Network programming concepts are introduced and reinforced through programming exercises. Finally, new and emerging standards, as well as wide-area networking concepts, are presented.

**Prerequisites:** UNIX/Linux System Fundamentals X426.1A; UNIX/Linux System Administration Programming: Shell, C and Perl X426.1B; and UNIX/Linux System Administration I X422.8

**EDP 323279**

Marcelo Carvalho, M.A.

10 meetings

Mondays, 6:30–9:30 pm

March 5–May 7

San Francisco: Downtown Center • $845

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**Hands-on**

**UNIX/Linux System Security**

X409.9 • 2 semester units in EECS

- A requirement in the Certificate Program in UNIX/Linux System Administration

This course provides an overview of computer security, with emphasis on UNIX, Linux and Mac OS X. Analyze local and network threats to security, and discuss guidelines for maintaining a good security posture. Use of encryption for securing communications and ensuring authenticity is a major topic. The trade-offs between security and access requirements are examined. Hands-on laboratory exercises explore standard UNIX commands and open source software for maintaining security. You also discuss Web-based threats and the use of firewalls to insulate a network from the Internet.

**Prerequisite:** UNIX/Linux System Administration I: Essentials X422.8 or equivalent experience

**EDP 303875**

Instructor to be announced

10 meetings

Wednesdays, 6:30–9:30 pm

March 21–May 23

San Francisco: Downtown Center • $645
Post-Baccalaureate Certificate in Information Systems and Management

Prepare yourself for a new career in the IT field by expanding your expertise and taking your skills to the next level. Our rigorous curriculum combines theory and practice to give you the balanced mix of skills and powerful tools you need to build a successful career in information management, systems analysis, computer programming or computer consulting. Upon successful completion of the Post-Baccalaureate Certificate in Information Systems and Management (ISM), you can define, manage and execute a systems approach to the business environment; write computer programs; and design database systems.

Curriculum Requirements
The curriculum consists of 4–8 required courses (depending on specific courses taken) for a total of 10 semester units (150 hours of instruction). At least 6 of the 10 semester units required must come from the Core Courses list.

Prerequisites
You must hold a bachelor’s degree and submit a transcript to register for this certificate.

Core Courses
You must take a minimum of 6 semester units from this list:

- Advanced Business Systems Analysis X423 (offered this term)
- Concepts of Relational Database Management Systems X408 (offered this term)
- Fundamentals of Data Communications and Networking X433 (offered this term)
- Introduction to Information Systems Analysis and Design X422 (offered this term)
- Introduction to Relational Database Management Systems X409.1 (offered this term)
- Managing the Software Development Life Cycle X458.4
- Software Project Management X433 (offered this term)
- Software Requirements Analysis X438.1
- UNIX/Linux System Administration Programming: Shell, C and Perl X426.1B (offered this term)
- UNIX/Linux System Fundamentals X426.1A (offered this term)
- Using the UNIX Operating System X415 (offered this term)

Electives
For a list of electives available this term, please visit extension.berkeley.edu/cert/ism.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/ism.html
(510) 642-4151
course@unex.berkeley.edu
Register using EDP 302894
Programmed Languages and Object-Oriented Programming

**COURSE INFORMATION**
(510) 642-4151
program@unex.berkeley.edu
extension.berkeley.edu/inf

**ONLINE COURSE INFORMATION**
(510) 642-4151
program@unex.berkeley.edu
extension.berkeley.edu/online

**Introduction to Perl Programming**
X416.7 • 1 semester unit in EECS
An elective in the Certificate Program in UNIX/Linux System Administration, in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Sequence in Database Management

Perl is widely used by UNIX and Windows programmers, system administrators, and Web and database programmers. It is an easy-to-learn, extremely powerful extensible language with add-on modules for almost every kind of task imaginable. Perhaps its most powerful feature is that Perl programs run on any operating system with few, if any, changes needed. Learn to write, debug and understand more complicated Perl programs.

**Prerequisites:** Familiarity with UNIX or Windows and experience with a programming language

Sec. 1 EDP 323295
Christine Bouamalay, M.S., Extension
Honored Instructor
5 meetings
Tuesdays, 6:30–9:30 pm
March 27–April 24
San Francisco: Downtown Center • $475

Sec. 2 EDP 877886
Carl Limsico, B.A.
Enroll anytime
Online • $595

**Python Programming**
X442.3 • 1 semester unit in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management

Python, an open-source scripting language that allows rapid application development of both large and small software systems, is object oriented by design and provides an excellent platform for learning the basics of language programming. Learn this language, ideal for team projects, that provides access to databases, CGI programming, system administration and other useful services.

Although no previous programming experience is required, you must have access to a computer running Python or access to the Internet to allow you to download Python.

EDP 877951
Carl Limsico, B.A.
Enroll anytime
Online, proctored final exam • $595

**PHP Programming for the Web**
X400 • 1 semester unit in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management

Learn the fundamentals of PHP: Hypertext Preprocessor, how PHP functions in the Web’s client-server relationship and how it relates to standard HTML. You gain an understanding of one of the most common uses for PHP: handling the data created by an HTML form. Other topics include writing PHP scripts, using PHP to manage data and creating Web applications with PHP. You also learn some of PHP’s more advanced features and security issues.

**Prerequisites:** You should have a hosted website with 10 MB of disk space, MySQL and PHP. In general, most Web hosts offer workable sites. Free PHP Web-hosting options are also available.

EDP 897405
Robert Adams Jr., M.S.C.S., M.S.E.
Enroll anytime
Online • $595
Certificate Program in UNIX/Linux System Administration

Professionals with knowledge of both the UNIX operating system and its open-source counterpart, Linux, are in demand. Get the specialized IT training employers seek with UC Berkeley Extension’s Certificate Program in UNIX/Linux System Administration. Learn how to be an effective administrator of these multitask operating systems, which are both powerful and elegant. Build on your experience in system administration, or discover how you can use the UNIX and Linux systems in your work as a programmer. Whatever role you have or aspire to in systems administration, this professional certificate provides the skills, knowledge and formal training you need to compete for the higher-level IT positions that increase your job security in today’s global economy.

Curriculum Requirements
The curriculum consists of 7 required courses and 1 elective for a total of 16 semester units (240 hours of instruction).

Required Courses
- UNIX/Linux System Administration I: Essentials X422.8 (offered this term)
- UNIX/Linux System Administration II: Networking X420.8 (offered this term)
- UNIX/Linux System Administration III: Services X444.2
- UNIX/Linux System Administration Programming: Shell, C and Perl X426.1B
- UNIX/Linux System Fundamentals X426.1A (offered this term)
- UNIX/Linux System Security X409.9 (offered this term)
- UNIX/Linux System Administration Capstone: Case Studies X462.3 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/linux.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/linux.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 302679
## Introduction to C Language Programming

**X24**  •  2 semester units in EECS

An elective in the Post-Baccalaureate Certificate in Information Systems and Management

Learn the C programming language and fundamental programming concepts. Gain the knowledge to write simple C language applications, and undertake courses that assume some background in computer programming. Topics include variables, data types, functions, control structures, pointers, strings, arrays and dynamic allocation principles. You need access to any programming environment that allows you to write, edit, compile, link and debug a C program.

Familiarity with fundamental programming language concepts such as variables, data types and compiling source code is helpful.

**EDP 867879**
Robert Adams Jr., M.S.C.S., M.S.E.E.
Enroll anytime
Online  •  $595

## C++ Programming I

**X412.1**  •  2 semester units in EECS

An elective in the Post-Baccalaureate Certificate in Information Systems and Management

C++ is a popular, widely used object-oriented programming (OOP) language. C++ provides all the tools for OOP, such as data abstraction, inheritance, polymorphism and generic programming. Get a solid introduction to all the major features of American National Standards Institute (ANSI) standard C++, including the newer syntactic and semantic constructs, by studying each concept through lucid, fluent functions. Access to a C++ compiler is required.

**EDP 877860**
Robert Adams Jr., M.S.C.S., M.S.E.E.
Enroll anytime
Online, proctored final exam  •  $715

## C# Programming I

**X444.3**  •  1 semester unit in EECS

An elective in the Post-Baccalaureate Certificate in Information Systems and Management

Get an introduction to C# development using Microsoft Visual Studio, with particular focus on C# syntax, logic constructs, application development, exception handling and the object-oriented nature of the language. You are also introduced to debugging C# applications, the Microsoft .NET Framework, aspects of the .NET object hierarchy and how to use C# in a .NET application environment.

**Prerequisites:** Understanding of C, C++, Java or Visual Basic and access to a computer running Windows NT/2000/XP/2003 and Visual Studio

**EDP 857482**
Laura Malave, M.S.
Enroll anytime
Online, proctored final exam  •  $595

## Developing Applications for the iPhone

**X422.9**  •  2 semester units in EECS

Applications for the Apple iPhone have made it one of the most popular—and lucrative—programming platforms. Learn the hardware and software features of the iPhone and iPod Touch and the tools used to create apps for them. Study tutorials, sample code and documentation. Modify and extend sample code to give you hands-on experience.

**EDP 313114**
David Rowland, M.S.
10 meetings
Thursdays, 6:30–9:30 pm
March 22–May 24
Berkeley: Golden Bear Center  •  $625

## Building Applications Using C# and .NET Framework

**X428.6**  •  2 semester units in EECS

Learn to develop information system applications using C#, Microsoft .NET Framework and Visual C# Express Edition (part of Microsoft Visual Studio). Study the essentials of the C# programming language. Use C# to master object-oriented concepts, including classes, events and inheritance. Design and develop simple forms and database applications. Complete fairly sophisticated applications using a wide range of form controls and data validation techniques.

**EDP 303917**
Michael Kremer, Ph.D.
10 meetings
Thursdays, 6–9 pm
March 22–May 24
San Francisco: Downtown Center  •  $695

## Java

### First Course in Java

**X429.9**  •  2 semester units in EECS

An elective in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Sequence in Database Management

Java—with its platform independence and support for animation, graphics and sound—is heavily used in interactive Web pages that work on Windows, Macintosh, UNIX and other platforms. Examine fundamental programming concepts and statements and basic object-oriented programming, and get an introduction to Java applets. Upon successful completion of the course, you are not only able to write simple Java applications and applets but also prepared to undertake advanced courses in Java.

You do not need any background in programming to succeed in this course.

**EDP 303776**
Thomas Albert, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–March 20
San Francisco: Downtown Center  •  $695
Java: Discovering Its Power
X436.2 • 2 semester units in EECS
An elective in the Certificate Program in UNIX/Linux System Administration and in the Post-Baccalaureate Certificate in Information Systems and Management
Java’s platform independence (write once, run anywhere) allows the same code to run on Windows, Macintosh, UNIX, mobile phones and supercomputers. Java is popular for enterprise applications that run on Web servers. This high-level language enhances productivity and reduces bugs through automatic memory management and strong typing. Learning Java is easier than learning C or C++. Using the free Java Development Kit (JDK 6 SE), you learn practical fundamentals of the Java programming language, as well as basic object-oriented programming, so that you can write simple applications and take intermediate courses in Java.

Prerequisites: First Course in Java, C++ Programming I or equivalent and some experience with object-oriented design and techniques. Familiarity with building graphical user interfaces is helpful.

Sec. 1 EDP 303784
Lalitha Krishnamurthy, M.S.
5 meetings
 Saturdays, 9 am–4 pm
March 10–April 7
San Francisco: Downtown Center • $695

Sec. 2 EDP 877910
Carl Limisco, B.A.
Enroll anytime
Online • $715

Advanced Java: Developing With APIs
X436.4 • 2 semester units in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
A Java programmer must be experienced with design strategies used with application programming interfaces (APIs) to create a wide variety of enterprise-level applications for programming in the distributed-computing world. Learn about APIs in J2SE and J2EE. You begin with a study of the Java Foundation Classes (Swing). After thoroughly exploring how to write thread-safe applications, you then learn about networking, sockets and remote method invocation (RMI). You examine the enterprise libraries for writing servlets, as well as JavaServer Pages (JSP) used traditionally for Web programming. Finally, you work with Enterprise JavaBeans for developing transactional, secure and distributed components.

EDP 313122
Christine Bouamalay, M.S., Extension Honored Instructor
10 meetings
 Thursdays, 6:30–9:30 pm
Jan. 12–March 15
Berkeley: Golden Bear Center • $645

Virtual and Cloud Computing

Virtual and Cloud Computing

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/it

Multivendor Virtualization
X422.1 • 3 semester units in EECS
A requirement in the Professional Series in Virtual and Cloud Computing
Focus on the practical areas of creating, configuring and securing popular virtual machines on hypervisors such as Microsoft Hyper-V, Red Hat KVM, VMware ESX and QEMU. This course is ideal for planners who optimize the trade-offs of different vendors’ solutions from both technical and business perspectives. Learn the GUI tools and the internals of each vendor’s various software development kits (SDKs) available for developing custom applications. You also learn how to write plug-ins for vSphere to customize the solution to a particular environment. Note: Bring an X86-based machine that is Intel VT or AMD-V (virtualization-enabled) with a minimum of 8 GB of RAM and a 500 GB hard drive with a DVD-RW, drive and USB port(s); you may have to install ESXi(i), Hyper-V, Red Hat KVM, enabled kernel and QEMU.

EDP 313023
Ravi Jagannathan, B.S., B.Tech.
6 meetings
Saturdays, 8:30 am–5 pm
Feb. 11–March 24 (no meeting Feb. 18)
Belmont: Belmont Center • $795

Professional Series in Virtual and Cloud Computing

Understand the technologies and applications of cloud computing and its virtualization foundation used in servers, desktops, embedded devices and mobile products. In addition to a full range of enhanced virtualization deployment skills and cloud computing theory, learn to apply your skills to a variety of open-source and vendor-specific virtualization solutions, including Microsoft Hyper-V, Red Hat KVM, VMware and QEMU technologies. With the Professional Series in Virtual and Cloud Computing, you gain the technical expertise and real-world knowledge to take advantage of this growing segment of the programming market.

Curriculum Requirements
The curriculum consists of 3 required courses for a total of 7 semester units (105 hours of instruction).

Required Courses
Choose 3 courses from this list:

- Agile Development, Virtualization and Cloud Deployment X422.3
- Business and Technical Models for Cloud Computing X422.2
- Cloud Computing: Discovering Its Power X422.4
- Multivendor Virtualization X422.1 (offered this term)
- Optimizing Cloud Computing for Profitability X415.1
- Virtualization Theory for CPU, Memory and Storage X422.0

Learn More
extension.berkeley.edu/spos/cloud.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 312067
Not many people make school a priority after raising three children and bringing grandchildren and great-grandchildren into their family. However, Susan Stasi—married to her high-school sweetheart for 43 years—is back to school, working toward her fourth career. With the Designated Subjects Career Technical Education Teaching Credential, Stasi adds yet another layer to a work and education history that includes a degree in foreign languages from San Jose State University and stints working in international sales and marketing for prosthetics, owning a graphic design firm and managing a catering business.

Stasi cites her turn teaching cooking to kids at a YMCA summer camp in 2010 as the catalyst for her latest career move. With her teaching credential, she can be a truly effective teacher. "I've learned about how to put together a lesson plan and how to teach," she says. "I taught the summer camp again this past summer—what a difference!"

Earning a credential through Extension is the best way to get out of a rut and back into the workforce, Stasi believes. "I have recommended this program to quite a number of people, especially those who are going through this recession and are suddenly out on the street," she says. "You’re never too old to learn. Just keep on!"
Whether you’re already a teacher or want a career in education, UC Berkeley Extension offers the education to prepare you for your next step. Fulfill requirements for a teaching credential in adult or career technical education. Take a class for professional growth, complete a certificate enabling you to teach English as a second language or get training to become a college admissions adviser.

At UC Berkeley Extension, you choose the teaching program that fits your needs. Fulfill your California Clear Credential requirement with courses approved by the California Commission on Teacher Credentialing. Earn a certificate to teach Chinese as a foreign language. Or enhance your teaching skills with courses focusing on successful reading techniques, inclusion of students with special needs, strategies for teaching health concepts, integrating technology into the classroom and other essential topics.

With instructors who are highly qualified teachers and experienced resource specialists, you can be confident that UC Berkeley Extension is the best training for a career in education.
For more information about adult education, visit extension.berkeley.edu/spos/adultedctc.html. For more information about career technical education, see p. 112 or visit extension.berkeley.edu/spos/cateched.html.

EDP 203638
1 meeting
Thursday, 5:30–7 pm
May 10
Berkeley: Golden Bear Center • FREE

Certificate Program in College Admissions and Career Planning and Professional Program in College Admission Counseling
EDP 203679
Wednesday, May 9, 5:30–7 pm
Berkeley: Golden Bear Center
EDP 203216
Thursday, Jan. 12, 5:30–7 pm
Berkeley: Golden Bear Center
EDP 203232
Thursday, May 17, 5:30–7 pm
Berkeley: Golden Bear Center
EDP 203638
Thursday, May 10, 5:30–7 pm
Berkeley: Golden Bear Center

Designated Subjects Adult Education and Career Technical Education Teaching Credential Programs

EDP 203638
1 meeting
Thursday, 5:30–7 pm
May 10
Berkeley: Golden Bear Center • FREE

Early Orientation
X366.13 • 1 semester unit in Education
A requirement in the Designated Subjects Career Technical Education Teaching Credential
Get the theoretical background and skills essential for success as a beginning career technical educator. Expect an overview of teaching methods, learning styles, lesson planning, career technical education concepts, equity and diversity in the classroom, mandated reporting and legal and ethical issues. You further study these competencies in later coursework.
Prerequisite: Advising session or consent of instructor and program director
Sec. 1 EDP 203547
Vicki Pontius, Ed.D.
2 meetings
Saturdays, 9 am–5:30 pm
Jan. 21 and 28
Berkeley: Golden Bear Center • $295
Sec. 2 EDP 203646
James Iler, M.A.
2 meetings
Sundays, 9 am–5:30 pm
March 4 and 11
Berkeley: Golden Bear Center • $295
Sec. 3 EDP 203539
Rod McLean, M.A.
2 meetings
Saturdays, 9 am–5:30 pm
May 12 and 19
Berkeley: Golden Bear Center • $295
Curriculum Design and Assessment in Career Technical Education
X366.16 • 2 semester units in Education
A requirement in the Designated Subjects Career Technical Education Teaching Credential
Learn the study of curriculum and instructional planning in relation to specific occupations, including the role of integrated academic and career technical education curricula. Topics include the development and coordination of instructional objectives, strategies, activities, safety considerations, materials and student assessment instruments in the preparation of unit and lesson plans.
Prerequisite: Early Orientation X366.13 or consent of instructor and program director
EDP 203794
Donna Wyatt, RN, M.S.
4 meetings
Saturdays, 9 am–5:30 pm
Feb. 4–March 3 (no meeting Feb. 18)
Berkeley Campus: 54 Barrows Hall • $475

Teaching Credential Programs

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/subject/edcredprogram.html
Integrating Technology Into Career Technical Education

X366.15 • 1 semester unit in Education

A requirement in the Designated Subjects Adult Education Teaching Credential, in the Designated Subjects Career Technical Education Teaching Credential and in the Professional Program in Adult Education, an elective in the Professional Program in Career Technical Education

Learn to integrate computers and related technologies into your curriculum in ways that enhance learning for adolescents and adults with diverse needs and learning styles. Study methods for using technology to develop effective curricular materials for the classroom.

EDP 203563
James Iler, M.A.
2 meetings
Sundays, 9 am–5:30 pm
April 8 and 15
Berkeley: Golden Bear Center • $295

Career Technical Education Foundations

X366.18 • 2 semester units in Education

A requirement in the Designated Subjects Career Technical Education Teaching Credential and in the Professional Program in Career Technical Education

Examine the history and traditions of career technical education (CTE) and its impact on contemporary CTE programs and the economy of the state of California. You develop a professional perspective by examining contemporary education policies and teaching practices in relation to fundamental issues, theories and research in education.

Prerequisite: Early Orientation X366.13 or consent of instructor and program director

EDP 203562
Vicki Pontius, Ed.D.
4 meetings
Saturdays, 9 am–5:30 pm
May 5–June 2 (no meeting May 26)
Berkeley: Golden Bear Center • $475

Designated Subjects Adult Education Teaching Credential

UC Berkeley Extension’s Designated Subjects Adult Education (DSEA) Teaching Credential, approved by the California Commission on Teacher Credentialing (CTC), opens classroom doors in a range of academic subject areas, whether you already hold a teaching position or desire to enter the field. Learn from industry professionals and get up-to-date training in education technology, curriculum development and student evaluation. Understand instructional strategies, activities and materials appropriate for adult learners with diverse needs. Develop methods to increase student motivation and retention. The credential program maximizes your previous life experience to improve your teaching skills or start a new career in the classroom.

Required Courses

• Perspectives on the Adult Learner (Level I) X351.8A
• Instructional Strategies for Career Technical Education X366.14
• Assessment and Evaluation in Adult and Vocational Education (Level I) X366
• Integrating Technology into Career Technical Education X366.15 (offered this term)
• Critical Issues in Public Education: Class, Culture, Race, Ethnicity and Gender (Level I) X344.2 (offered this term)
• Curriculum for the Adult Learner (Level II) X325
• Integrating Technology into Adult and Vocational Education (Level II) X366.3B
• Counseling, Guidance and Professional Relationships in Adult Education (Level II) X366.6 (offered this term)

Curriculum Requirements

The curriculum for the full-time credential consists of 8 required courses for a total of 14 semester units (210 hours of instruction).

A part-time credential is also available. See the Web for curriculum details.

Learn More and View the Brochure
extension.berkeley.edu/spos/adultedctc.html (510) 642-1171
askeducation@unex.berkeley.edu

Professional Program in Adult Education

A teaching credential is not required for many adult education positions, but skilled, knowledgeable teachers are always in demand. UC Berkeley Extension’s Professional Program in Adult Education prepares you for a career teaching adults in a variety of learning environments and improves your skills if you are already a professional teacher or trainer. Learn from industry professionals, and get up-to-date training in education technology, curriculum development and student evaluation.

Required Courses

• Instructional Strategies for Career Technical Education X366.14
• Assessment and Evaluation in Adult and Vocational Education (Level I) X366
• Integrating Technology into Career Technical Education X366.15 (offered this term)

Curriculum Requirements

The curriculum consists of 3 required courses and 1 approved elective for a total of 6–8 semester units (90–120 hours of instruction).

Learn More and View the Brochure
extension.berkeley.edu/spos/adulted.html (510) 642-1171
askeducation@unex.berkeley.edu

Register using EDP 202309

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Designated Subjects Career Technical Education Teaching Credential

UC Berkeley Extension’s Designated Subjects Career Technical Education (DSCTE) Teaching Credential, approved by the California Commission on Teaching Credentialing (CTC), opens classroom doors in a range of career technical subject areas by enabling you to teach what you know best. Learn from industry professionals, and get up-to-date training in education technology, curriculum development and student evaluation. Understand instructional strategies, activities and materials appropriate for adult and youth learners with diverse needs. Develop methods to increase student motivation and retention. The credential program maximizes your previous work experience to start a new career in teaching.

**Required Courses**
- Early Orientation X366.13 (offered this term)
- Instructional Strategies for Career Technical Education X366.14
- Integrating Technology into Career Technical Education X366.15 (offered this term)
- Curriculum Design and Assessment in Career Technical Education X366.16 (offered this term)
- SDAIE/Special Needs for Career Technical Education X366.17 (offered this term)
- Career Technical Education Foundations X366.18 (offered this term)
- Advanced Preparation Portfolio for Career Technical Education A X366.19
- Advanced Preparation Portfolio for Career Technical Education B X366.20

**Curriculum Requirements**
The curriculum consists of 8 required courses for a total of 14 semester units (210 hours of instruction).

**Learn More and View the Brochure**
extension.berkeley.edu/spos/cateched.html (510) 642-1171
askeducation@unex.berkeley.edu

Professional Program in Career Technical Education

A teaching credential is not required for many career technical education positions, but skilled, knowledgeable teachers are always in demand. UC Berkeley Extension’s Professional Program in Career Technical Education prepares you for a career teaching in a variety of learning environments and improves your skills if you are already a professional teacher or trainer. Learn from industry professionals, and get up-to-date training in education technology, curriculum development and student evaluation.

**Required Courses**
- Instructional Strategies for Career Technical Education X366.14
- Assessment and Evaluation in Adult and Vocational Education (Level I) X366
- Career Technical Education Foundations X366.18 (offered this term)

**Electives**
For a list of electives available this term, visit extension.berkeley.edu/spos/voced.html.

**Curriculum Requirements**
The curriculum consists of 3 required courses and 1 approved elective for a total of 7–9 semester units (105–135 hours of instruction).

**Learn More and View the Brochure**
extension.berkeley.edu/spos/voced.html (510) 642-1171
askeducation@unex.berkeley.edu

Register using EDP 202317

SDAIE/Special Needs for Career Technical Education

X366.17 • 2 semester units in Education
A requirement in the Designated Subjects Career Technical Education Teaching Credential

Explore current research-based theories of second-language acquisition and the differences between first- and second-language acquisition and literacy development. Topics include cognitive, linguistic and factors that affect language learning in children of diverse backgrounds. You also learn to use the California English Language Development standards and the California English Language Development Test ( CELDT) in instructional planning that promotes both language development and academic achievement.

**Prerequisite:** Early Orientation X366.13 or consent of instructor and program director

EDP 203802
Instructor to be announced
4 meetings
Sundays, 9 am–5:30 pm
March 4–25
Berkeley: Golden Bear Center • $475

Critical Issues in Public Education: Class, Culture, Race, Ethnicity and Gender (Level I)

X344.2 • 2 semester units in Education
A requirement in the Designated Subjects Adult Education Teaching Credential; an elective in the Professional Program in Career Technical Education

Examine the sociocultural and political perspectives that influence public education, and explore the complex ways that class, culture, race, ethnicity and gender affect educational practice and process.

EDP 203554
Instructor to be announced
4 meetings
Saturdays, 9 am–5:30 pm
Feb. 4–March 3 (no meeting Feb. 18)
Berkeley Campus: 185 Barrows Hall • $475

Counseling, Guidance and Professional Relationships in Adult Education (Level II)

X366.5 • 2 semester units in Education
A requirement in the Designated Subjects Adult Education Teaching Credential; an elective in the Professional Program in Career Technical Education

Develop specific strategies for increasing student motivation and retention (including goal setting, assessment and feedback and life relevance) and for connecting students to support services. You also review governance and advisory structures, legislation, funding and grant writing.

EDP 203570
Rod McLean, M.A.
4 meetings
Sundays, 9 am–5:30 pm
April 22–May 13
Berkeley: Golden Bear Center • $475
CREDENTIAL FULFILLMENT

U.S. Constitution History Requirement

Introduction to American Politics
Explore the theoretical implications of democracy and justice in this in-depth look into the structure of the American political system.

For course schedule, see p. 145.

Introduction to the History of the United States: From Colonial Settlement to the Civil War
Sharpen your understanding of the people, institutions and ideologies that shaped the formation of the United States.

For course schedule, see p. 144.

Introduction to the History of the United States: From the Civil War to the Present
Survey U.S. history from the 1870s to the new millennium. Increase your knowledge of events, institutions and historic figures while developing skills of historical analysis and interpretation.

For course schedule, see p. 144.

CTC-Approved Courses

Introduction and Use of Computer Technology (Level I)
X354 • 2 semester units in Education
Fulfills the Computer Education Level I requirement for California teaching credentials
Become a fluent, critical user of technology, and prepare your students to be lifelong learners in an information-based, interactive society.

EDP 203729
David Casuto, M.A., M.Ed.
4 meetings
Sundays, 9 am–5:30 pm
March 4–25
Berkeley: Golden Bear Center • $525

Classroom-Tested Reading Techniques, K–12
X330.3 • 3 semester units in Education
Fulfills the Teaching of Reading requirement for California teaching credentials
Develop an understanding of the reading process, and learn to assess the strengths and needs of struggling readers. Learn how to design appropriate instructional plans based on effective strategies that meet the needs of individual students.

EDP 203935
Eugenia Kaw, M.A., Ph.D.
6 meetings
Sundays, 9 am–5:30 pm
Jan 22–March 4 (no meeting Feb. 19)
Berkeley: Golden Bear Center • $625

Inclusion of Students With Special Needs in Regular Education
X370.4 • 2 semester units in Education
Fulfills the Special Education, or “mainstreaming,” requirement for California teaching credentials; an elective in the Professional Program in Adult Education
Develop teaching and management skills in the mainstream classroom that facilitate learning by students with special needs. Learn about special education history, legislation, programs, services and trends; the terminology and characteristics of disabling conditions; and strategies for modifying the regular education program. You may use this course to fulfill the mainstreaming requirement for the Ryan Multiple or Single Subject Credential on direct application to the Commission on Teacher Credentialing.

EDP 203620
Nina Ghiselli, Psy.D.
4 meetings
Saturdays and Sundays, 9 am–5:30 pm
April 7–15
Berkeley: Golden Bear Center • $525

FREED PUBLIC LECTURE

Culturally Responsive Teaching and Learning
Learn practical skills in cross-cultural communication at a dynamic free seminar presented by Sedique Popal, an Extension Honored Instructor. With an increase in international student populations, it has become more critical for educators and counselors to reach students in a culturally responsive manner. These students need instructional methods that are comprehensive and transformative, methods that honor their diversity and cultures.

Sedique Popal, Ed.D., Extension Honored Instructor, has been a teacher and educator since 1980. He has taught English as a second or foreign language (ESL/EFL) in Asia and Europe and has made presentations to English as a second language and bilingual organizations. Popal teaches at the College of Alameda and the University of San Francisco.

EDP 203745
1 meeting
Tuesday, 6–9 pm
May 15
Berkeley: Golden Bear Center • FREE
CLAD Through CTEL

UC Berkeley Extension’s certification program for K–12 teachers helps you gain effective skills and knowledge to teach English learners, or students whose native language is not English. Approved by the California Commission on Teacher Credentialing (CTC), the CLAD Through CTEL program meets the updated competencies required for CLAD certification of K–12 teachers. Teachers who take this classroom-based curriculum do not need to take the CTEL exam. In this program, you gain a clear understanding of language systems, how children of diverse backgrounds acquire language and standards-based assessments and instruction for English learners.

Prerequisites
A CLAD Through CTEL program application and a valid California teaching credential.

Required Courses
- CTEL 0: Orientation: CLAD Through CTEL (offered this term)
- CTEL 1: Culture and Inclusion X374.A
- CTEL 2: Language and Language Development X374.B
- CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction, SDAIE X374.D (offered this term)
- CTEL 3: Assessment of English Learners X374.C (offered this term)
- CTEL 4: Portfolio X374.P (offered this term)

Curriculum Requirements
The curriculum consists of 6 required courses for a total of 13 semester units (195 hours of instruction). You may take individual courses in this program for academic credit; however, you must complete the entire curriculum to satisfy requirements for the CLAD Through CTEL program.

Note: Because the basis for CTEL 3: Assessment of English Learners X374.C is provided in CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction X374.D, we recommend that you take CTEL 4 before taking CTEL 3.

Learn More
extension.berkeley.edu/spos/clad.html
askeducation@unex.berkeley.edu

Contact the Education department at (510) 642-1171 for registration information and individualized guidance through the certification process.

Professional Program in English Learner Pedagogy

The Professional Program in English Learner Pedagogy gives you the teaching skills and knowledge needed to work successfully in any educational environment with English learners, or students whose native language is not English. You learn from outstanding professionals in the field and gain the latest in language acquisition, the foundations and methods of English language instruction and the assessment of English learners.

Required Courses
- CTEL 0: Orientation: CLAD Through CTEL (offered this term)
- CTEL 1: Culture and Inclusion X374.A
- CTEL 2: Language and Language Development X374.B
- CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction, SDAIE X374.D (offered this term)
- CTEL 3: Assessment of English Learners X374.C (offered this term)

Curriculum Requirements
The curriculum consists of an orientation and 4 required courses for a total of 12 semester units and 0.2 ceu (182 hours of instruction).

Learn More
extension.berkeley.edu/spos/pedagogy.html
askeducation@unex.berkeley.edu

Register using EDP 20325

CLAD Through CTEL

CTEL 0: Orientation: Clad Through CTEL

0.2 ceu

A requirement in the CLAD Through CTEL program and in the Professional Program in English Learner Pedagogy

Gain a clear understanding of the CLAD Through CTEL program, including its scope and goals, requirements, standards, the procedures that affect competencies and field experience.

EDP 203604
Donna Altes, B.A., and Eugenia Kaw, M.A., Ph.D.
1 meeting
Thursday, 5:30–7:30 pm
Jan. 12
Berkeley: Golden Bear Center • $25

CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction, SDAIE

X374.D • 4 semester units in Education

A requirement in the CLAD Through CTEL program and in the Professional Program in English Learner Pedagogy

Explore current research-based theories of second-language acquisition and the differences between the first and second language and literacy development. Topics include cognitive, linguistic, sociocultural and affective factors that affect language learning in children of diverse backgrounds; use of the California English Language Development standards and the English Language Development Test (CELDT) in instructional planning that promotes language development and academic achievement; and research-based approaches and methods for English-language development in the areas of listening, speaking, reading and writing as they relate to communicative competence.

Note: Because the foundation for CTEL 3: Assessment of English Learners X374.C is provided in CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction X374.D, it is recommended that you take CTEL 4 before taking CTEL 3.

EDP 203596
Donna Altes, B.A.
8 meetings
Saturdays, 9 am–5:30 pm
Jan. 21–March 17 (also Sunday, March 4, 9 am–5:30 pm; no meetings Feb. 18 and March 3)
Berkeley: Golden Bear Center • $580
CTEL 3: Assessment of English Learners
X374.C • 2 semester units in Education
A requirement in the CLAD Through CTEL program and in the Professional Program in English Learner Pedagogy
Learn the principles and design of standards-based assessments and instruction for English-language learners and the relationship to the identification of students’ strengths and needs in English language and literacy development and academic achievement.

Note: Because the foundation for CTEL 3: Assessment of English Learners X374.C is provided in CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction X374.D, it is recommended that you take CTEL 4 before taking CTEL 3.

EDP 203588
Eugenia Kaw, Ph.D., M.A.
4 meetings
Saturdays, 9 am–5:30 pm
March 31–April 21
Berkeley: Golden Bear Center • $460

CTEL P: Portfolio
X374.P • 1 semester unit in Education
A requirement in the CLAD Through CTEL program
Consolidate the information and field experience from the previous CLAD Through CTEL courses, and connect them in a cohesive manner. Complete a CTEL portfolio that documents your experiences, including organized reflections and evidence of knowledge, skills and abilities.

Prerequisite: Completion of all courses in the CLAD Through CTEL program

EDP 203612
Donna Altes, B.A.
2 meetings
Sunday–Monday, 9 am–5:30 pm
April 22 and 23
Berkeley: Golden Bear Center • $340

Teaching English as a Second or Foreign Language (TESL/TEFL)

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/subject/tesl.html

FREE INFORMATION SESSION Certificate Program in Teaching English as a Second Language
Learn how UC Berkeley Extension’s professional certificate can prepare you for diverse job opportunities—in areas such as education, business, travel and more—both in the United States and around the world. For information about the certificate, see p. 117 or visit extension.berkeley.edu/cert/tesl.html.

EDP 203216
1 meeting
Thursday, 5:30–7 pm
Jan. 12
Berkeley: Golden Bear Center • FREE

EDP 203222
1 meeting
Thursday, 5:30–7 pm
May 17
Berkeley: Golden Bear Center • FREE

Fundamentals of Linguistics for ESL Teachers
X416 • 3 semester units in Linguistics
A requirement in the Certificate Program in Teaching English as a Second Language
Get an introduction to the concepts in linguistics and sociolinguistics relevant to the teaching of English as a second language (TESL). If you are a TESL certificate student, you should take this course first, as it provides a foundation for other TESL studies.

Sec. 1 EDP 203174
Steven L. West, Ph.D.
15 meetings
Wednesdays, 6–9 pm
Jan. 25–May 2
Berkeley: Golden Bear Center • $535

Sec. 1 EDP 203885
Sedique Popal, Ed.D.
13 meetings
Thursdays, 6–9:30 pm
Feb. 16–May 10
Belmont: Belmont Center • $535

Methods and Materials for Teaching English as a Second Language
X339.1A • 3 semester units in Education
A requirement in the Certificate Program in Teaching English as a Second Language
In this practical introduction to the field, you learn traditional and innovative classroom techniques for teaching listening, speaking, reading and writing skills to speakers of English as a second language.

Sec. 1 EDP 203372
Carol Lethaby, M.A.
12 meetings
Saturdays, 10 am–4:30 pm
Feb. 4 and March 3 (also Tuesdays, Feb. 7–April 10, 6–9 pm)
San Francisco: Art and Design Center • $535

Sec. 2 EDP 203125
Sedique Popal, Ed.D., Extension Honored Instructor
13 meetings
Tuesdays, 6–9:30 pm
Feb. 14–May 8
Berkeley: Golden Bear Center • $535

Grammar Fundamentals for ESL Teachers
X338 • 2 semester units in Education
A requirement in the Certificate Program in Teaching English as a Second Language
Get an in-depth review of basic grammar topics that have particular importance in the ESL classroom. You also gain an understanding of the special difficulties that arise in learning a second language and the reasons that these problems occur.

Sec. 1 EDP 203307
Angela Blackwell, M.A.
10 meetings
Mondays, 6–9 pm
Jan. 30–April 16 (no meetings Feb. 20 and March 12)
San Francisco: Art and Design Center • $500

Sec. 2 EDP 203240
Patti Weissman, M.A.
7 meetings
Sundays, 9:30 am–2 pm
March 18–May 6 (no meeting April 8)
Berkeley: Golden Bear Center • $500

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111

EDUCATION
Cross-Cultural Communication
X339.4 • 2 semester units in Education
A requirement in the certificate programs in Teaching English as a Second Language and in Teaching Chinese as a Heritage/Foreign Language; an elective in the Professional Program in Adult Education
Examine the values, customs, mores and communication styles of cultural groups, with emphasis on their implications for teaching. Learn to interpret the communicative behavior of a student and to explain how conversational behavior differs from culture to culture.

Sec. 1 EDP 203695
Ingrid Bosetti, M.A.
10 meetings
Mondays, 6–9 pm
Feb. 6–April 16 (no meeting Feb. 20)
Berkeley: Belmont Center • $500

Sec. 2 EDP 203182
Steven L. West, Ph.D.
11 meetings
Mondays, 6–9 pm
March 5–May 14
Berkeley: Golden Bear Center • $500

Second-Language Acquisition
X334 • 3 semester units in Education
A requirement in the certificate programs in Teaching English as a Second Language and in Teaching Chinese as a Heritage/Foreign Language
Review the theories of first- and second-language acquisition, comparing and contrasting issues involved in both. In addition, you carefully examine theories of bilingualism.

Prerequisite: Fundamentals of Linguistics for ESL Teachers X416
EDP 203141
Sedique Popal, Ed.D., Extension Honored Instructor
7 meetings
Saturdays, 9 am–4:30 pm
March 3, March 17, April 7, April 14, April 28, May 12 and May 19
Berkeley Campus: 174 Barrows Hall • $535

Teaching Pronunciation as a Communicative Skill
X339.7 • 1 semester unit in Education
A requirement in the Certificate Program in Teaching English as a Second Language
Compare different teaching solutions to specific pronunciation problems, and learn practical techniques for creating lively and effective pronunciation lessons. You examine American English pronunciation, including stress, rhythm, intonation, consonants and vowels. You also explore the linguistic and psychological factors affecting communicative clarity. Course work includes hands-on experience as a tutor.

Sec. 1 EDP 203331
Carol Lethaby, M.A.
5 meetings
Wednesdays, 6–9 pm
Feb. 1–29
San Francisco: Art and Design Center • $395

Sec. 2 EDP 203281
Ilze Duarte, Ph.D.
5 meetings
Saturdays, 9 am–12 pm
Feb. 25–March 24
Berkeley: Golden Bear Center • $395

Sec. 3 EDP 203299
Ilze Duarte, Ph.D.
5 meetings
Mondays, 6–9 pm
April 23–May 21
Belmont: Belmont Center • $395

Some people are blessed with two fulfilling careers in their lifetime, and others are bold enough to go for a third. Dennis Crawford is one of the latter, pursuing his passion for education with the Certificate Program in Teaching English as a Second Language (TESL). Crawford, who holds a bachelor’s degree in education from Whitworth University and a master’s in divinity from Fuller Theological Seminary, adds the TESL certificate to an already-rich résumé that includes careers as a Presbyterian minister and as a real estate agent with Keller Williams Realty.

With his TESL certificate from Extension, Crawford is prepared to teach English abroad. The benefits of studying at Extension, he notes, are the hands-on experience working with nonnative English speakers and the above-and-beyond guidance from instructors—particularly Grammar Fundamentals teacher Patti Weissman. “She could have just gone home after class, but twice she said, ‘I’ll stay for another hour and demonstrate techniques of teaching grammar,’” he recalls. “That was a gold mine.”

In his new role as an ESL instructor, Crawford is now substitute teaching and coaching a Russian client. In the next few years, Crawford says that he and his partner aim to travel to Europe or Asia to teach English: “To think that I can do my passions, teaching and travel, and make money—okay! And love it? Good!”
Certificate Program in Teaching English as a Second Language

The increasing use of English worldwide has opened career opportunities for teachers of English as a second language (ESL). ESL educators work all over the world in fields such as business, travel, publishing and education. They work in countries where English is spoken primarily as a foreign language, as well as in countries where English is the dominant language. In English-speaking countries, ESL teachers work with immigrants and refugees at all levels of the education system, including adult education.

Teaching ESL requires skills beyond just fluency in the English language. It is a multifaceted academic discipline requiring training in linguistics, second-language acquisition, language pedagogy, methodology, materials development, assessment and evaluation, curriculum and syllabus design, and cross-cultural communication. Teaching at the community college level requires either an M.A. in TESOL or an M.A. in a related field and the TESL certificate. All courses in the Certificate Program in Teaching English as a Second Language can be applied toward an M.A. with TESOL emphasis at St. Mary’s College and the master’s degree in TESOL at the University of San Francisco.

Curriculum Requirements
The curriculum consists of 7 required courses for a total of 17 semester units (255 hours of instruction).

Required Courses
- Cross-Cultural Communication X339.4 (offered this term)
- Fundamentals of Linguistics for ESL Teachers X416 (offered this term)
- Grammar Fundamentals for ESL Teachers X338 (offered this term)
- Methods and Materials for Teaching English as a Second Language X339.1A (offered this term)
- Practicum in Course Design for ESL/EFL Teachers X327.1 (offered this term)
- Second-Language Acquisition X334 (offered this term)
- Teaching Pronunciation as a Communicative Skill X339.7 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/cert/tesl.html
(510) 642-1171
askeducation@unex.berkeley.edu
Register using EDP 202127
Practicum in Course Design for ESL/EFL Teachers
X327.1 • 3 semester units in Education
A requirement in the Certificate Program in Teaching English as a Second Language
Build on prior course work in methodology, second-language acquisition, linguistics and cross-cultural communication, and gain project-based practical experience in the fundamentals of course design. Move through the curriculum cycle and needs assessment, objective writing and lesson and material development and evaluation. Embedded in the course are exercises in teaching techniques, classroom management and testing and assessment.
Enrollment is restricted. Please call the Education department at (510) 642-1171 for enrollment information.
Prerequisite: Completion of all courses in the Certificate Program in Teaching English as a Second Language
Sec. 1 EDP 203380
Gabriella Megyesi, M.A.
14 meetings
Thursdays, 6:30–9:30 pm
Jan. 26–May 3 (also Saturdays, Feb. 4 and April 28, 10 am–4 pm; no meetings Feb. 23, March 22 and March 29)
Berkeley: Golden Bear Center • $940
Sec. 2 EDP 203323
Angela Blackwell, M.A.
7 meetings
Saturdays, 10 am–5 pm
Jan. 28, Feb. 11, Feb. 25, March 3, March 24, April 7 and April 21
San Francisco: Art and Design Center • $940

Specialized Courses in TESL/TEFL
Developing Listening and Speaking Skills in ESL/EFL
X336.8 • 1 semester unit in Education
Gain a deeper understanding of the nature of spoken English, and investigate current approaches to the teaching of listening and speaking skills. Learn effective techniques and ideas for speaking-practice activities that work, including scaffolding, personalization and structured “gap” activities.
Prerequisite: Methods and Materials for Teaching ESL/EFL X339.1A or equivalent ESL/EFL teaching experience
EDP 203315
Angela Blackwell, M.A.
5 meetings
Thursdays, 6–9 pm
April 12–May 10
Berkeley: Golden Bear Center • $365

Teaching Chinese as a Heritage/Foreign Language

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/education

Methods and Materials of Teaching Chinese I
X392.8 • 3 semester units in Education
A requirement in the Certificate Program in Teaching Chinese as a Heritage/Foreign Language
If you’re an aspiring teacher of Chinese, this course helps you develop practical applications for classroom teaching. In addition to reviewing current research and theories regarding first- and second-language acquisition, you investigate strategies and techniques that are effective in developing communicative competence—listening, speaking, reading and writing—in Chinese.
Prerequisite: Native-speaker fluency in Chinese
EDP 203877
Tsueylin Tracy Wang, Ed.D.
7 meetings
Saturdays, 1–6 pm
Jan. 28–Feb. 11 (also Sundays, Jan. 29–Feb. 12, 9 am–5 pm and Feb. 26, 10 am–4 pm)
Berkeley Campus: 174 Barrows Hall • $450

Methods and Materials of Teaching Chinese II
X396.8 • 3 semester units in Education
A requirement in the Certificate Program in Teaching Chinese as a Heritage/Foreign Language
Get a working knowledge of Chinese-language teaching approaches for all levels in grades K–12. Through demonstration and participation, you become familiar with activities and materials that you can use to develop oral fluency and literacy. Apply what you learn in class by planning a thematic unit or a 50-minute lesson. You also complete four to six hours of practice teaching in a Chinese-language classroom.
Enrollment is restricted. Please call the Education department at (510) 643-8728 for enrollment information.
Prerequisites: Native-speaker fluency in Chinese; Methods and Materials of Teaching Chinese I X392.8
EDP 203349
Tsueylin Wang, Ed.D.
6 meetings
Sundays, 9 am–5 pm
April 22–June 3 (no meeting May 27)
Berkeley: Golden Bear Center • $450

Second-Language Acquisition
Review the theories of first- and second-language acquisition, comparing and contrasting issues involved in both. In addition, you carefully examine theories of bilingualism.
For course schedule, see p. 116.

Cross-Cultural Communication
Examine the values, customs, mores and communication styles of cultural groups, with emphasis on their implications for teaching. Learn to interpret the communicative behavior of a student and to explain how conversational behavior differs from culture to culture.
For course schedule, see p. 116.
Certificate Program in Teaching Chinese as a Heritage/Foreign Language

With interest in Mandarin Chinese exploding in the United States, the demand for qualified Chinese-language teachers—with real dedication to pedagogical craft—is growing rapidly. Whether you are new to the field or want to enhance your teaching effectiveness, the Certificate Program in Teaching Chinese as a Heritage/Foreign Language offers theoretical knowledge and practical approaches for classroom success. Increased pedagogical skills and expertise prepare you to work in a variety of settings, including charter schools, dedicated language schools, after-school and weekend programs, community colleges and universities. If you wish to work in a public school, you must acquire a separate California teaching credential.

Prerequisites for Admission

One of the following prerequisites is required for the Certificate Program in Teaching Chinese as a Heritage/Foreign Language:

- A baccalaureate or higher degree verified by an official transcript
- Significant experience in teaching

You must also meet the following language requirements:

- Native-level fluency in spoken and written Mandarin Chinese
- Proficiency in spoken and written English

Curriculum Requirements

The curriculum consists of 5 required courses for a total of 14 semester units (210 hours of instruction).

Required Courses

- Cross-Cultural Communication X339.4 (offered this term)
- Linguistics for Chinese-Language Teachers X393.3
- Methods and Materials for Teaching Chinese I X392.8 (offered this term)
- Methods and Materials for Teaching Chinese II X396.8 (offered this term)
- Second-Language Acquisition X334 (offered this term)

Learn More and View the Flyer

extension.berkeley.edu/cert/teachingchinese.html
(510) 642-1171
askeducation@unex.berkeley.edu

Register using EDP 202333
College Admissions Advising A

X369.3 • 4 semester units in Education

A requirement in the Certificate Program in College Admissions and Career Planning and in the Professional Program in College Admission Counseling

Get an introduction to the critical components of college admissions advising, including needs assessment, financial planning and researching higher education options.

EDP 203406
Katy Murphy, M.A., and Peggy Hock-McCalley, Ph.D.
12 meetings
Saturdays, 9 am–5:30 pm
Jan. 7–Feb. 25 (also Tuesdays, Jan. 10–Feb. 14, 6–9 pm; no meetings Jan. 14 and Feb. 18)
Belmont: Belmont Center • $970

College Admissions Advising B

X369.4 • 4 semester units in Education

A requirement in the Certificate Program in College Admissions and Career Planning and in the Professional Program in College Admission Counseling

This continuation of College Admissions Advising A X369.3 provides comprehensive information on the college selection process, admissions testing, the college application and essay, financial aid and admissions considerations for special needs populations (including athletes, disabled, reentry, foreign and under-represented students).

Prerequisites: College Admissions Advising A X369.3

EDP 203398
Katy Murphy, M.A., and Peggy Hock-McCalley, Ph.D.
12 meetings
Saturdays, 9 am–5:30 pm
Mar. 31–May 12 (also Tuesdays, April 3–May 15, 6–9 pm; no meetings April 7 and 10)
Belmont: Belmont Center • $970

Career Planning for College Admissions

X369.5 • 4 semester units in Education

A requirement in the Certificate Program in College Admissions and Career Planning

This hands-on course utilizes career assessment tools to help educators, counselors and others interested in career planning for all ages. Topics include assessment, theory and methods to motivate clients to achieve their goals.

Sec. 1 EDP 203117
Steven Pantell, Ph.D.
8 meetings
Saturdays, 9 am–5:30 pm
Jan. 21–March 17 (no meeting Feb. 18)
Belmont Campus: 20 Barrows Hall • $970

Sec. 2 EDP 203661
Judith Garcia, B.S.
8 meetings
Saturdays, 9 am–5:30 pm
Jan. 28–March 31 (no meetings Feb. 18 and March 17)
Belmont: Belmont Center • $970

Free Information Session
Certificate Program in College Admissions and Career Planning and Professional Program in College Admission Counseling

Call (510) 642-4111 to reserve your space. There is no charge or obligation to enroll. For more information about the Certificate Program in College Admissions and Career Planning, see p. 121 or visit extension.berkeley.edu/cert/college.html. For more information about the Professional Program in College Admission Counseling, see this page or visit extension.berkeley.edu/spos/admission.html.

EDP 203679
1 meeting
Wednesday, 5:30–7 pm
May 9
Berkeley: Golden Bear Center • FREE

Certificate Program in College Admission Counseling

A requirement in the Certificate Program in College Admissions and Career Planning

For course and schedule in Formation visit extension.berkeley.edu/CA
ATOUGH
Cducation
College Admissions and Career Planning

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/subject/edcounseling.html

FREE INFORMATION SESSION
Certificate Program in College Admissions and Career Planning and Professional Program in College Admission Counseling

Call (510) 642-4111 to reserve your space. There is no charge or obligation to enroll. For more information about the Certificate Program in College Admissions and Career Planning, see p. 121 or visit extension.berkeley.edu/cert/college.html. For more information about the Professional Program in College Admission Counseling, see this page or visit extension.berkeley.edu/spos/admission.html.

EDP 203679
1 meeting
Wednesday, 5:30–7 pm
May 9
Berkeley: Golden Bear Center • FREE

Certificate Program in College Admissions and Career Planning

A requirement in the Certificate Program in College Admissions and Career Planning

For course and schedule in Formation visit extension.berkeley.edu/CA

ToughEducation
Certificate Program in College Admissions and Career Planning

Educators must adapt to meet the diverse needs of today's students. The Certificate Program in College Admissions and Career Planning provides the in-depth knowledge and technical skills necessary for you to help students make the transition from high school to college or from college to a professional career. Experienced instructors offer insight to all areas, including admissions requirements for public, private, local, national and international institutions; financial aid options and planning; techniques to advise special populations; counseling skills; self-appraisal instruments and interpretation; strategies for college admissions tests, essays and recommendation letters; and uses of technology in college and career planning. The curriculum gives special attention to training in the college admissions process while emphasizing the connection to the workplace, including field site observations and a comprehensive practicum. With a certificate from UC Berkeley Extension, you're ready to not only help others but also advance your own career.

Curriculum Requirements
The curriculum consists of 5 required courses for a total of 15 semester units (216 hours of instruction).

Required Courses
• Career Planning for College Admissions X369.5 (offered this term)
• College Admissions Advising A X369.3 (offered this term)
• College Admissions Advising B X369.4 (offered this term)
• Counseling Techniques for Educators X365.6 (offered this term)
• Practicum in College Admission Advising X361.9 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/cert/college.html
(510) 642-1171
askeducation@unex.berkeley.edu

Register using EDP 202150
Counseling Techniques for Educators
X365.6 • 2 semester units in Education
A requirement in the Certificate Program in College Admissions and Career Planning
Gain familiarity with counseling approaches that counselors, teachers, administrators and others can use in K–12 and university settings. You learn and practice the basic tenets of Robert Carkhuff’s Human Resource Development (HRD) Model in order to gain competence in the application of basic counseling skills.

Sec. 1 EDP 203687
Maureen Casey, M.A.
5 meetings
Sat., 9 am–5:30 pm
March 6–17 (also Tuesdays, March 6 and 13, 6–9 pm)
Belmont: Belmont Center • $485

Sec. 2 EDP 203257
Aubrey Uresti, M.A., PPS
4 meetings
Sundays, 9 am–5:30 pm
March 11–April 1
Berkeley: Golden Bear Center • $485

Sec. 3 EDP 203265
Suzy Thomas, Ph.D.
4 meetings
Sundays, 9 am–5:30 pm
March 11–April 1
Berkeley: Golden Bear Center • $485

Practicum in College Admission Advising
X361.9 • 1 semester unit in Education
A requirement in the Certificate Program in College Admissions and Career Planning
Deepen your knowledge and skills by completing 40 hours of involvement at a high school or nonprofit organization working with high school students exploring the transition to college. You choose from a list of UC Berkeley Extension–approved organizations or propose an alternative fieldwork location approved by the course instructor and the placement site. Fieldwork is accompanied by classroom guidance and collaboration with fellow students and the instructor, who is an experienced college adviser.

Restricted Enrollment: Please contact the Education Department at (510) 642-1171 before enrolling.

EDP 203869
Nancy Whittaker, M.S.
3 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1, March 21 and May 2
Berkeley Campus: 185 Barrows Hall • $395

Specialized Courses in Admissions Advising

The HRD Model Revisited: Counseling College-Bound Students and Their Families
X381.2 • 1 semester unit in Education
Counseling techniques are skills that must be reviewed, refreshed and practiced so that counselors can be of the best use for their clients. Practicing counselors and advisers who have received training in Carkhuff’s Human Resources Development (HRD) Model, which teaches a step-by-step method for active and reflective listening, can benefit from additional practice with listening skills. Continue your practice of this model in small groups, focusing on a variety of topics that you might encounter in your student clients. Broaden your basic knowledge of several other theoretical models, such as narrative therapy, Gestalt therapy and solution-focused brief therapy.

Prerequisite: Counseling Techniques for Educators X365.6 or comparable training in the HRD listening model
EDP 203927
Aubrey Uresti, M.A., PPS
2 meetings
Sundays, 9 am–5:30 pm
April 22 and 29
Berkeley: Golden Bear Center • $295

Professional Development for Educators

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/subject/eddevelopment.html

ONLINE COURSE INFORMATION
(510) 642-4231
online@unex.berkeley.edu
extension.berkeley.edu/online

Technology in Education

Unless otherwise stated in course descriptions, Technology in Education courses are for educators without specific technical skills. If you have any questions, please call the Education department at (510) 642-1171.

Introduction and Use of Computer Technology (Level I)
Become a fluent, critical user of technology, and prepare your students to be lifelong learners in an information-based, interactive society.

For course schedule, see p. 113.

Developing Internet-Based Instruction
X331.6 • 3 semester units in Education
Gain the knowledge and skills necessary to produce online courses. You explore the theoretical foundations of Internet-based instruction and its practical applications, such as methods for student interaction, evaluation and functional design. By the end, you should know how to effectively use Internet-based instructional tools (such as hyperlinks, email, newsgroups, chat, evaluation forms, graphics and multimedia) to design, program and publish instructional modules on the Internet.

EDP 877779
Joe Volk, M.A.
Enroll anytime
Online • $715

Creating Websites With HTML
HTML is the universal language that underpins every page displayed on the Web. Using a straightforward, step-by-step approach, you learn to build Web pages of increasing sophistication and design, acquiring a sound working knowledge of HTML and Web design.

For course schedule, see p. 17.
Teaching Math

MAKING MATH REAL INSTITUTE

The following courses are offered in partnership with the Making Math Real Institute, which provides professional development for educators, private practitioners and parents. Making Math Real integrates cognitive development techniques into lessons and activities. Extensive color coding is a critical element of the program, so please bring four colored markers or pencils in blue, green, red and black to every class meeting. Register for these courses by paying for tuition and materials at www.makingmathreal.org or by calling (510) 527-0720. For optional academic credit, register and pay separate fees to UC Berkeley Extension prior to the first class meeting.

Making Math Real: Overview

X381.1 • 1 semester unit in Education

Get an overview of the pedagogical foundations and practical applications of implementing and maintaining a comprehensive methodology in mathematics for pre-K through calculus. Learn how and why this multisensory structured approach is entirely different from traditional math teaching methods. Tuition fee paid directly to Making Math Real Institute: $349. Fee for academic credit option paid to UC Berkeley Extension: $175.

This course is the mandatory overview for all other Making Math Real courses.

Do not contact Black Pine Circle School. If you have questions, contact the Making Math Real Institute.

EDP 203810

David Berg, B.A.
2 meetings
Saturday and Sunday, 9 am–5 pm
Jan. 7–8
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: The 9 Lines Intensive

X307.7 • 1 semester unit in Education

Learn to integrate the 9 Lines symbol-imaging mental organizer into the daily classroom or home experience. Apply this system to multiplication, division, fractions, number theory, whole number factoring and factoring polynomials. Tuition fee paid directly to Making Math Real Institute: $349. Fee for academic credit option paid to UC Berkeley Extension: $175.

Prerequisite: Making Math Real: Overview X381.1

Do not contact Black Pine Circle School. If you have questions, contact the Making Math Real Institute.

EDP 203828

David Berg, B.A.
2 meetings
Saturday and Sunday, 9 am–5 pm
Jan. 21–22
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: Time and Money

X303.9 • 1 semester unit in Education

Learn to modify and utilize appropriate manipulatives; multisensory instruction for telling time to the hour, half-hour and minute; and word problem applications. Learn strategies to help students’ identify coins and values, and counting mixed coins systematically. Tuition fee paid directly to Making Math Real Institute: $225. Fee for academic credit option paid to UC Berkeley Extension: $175.

Prerequisite: Making Math Real: Overview X381.1

Do not contact Black Pine Circle School. If you have questions, contact the Making Math Real Institute.

EDP 203851

David Berg, B.A.
2 meetings
Saturday and Sunday, 9 am–5 pm
Feb. 11–12
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: Prealgebra

X326.1 • 4 semester units in Education

Examine the systematic incrementation and methods of instruction that address the development, refinement and integration of students’ sensory-cognitive abilities with the application and retention of algebraic problem solving and skills. Tuition fee paid directly to Making Math Real Institute: $994. Fee for academic credit option paid to UC Berkeley Extension: $360.

Prerequisites: Making Math Real: Overview X381.1

Some substitutions may apply; see Web for details.

Do not contact Black Pine Circle School. If you have questions, contact the Making Math Real Institute.

EDP 203844

David Berg, B.A.
8 meetings
Saturdays and Sundays, 9 am–5 pm
Feb. 25–26, March 17–18, April 14–15 and April 28–29
Berkeley: Black Pine Circle School, 2016 Seventh St. • $360

Making Math Real: Games!

X305.7 • 1 semester unit in Education

Learn how to create, apply and play high-interest games to provide practice and development for the learning of any math content. Understand how to effectively integrate games within any learning environment. Tuition fee paid directly to Making Math Real Institute: $349. Fee for academic credit option paid to UC Berkeley Extension: $175.

Prerequisite: Making Math Real: Overview X381.1

Do not contact Black Pine Circle School. If you have questions, contact the Making Math Real Institute.

EDP 203836

David Berg, B.A.
2 meetings
Saturday and Sunday, 9 am–5 pm
May 19–20
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

FREE PUBLIC LECTURE

Making Math Real: Reaching All Learners With a Multisensory Approach to Learning

David Berg, well-known educational therapist and founder of the Making Math Real Institute, presents a lively talk focused on strategies to help students overcome difficulties in understanding mathematics. Parents and educators alike understand the importance of the sciences in educating the next generation. Berg explains why students may be struggling with mathematical concepts and details strategies for lowering anxiety and increasing comprehension through proven tools and techniques he has developed throughout his career.

David Berg, E.T., is creator of the Making Math Real Multisensory Structured methods and founder and director of the Making Math Real Institute. He has been an educator for 30 years, working with all grade levels. Berg lectures and trains for universities, schools, districts and learning disability organizations.

EDP 203737

1 meeting
Thursday, 6–9 pm
May 10
Berkeley: Golden Bear Center • FREE

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111

EDUCATION
Gail Brownell is an environmental engineer with a B.S. from Northwestern University in Illinois and an M.B.A. in operations management from Golden Gate University. Combining this background with an interest in energy efficiency, Brownell is completing the Certificate Program in HVAC to prepare for her next career phase.

“The UC Berkeley Extension HVAC certificate allows me to expand upon my interests and experience,” she says. “Having worked on environmental issues throughout my career, I see that the need for energy efficiency is paramount to deal with climate change.”

The HVAC curriculum provides a wide spectrum of learning to apply at work and at home. “Using our condominium building as an example project in the Building Commissioning for LEED course allowed me to really personalize the learning,” Brownell says. “I have made contacts, listened to leaders in the industry, found more to learn, and been inspired. The opportunity to learn from and talk with teachers who have influenced the standards and technology in the HVAC field is amazing, and the interaction with students who are working in the industry has broadened my appreciation of the field.”
Broaden your technical expertise and add to your professional knowledge, whether you work in civil, construction, structural, mechanical, environmental or electrical engineering.

Learn the latest developments and trends in Lean manufacturing, green building, LEED, photovoltaic devices, energy, networking and technologies for emerging markets. Take an online program in integrated circuit design that offers optional Mandarin sound tracks to help maximize learning. Find out about HVAC for green buildings, smart grid technology and state-of-the-art tools for facilities design and construction management. Enroll in courses to maintain your LEED credential.

Instructors who are engineers, architects, lawyers, building contractors and other experts ensure your education is professionally relevant and academically strong. With UC Berkeley Extension, you are prepared for the next step in your engineering career.
Engineering, Construction, HVAC and LEED

Free Information Sessions

Attend a free information session to discover how UC Berkeley Extension can help you achieve your goals. Learn more about courses and programs, meet other prospective students, talk to instructors and staff and ask questions. To reserve your space, visit extension.berkeley.edu/infosessions or call (510) 642-4111.

Certificate Programs in HVAC and Construction Management

EDP 301978
Wednesday, Dec. 14, 5:30–7 pm
Berkeley: Golden Bear Center

Certificate Program in Construction Management

EDP 323824
Wednesday, May 30, 5:30–6:30 pm
Berkeley: Golden Bear Center

DISCONTINUATION NOTICE

The Professional Program in Solar Energy and Green Building is being discontinued, effective Dec. 5, 2011. No further applications to the programs will be accepted. For all questions, email course@unex.berkeley.edu or call (510) 642-4151.

Call for Instructors and Course Proposals

UC Berkeley Extension invites highly qualified instructors to submit course proposals and résumés or letters of interest to jobs@unex.berkeley.edu. Information about current course offerings is available at extension.berkeley.edu.

UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO

Online Course Information

For course and schedule in Formation visit extension.berkeley.edu/Engineering, Construction, HVAC and LEED

Fundamentals of Data Communications and Networking

X433 • 2 semester units in EECS
A core course in the Post-Baccalaureate Certificate in Information Systems and Management

Learn about data communications in this introductory course in networking technology. Gain a practical understanding of relevant terminology, concepts and other information necessary to make you literate in data communications. By the end of the course, you should be able to make intelligent decisions about the appropriate design, purchase, integration and use of data communications equipment and systems.

EDP 897983
Ching-Cheng Lee, Ph.D.
Enroll anytime
Online •$715

Electrical Engineering

Construction

Certificate Program in Construction Management

Learn how this professional certificate can help you achieve your career goals. For more information about the Certificate Program in Construction Management, see p. 127 or visit extension.berkeley.edu/cert/const.html.

EDP 323824
1 meeting
Wednesday, 5:30–6:30 pm
May 30
Berkeley: Golden Bear Center • FREE

Construction Enterprise Risk Management

X400.8 • 2 semester units in Civil and Environmental Engineering
An elective in the Certificate Program in Construction Management

Learn to optimize construction business profitability and reduce systematic risks by applying enterprise risk management (ERM) methodology. Using the ERM framework, you learn proven strategies to identify, analyze and communicate risks to shareholders and corporate stakeholders. You develop the necessary expertise to manage risk more effectively and underwrite risk more accurately using proven risk-analysis techniques.

EDP 323360
David F. Druml, B.S.C.E., M.S.C.E.
10 meetings
Mondays, 6:30–9:30 pm
Jan. 23–April 2 (no meeting Feb. 20)
Berkeley Campus: 80 Barrows Hall • $525

Sustainable Construction Management and Field Practices

X490 • 2 semester units in Civil and Environmental Engineering • 30 GBCI CE Hours
An elective in the Certificate Program in Construction Management. This course is USGBC-approved for continuing education credit.

Learn green management and operations of a construction site from preconstruction to LEED/green certification. Review management methods in preconstruction, cost estimation of green features, improved workers’ safety and health field practices, LEED/green-building requirements and development and execution of proper commissioning.

EDP 323543
Adhamina Rodriguez, M.S., LEED AP
10 meetings
Thursdays, 5:30–8:30 pm
Feb. 9–April 12
San Francisco: Art and Design Center • $715
Certificate Program in Construction Management

The Certificate Program in Construction Management provides thorough, up-to-date preparation for effectiveness and leadership in the field of construction management, which includes light (residential and small office buildings) and heavy (large office buildings and facilities, infrastructures) projects. As a construction manager, you are in charge of the overall planning and control of a project, which demands a command of many skills. This professional certificate educates you in the regulatory, insurance, management, safety, estimating and environmental aspects of construction management.

Curriculum Requirements
The curriculum consists of 5 required courses and 60 hours of electives (usually 2 courses) for a total of 14 semester units (210 hours of instruction).

Required Courses
• Construction Project Scheduling and Control X463
• Fundamentals of Construction Law X440
• Management in the Construction Industry X464
• Managing Safety and Health in Construction Projects X452
• Preconstruction Estimating: From the Design Development Stage to the Final Bid Process X451

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/const.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/const.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 302448
Green Building

COURSE INFORMATION
(510) 642-4151
course@enex.berkeley.edu
extension.berkeley.edu/engineering

Greening Your Supply Chain: Life Cycle Assessment Tools
X434 • 1 semester unit in Natural Resources
A requirement in the Professional Program in Corporate Social Responsibility Reporting; an elective in the Certificate Program in the Essentials of Green Chemistry

Green supply chains are an important part of sustainable business practice. If you are an environmental or business manager or someone who wants to develop knowledge and expertise in sustainable business practices, this course teaches you about green product and service supply chains and compliance requirements. Understand how products, businesses and services are measured against green standards. Examine the implications of Environmentally Preferable Purchasing, supply chain management and life-cycle analysis. Understand decision tools for managing supply chains and maximizing value while minimizing environmental impact.

EDP 323683
David Norem, M.A.
2 meetings
Saturdays, 9 am–5 pm
March 10 and 17
San Francisco: Art and Design Center • $475

Implementing LEED Strategies
X496 • 1 semester unit in Civil and Environmental Engineering
An elective in the certificate programs in Construction Management and in HVAC

If you are a commercial-sector green professional, such as a LEED Accredited Professional, seeking to advance your skills, this course shows you how to manage the LEED project administration process through hands-on education. Gain proficiency with LEED Online, project checklists and submittal templates, and learn from project challenges and best practices. Examine technical contents of LEED programs in Building Design + Construction (BD+C), Existing Buildings: Operations and Maintenance (EB: O&M) and Interior Design + Construction (ID+C). Learn from real-world case studies, and take a mock building to LEED Platinum.

EDP 323642
Kelly Gearhart, B.A., LEED AP
5 meetings
Wednesdays, 6:30–9:30 pm
Feb. 8–March 7
San Francisco: Art and Design Center • $615

Application of Green Building Concepts
X495.1 • 1 semester unit in Civil and Environmental Engineering

If you are a commercial green professional, such as a LEED Green Associate, who is pursuing further professional accreditation or advanced knowledge in green building, this course covers the application of fundamental green building concepts. Gain an overview of LEED and the exam content for the LEED AP Building Design + Construction (BD+C) credential from the Green Building Certification Institute (GBCI). You also review application of LEED concepts, technical components and calculations of LEED credits, case studies and the administration process.

EDP 323618
Kelly Gearhart, B.A., LEED AP
5 meetings
Tuesdays, 6:30–9:30 pm
May 1–29
San Francisco: Downtown Center • $550

Applying LEED Building Operation and Maintenance
X401.2 • 1 semester unit in Civil and Environmental Engineering

Learn to apply sustainability principles to building operations. Gain practical knowledge on the methodology of the LEED Green Rating System for Existing Buildings: Operation and Maintenance (EB: O&M). Examine best practices and lessons learned from industry practitioners who share their expertise through hands-on demonstrations. You also review LEED AP Operations and Maintenance exam requirements and technical contents of LEED programs as a tool for integrating sustainability into building operations. You are required to arrange for your own transportation for field trips.

EDP 323378
Rebecca Anderson, M.E.H.S., LEED AP
5 meetings
Mondays, 6:30–9:30 pm
Feb. 27–March 26
Berkeley: Golden Bear Center • $575

Green Purchasing Strategies for Triple-Bottom-Line Impact
X448 • 2 semester units in Natural Resources
(formerly Principles of Green Purchasing and Sustainability)

Gain a foundational overview of the environmental information underlying sustainable purchasing. Learn how to access, understand and evaluate the information you need for green procurement. Evaluate business cases that illustrate how companies can boost profits and productivity by using and selling sustainable products.

EDP 323626
Jonathan Gelbard, Ph.D.
8 meetings
Tuesdays, 6–9:45 pm
March 27–May 15
Berkeley: Golden Bear Center • $525

Residential Green Building Design and LEED for Homes
X498 • 2 semester units in Civil and Environmental Engineering

Be prepared to take the LEED for Homes Accredited Professional exam developed by the U.S. Green Building Council. Learn the fundamental structure and elements of the LEED for Homes Rating System, program delivery infrastructure and the strategies and standards embedded in LEED for Homes. Learn each of the eight LEED for Homes credit categories in depth. Work hands-on with all of the relevant documents, including the rating system, checklists, Reference Guide, midrise guidance and credit interpretation and innovation credit database.

EDP 323659
Antonia Tsoubanoudis, B.S., LEED AP-Homes
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 4–March 7
San Francisco: Downtown Center • $715

Introduction to Concepts of Green Building
X495 • 1 semester unit in Civil and Environmental Engineering

Whether you are a design, construction or real estate professional; a building owner; or someone who wants to develop your knowledge, learn the fundamental concepts of green building. This course teaches you some of the key concepts for the LEED Green Associate credential from the Green Building Certification Institute (GBCI). Examine case studies of LEED-certified building projects, concepts of integrated design, third-party verification and the LEED administration process.

EDP 323634
Kelly Gearhart, B.A., LEED AP
5 meetings
Wednesdays, 6:30–9:30 pm
Jan. 4–Feb. 1
San Francisco: Art and Design Center • $550
The field of heating, ventilation and air conditioning—HVAC—is the science and practice of controlling indoor climate to provide healthy and comfortable interior conditions for occupants in a well-designed, energy-efficient and low-emissions manner. The Certificate Program in HVAC provides you with a comprehensive approach to acquiring in-depth technical understanding of the principles and applications you need to design new HVAC systems and retrofit existing systems to meet energy conservation standards.

**Curriculum Requirements**
This curriculum consists of 4 required courses and 90 hours of electives (usually 3 courses) for a total of 14 semester units (210 hours of instruction).

**Required Courses**
- HVAC Control and Energy Management Systems X473 (offered this term)
- HVAC Ductwork and Piping Systems X470 (offered this term)
- HVAC System Design Considerations X472
- HVAC System Load Calculations and Psychrometry X469

**Electives**
For a list of electives available this term, visit extension.berkeley.edu/cert/hvac.html.

**Learn More and View the Flyer**
extension.berkeley.edu/cert/hvac.html
(510) 642-4151
course@unex.berkeley.edu

**Register using EDP 302117**
HVAC

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/subject/hvac.html

FREE INFORMATION SESSION
Certificate Programs in HVAC and Construction Management
Learn how these professional certificates can help you achieve your career goals. For more information on the Certificate Program in Construction Management, see p. 127 or visit extension.berkeley.edu/cert/const.html. For more information on the Certificate Program in HVAC, see p. 129 or visit extension.berkeley.edu/cert/hvac.html.

EDP 301978
1 meeting
Wednesday, 5:30–7 pm
Dec. 14
Berkeley: Golden Bear Center • FREE

HVAC Ductwork and Piping Systems
X470 • 2 semester units in Mechanical Engineering
A requirement in the Certificate Program in HVAC
Learn the engineering fundamentals and practical considerations for the design of components and layout of HVAC systems and equipment. Lectures cover the selection and specification of components such as fans, coils, filters, pumps, chillers, cooling towers, boilers, water heaters, terminal devices and air outlets. Study the design of air and water distribution systems with consideration for first cost, energy costs and other practical matters such as space and maintenance. Energy conservation measures are highlighted throughout the course and presented with consideration for energy codes, utility rebate programs and economic evaluation. You pay particular attention to commercial applications in the greater Bay Area. Enrollment is limited.

EDP 323410
Steve T. Taylor, M.S., PE, Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 4–March 7
San Francisco: Downtown Center • $695

HVAC Control and Energy Management Systems
X473 • 2 semester units in Mechanical Engineering
30 GBCI CE Hours
A requirement in the Certificate Program in HVAC
This course provides the practicing engineer, designer and building operation engineer with a working knowledge of the principles involved in the selection and design of temperature controls for HVAC systems. Topics include controls theory and fundamentals; pneumatic, electric, electronic and computer-based hardware; control application for zones; air handlers; and chilled-water and hot-water systems. On completing the course, you should be able to specify and design control systems for normal applications. Enrollment is limited.

EDP 323394
Steve T. Taylor, M.S., PE, Extension Honored Instructor, and Mark Hydeman, M.S., PE
10 meetings
Wednesdays, 6:30–9:30 pm
March 14–May 16
San Francisco: Downtown Center • $695

Facilities

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/engineering

Facilities Planning and Design
X421 • 3 semester units in Architecture
Facilities management encompasses a broad set of specialized activities. This course acquaints you with the concept of planning as a process that involves the integration of design, facility technologies and business management principles for the purposes of identifying, documenting and meeting organizational needs. You are exposed to the range of skills required, including architectural design, facilities engineering, project accounting and scheduling. By the end of the course, you have an overview of the planning process, from project analysis to design synthesis.

EDP 313148
Julie Barron, B.F.A.
14 meetings
Mondays and Thursdays, 6–9:30 pm
Feb. 6–March 26 (no meeting Feb. 20)
San Francisco: Art and Design Center • $675
Integrated Circuit (IC) Design and Engineering

COURSE INFORMATION
(510) 642-4151
course@uex.berkeley.edu
extension.berkeley.edu/subject/ee.html

Semiconductor Devices for Integrated Circuit Design
X138 • 2 semester units in Electrical Engineering
A requirement in the Certificate Program in Integrated Circuit Design and Techniques
Get an in-depth, comprehensive understanding of semiconductor devices, enabling you to cope with the ever-increasing bandwidths of state-of-the-art designs. Study a broad range of topics in bipolar junction transistor (BJT) and metal oxide semiconductor (MOS) technologies, with an emphasis on physical concepts, operation principles, second-order effects and modeling and simulation. Individual research projects cover real-world issues in advanced complementary metal oxide semiconductor (CMOS) modeling in the 90 nm or 65 nm scale and future trends in the statistical IC design in nanoelectronics.
EDP 307827
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Advanced Analog Microelectronics
X139 • 2 semester units in Electrical Engineering
A requirement in the Certificate Program in Integrated Circuit Design and Techniques
Integrated analog filters, oscillators and multivibrators are important building blocks in developing an analog module to implement many applications in signal processing or wireless communications. The scope of the individual research projects includes switched-capacitor circuits, continuous-time filters and voltage-controlled oscillators (VCOs) for phase-locked loop (PLL) applications. The instructor helps you choose a practical research topic that you can implement in real-world applications for frequency synthesizers or televisions.
EDP 307835
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Fundamentals of Analog Integrated Circuit Design Techniques
X140 • 2 semester units in Electrical Engineering
A requirement in the Certificate Program in Integrated Circuit Design and Techniques
Gain a competitive advantage by learning how to analyze, simulate and design a complementary metal oxide semiconductor (CMOS) analog integrated circuit. This course is ideal if you are a working professional with no strong foundation in analog design but an interest in either upgrading your knowledge and skills or redirecting your career development in the semiconductor market. Topics cover basic concepts, practices and design skills used for analog ICs. Lectures include basic current mirrors, high-performance current mirrors, single-stage CMOS amplifiers, differential amplifiers, output stages and short-circuit protection circuitry.
EDP 307843
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Advanced Design Techniques for Analog Integrated Circuits
X141 • 2 semester units in Electrical Engineering
A requirement in the Certificate Program in Integrated Circuit Design and Techniques
Advances in signal processing, analog-to-digital conversion and the continued scaling down of complementary metal oxide semiconductor (CMOS) nanotechnology have ushered in the era of analog IC design with multistandard challenges. Topics include stability of feedback, frequency compensation, multistage operational amplifiers (op-amps) and optimized CMOS op-amp designs. Prepare to work on a design project to meet a required product specification. The scope of the project covers design of an advanced CMOS op-amp and of high-performance CMOS comparators for flash analog-to-digital converter (ADC) applications.
EDP 307850
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Professional Sequence in Facilities Management
The Professional Sequence in Facilities Management provides the knowledge, tools and skills needed for successful facilities management, along with a thorough understanding of and practical experience in the critical business-decision-making process of the facility manager. The sequence provides teaching methods and techniques that are consistent with accepted facilities management practices.

Curriculum Requirements
The curriculum consists of 4 required courses for a total of 8 semester units (120 hours of instruction).

Required Courses
• Introduction to Facilities Management X420
• Facilities Construction and Project Management X420.2
• Facilities Management: Operations and Maintenance X420.1
• Facilities Management: Strategic Planning Leadership and the Organization X420.3

Learn More
extension.berkeley.edu/spos/facmgmt.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 302927
Introduction to Microelectronic Theory and Applications
X30 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Taking an application-oriented approach, get an overview of analog and digital integrated circuits, starting with the most frequently used and applicable semiconductor device and circuit theories, and channel them into more complex circuit schematics and application modules, such as amplifiers, operational amplifiers with bipolar and complementary metal oxide semiconductor (CMOS) technologies, digital inverters, and voltage regulators and biasing techniques of amplifiers.

EDP 307744
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Fundamentals of Integrated Circuit Design
X31 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Learn the underlying concepts and industry-standard simulation tools for IC design, operational amplifier (op-amp) characteristics and practical amplifier behaviors in the frequency domain. Designed for technical professionals, this course aids in understanding analog circuit essence and properties through analysis—by-inspection and PSpice simulation. Topics include basic op-amp circuits and applications, s-domain analysis, bandwidth and slew-rate limitations and analyzing frequency limitations of amplifiers—a pivotal foundation for advancing to more intricate IC design topics.

EDP 307751
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Introduction to Physics of Semiconductor Devices
X32 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Learn how industry terms, such as energy bandgaps and minority carriers, are powerful concepts that reveal the mysterious behavior of semiconductor devices. Topics include intrinsic and extrinsic semiconductors and metal-semiconductor contact. An individual research project covers subjects such as the ultimate limits of integrated electronics and an integrated strategy for confronting commoditization in the foundry industry. Apply what you learn to many applications, including complementary metal oxide semiconductors (CMOS), bipolar junction transistors (BJT), LEDs, lasers and sensors.

EDP 307777
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Fundamentals of Analog Microelectronic Techniques
X33 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Develop intuitive skills for analyzing microelectronic circuits without doing lots of intricate mathematics. Although some courses use the classical approach requiring a tedious derivation that becomes more cumbersome with a complex circuit, this approach offers an alternative, focusing on the analysis—by-inspection method. Topics covered include low-frequency bipolar junction transistor (BJT) and metal oxide semiconductor (MOS) amplifiers, amplifier frequency response, analysis—by-inspection, simulated program with integrated circuit emphasis (SPICE) simulation and advanced case studies.

EDP 307769
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Digital Integrated Circuit Design
X134 • 2 semester units in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Study digital operation principles and advances into more complex areas involving multiplexers and flash memory. Featuring in-depth illustration and broad discussions, this course distills concepts, simulation program with integrated circuit emphasis (SPICE) verification and design skills from complementary metal-oxide-semiconductor (CMOS) amplifiers, amplifier frequency response, analysis—by-inspection, simulated program with integrated circuit emphasis (SPICE) simulation and advanced case studies. Work on a research project covering cutting-edge technologies, including user programming language (ULP) eSRAM, design for handheld or mobile applications, nonvolatile memory, NOR flash, PRAM and high-speed eDRAM.

EDP 307785
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Effective SPICE Circuit Simulation Techniques
X405 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Gain hands-on experience using simulated program with integrated circuit emphasis (SPICE) to simulate, verify, examine and design microelectronic circuits. Illustrating techniques to fully leverage SPICE, this course offers in-depth coverage ranging from semiconductor devices to analog and digital ICs. A design project covers wide-swing constant-transconductance bias; advanced comparators; and sequential digital circuits, such as master-slave DFFs and C2MOS latches.

EDP 307793
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Fundamentals of Modern Data Converter Design
X236 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Ever-increasing applications for signal processing, such as video and wireless communications, demand high-speed, high-resolution data converter techniques. This course builds a solid foundation and gives you the skills to diagnose and tackle real-world issues. Topics include data converter fundamentals, characterizations and performance limitations, Nyquist-rate D/A and A/D converters, successive-approximation register (SAR) converters and discrete time signal basics for understanding delta-sigma converters. Project options include medium-resolution, high-speed A/D converters pertaining to the IEEE 802.15 UWB standard and error correction and calibration techniques in the sub-100 nm mixed-signal ICs.

This course has restricted enrollment. Call (510) 642-4153 or (510) 642-4151 for more information.

EDP 307801
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Design Techniques of High-Performance Data Converters
X237 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Completely updated to reflect the extraordinary advances in data converters, this course sets the professional online learning standard in the IC design space. It is intended for practitioners who have experience in analog design and are interested in upgrading their skills in data converters. Topics include high-speed Nyquist-rate converters, oversampling, delta-sigma modulators and design examples through Simulink and HSPICE. Project options include 0.8 GS/s analog-to-digital converters (ADC) for 10 Gb/s Ethernet applications and delta-sigma ADCs for TV, software radio and high-quality digital audio applications. This course has restricted enrollment. Call (510) 642-4153 or (510) 642-4151 for more information.

EDP 307819
Vincent Chang, Ph.D.
Enroll anytime
Online • $245
Certificate Program in Integrated Circuit Design and Techniques

The online Certificate Program in Integrated Circuit Design and Techniques provides in-depth knowledge in a convenient online format designed for working professionals. Develop an understanding of key concepts in state-of-the-art design, including semiconductor characteristics; semiconductor device modeling; and analog, digital and mixed-signal integrated circuit (IC) design. When you choose UC Berkeley Extension, you benefit from an association with a university known worldwide for engineering excellence. An advisory board consisting of UC Berkeley College of Engineering faculty and industry leaders of major semiconductor companies in the Asia-Pacific region and the United States ensures that the program is both academically strong and professionally relevant.

The program’s innovative approach to learning includes English and Mandarin sound tracks that accompany English course slides. If you speak Mandarin but have some proficiency in English, you can successfully complete individual courses or the entire professional certificate.

Curriculum Requirements
The curriculum consists of 4 required courses and 1–2 electives for a total of 10 semester units (150 hours of instruction).

Required Courses
• Semiconductor Devices for Integrated Circuit Design X138 (offered this term)
• Advanced Analog Microelectronics X139 (offered this term)
• Fundamentals of Analog Integrated Circuit Design Techniques X140 (offered this term)
• Advanced Design Techniques for Analog Integrated Circuits X141 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/cert/icdesign.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/icdesign.html
(510) 642-4151
course@unex.berkeley.edu
Register using EDP 302861
Angela Deiana holds a master’s degree in biology from the Università degli Studi di Sassari in Italy. Having studied and worked in Europe, Deiana is leveraging her studies at UC Berkeley Extension to build her experience in the United States and increase her profile as a potential employee. “Studying environmental laws and legislation in some of my classes has helped me prepare for interviews in my field and be competitive,” she says.

A graduate of the Professional Program in Responsible Global Change Management, she is currently enrolled in the Professional Program in Leadership in Sustainability and Environmental Management. Deiana knows that her studies at UC Berkeley Extension are paying off: She is now a recent hire in her field. “I think that demonstrating my desire to learn and continue with education helped me prove that even though I may not have a U.S. college degree and work experience, I can still be a valuable and competitive job candidate,” she says.
Equip yourself with the tools and techniques of sustainable practice in a variety of disciplines, including compliance, environmental management and transportation.

Complete a program that focuses on a cutting-edge topic in sustainability, such as responsible business practices, clean energy or sustainable transportation planning. Explore the current environmental regulations that affect your organization, or learn about the legal framework for environmental protection. You can lead the way in creating a more sustainable world, whether you work in the public, private or nonprofit sector—or simply feel compelled to make a difference.

Get the education you need to maximize your career opportunities in today’s green economy.
Call for Instructors and Course Proposals

UC Berkeley Extension invites highly qualified instructors to submit course proposals and résumés or letters of interest to jobs@unex.berkeley.edu. Information about current course offerings is available at extension.berkeley.edu.

UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO.

ENERG Y

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/environmental

Investment-Grade Solar System Feasibility Studies

X430 • 2 semester units in Natural Resources
30 GBCI CE Hours
This course is USGBC-approved for continuing education credit.

Learn to understand, analyze, plan and produce an investment-grade solar feasibility report, a tool that evaluates and justifies commercial photovoltaic projects. This advanced course includes capitalization, production, site selection, host requirements and permitting issues.

Familiarity with basic financial concepts is recommended. Working knowledge of commercial building systems and comfort level with power utilization and permitting approvals is also helpful.

EDP 323519
Ted Horton, BME, MSRED
7 meetings
Tuesdays, 6:30–9:30 pm
Feb. 14–March 13 (also Saturdays, Feb. 11 and March 17, 9 am–5 pm)
San Francisco: Downtown Center • $545

A Practical Guide to the Solar Industry

X411 • 2 semester units in Natural Resources
Gain a comprehensive understanding of the solar technology industry. Review the basics of solar, electric and thermal technologies; industry economics and dynamics; policy drivers; utility structure; and careers and business opportunities. Focusing on the California market, you learn about various factors that shape how, where and how fast solar technology is being deployed and ways to pursue a career in the solar industry. Investigate barriers and enablers in meeting California’s solar energy goals, and examine utility industry structure and regulation, as well as the integrated relationship between energy efficiency and solar technology.

EDP 323535
Liz Merry, M.B.A.
4 meetings
Saturdays, 9 am–5 pm
April 7–28
Berkeley: Golden Bear Center • $595

Solar Energy: Understanding Policy-Driven Markets

X432 • 1 semester unit in Natural Resources

Get an overview of major solar markets and key solar policy drivers in the United States, real-world case studies of successful solar programs and the policy and advocacy processes behind them. Leave the class understanding critical drivers of solar markets and how to effect changes. You will be able to evaluate solar markets, promote adoption and advance business opportunities.

EDP 323592
Claudia Eyzaguirre, B.S.
5 meetings
Tuesdays, 6:30–9:30 pm
Feb. 21–March 20
San Francisco: Downtown Center • $395

Introduction to Renewable Energy Technologies

X450 • 2 semester units in Natural Resources

Energy generation and supply are changing due to increased political action and awareness about overall costs, consumption of natural resources and impacts on climate change. Whether you are a technical or nontechnical professional, gain a broad understanding of energy generation and supply, its problems and new technologies that supply renewable energy (wind, solar, water, biomass and geothermal). Through lectures and industry speakers, you learn the fundamentals of each technology as well as advantages and disadvantages. You also review the U.S. electricity system and examine novel energy-efficient production technologies, combined heat and power (CHP) and demand-side management. Prepare to examine U.S. energy supply, trends and policy and the related issues in rural and developing countries.

EDP 323584
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–March 20
Berkeley Campus: 50 Barrows Hall • $580
Smart Grids: Introduction
X423 • 1 semester unit in Electrical Engineering
A requirement in the Professional Series in Smart Grid Technology
Learn about the new intelligent energy grid that supports the green-energy initiatives of the 21st century. Study real-world value propositions, business perspectives and solution scenarios from business economics and technical practicalities points of view. Discover the evolution of today’s power distribution grid and the potential benefits from dynamically applying intelligence for improved efficiencies. This course lays a solid technical foundation for business professionals and a contemporary overview for technical staff; it is ideal for proposal staff, product developers, system managers and urban planners.
EDP 313643
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
Feb. 11 and 25
Belmont: Belmont Center • $475

Smart Grids: Energy-Efficient Transmission
X423.1 • 1 semester unit in Electrical Engineering
A requirement in the Professional Series in Smart Grid Technology
From long-distance high-voltage transmission lines through neighborhood distribution to the smart meter in the residential dwelling, this survey course covers the technical, economic and environmental issues of energy transmission. You learn about the challenges of high-power interconnections and review quality considerations. You then advance to the intricacies of outage management systems, reliability benefits of substation automation, economics of capital deferral, energy loss mitigation using DC transmission, interfacing with demand control systems and infrastructure security. This course lays a solid technical foundation for proposal staff, product developers, system managers, urban planners and business professionals, as well as a contemporary overview for technical staff.
EDP 313650
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
March 3 and 10
Belmont: Belmont Center • $475

Smart Grids: Command and Control
X423.2 • 1 semester unit in Electrical Engineering
A requirement in the Professional Series in Smart Grid Technology
The futuristic AC smart grid is built upon the concept of computerized command and control over a parallel data network in order to improve efficiency and reliability of electrical power distribution. In this survey course, you first review the communication technology for distribution automation of AC energy and then advance into technology trade-off considerations. You build a foundation for understanding the control network from the generation site to the end appliance in a residential home, including networking theory, trade-offs of various radio technologies, protocols and security issues.
EDP 313668
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
March 17 and 24
Belmont: Belmont Center • $475

Smart Grids: Metering and Home Area Networks
X423.3 • 1 semester unit in Electrical Engineering
A requirement in the Professional Series in Smart Grid Technology
Today’s utility industry is delivering greener power at impressive efficiencies by tapping into the smart grid business model using consumer portals, automatic sensors, home networking and advanced metering infrastructure. Gain a solid technical foundation for understanding smart meters and home power networking, including OpenHAN system requirements, modern wireless sensor networks, home automation and ZigBee Smart Energy. This course is ideal for proposal staff, product developers, system managers, urban planners and business professionals and is a contemporary overview for technical staff.
EDP 313676
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
March 31 and April 7
Belmont: Belmont Center • $475

Professional Program in Sustainability and Energy
Whether you work in the public or private sector—from government agencies and nonprofit organizations to utility companies, energy consulting firms, and other businesses—prepare yourself to manage energy use and its impact on the environment. Examine energy sustainability from the perspectives of technology, municipal planning, and policy, and learn to develop sustainable energy systems successfully. Understand the impact of current energy use patterns on climate change and of climate change law on local governments and businesses. This program is ideal if you wish to change or advance your career. It enables you to assess, analyze and manage issues related to energy use, climate change and sustainability.

Curriculum Requirements
The program consists of 2 academic credit courses and 2 one-day workshops for a total of 2 semester units and 1.4 ceu (44 hours of instruction).

Required Courses
• Climate Change and Law AB 32: What It Means for You
• Energy for Sustainability: Technology, Planning, and Policy X436
• Energy Use and Climate Change X435
• Introduction to Sustainability Management

Learn More and View the Brochure
extension.berkeley.edu/spos/energy.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 302935

ENROLL NOW VISIT EXTENSION.BERKELEY.EDUCALL (510) 642-4111
This entry-level program provides a solid foundation in smart grid technology (SGT), including a technical overview of networking, electrical engineering and power transmission and distribution. In addition to a wide range of smart grid theory, you study deployment issues, vendors, demand shaping and statutory and regulatory requirements—instruction that prepares you to seize new opportunities in the emerging field of networked power.

If you are a sustainability professional looking for increased technical knowledge or a technology worker interested in migrating to SGT, this program provides the knowledge you need. The program is also an excellent fit if you are an urban planner, home developer, real estate professional or policy maker looking for increased technical knowledge to translate the success of the online network effect into that of smart objects. Taking smart energy grids as a model, you investigate topics such as wireless sensor network issues, the role of middleware, radio frequency identification (RFID) and sensor network technologies and security and privacy issues.

**EDP 313684**
Michael Hsieh, Ph.D.
2 meetings
Saturday, 8:30 am–5 pm
April 14 and 21
Belmont: Belmont Center • $475

**Smart Grids: Microgrids**
X423.5 • 1 semester unit in Electrical Engineering

A requirement in the Professional Series in Smart Grid Technology

Microgrids can be an ideal way to intelligently integrate renewable resources, enable customer participation, add reliability, bring diversification of energy sources, reduce carbon emissions and lower life-cycle costs. Microgrids are the local-level building blocks of the modern, smart power grid. Examine a variety of microgrid topics, including distributed generation, wind, photovoltaics, fuel cells, supervisory control and data acquisition (SCADA) systems, securing smart grids, matching community needs, and smart meters and devices.

**EDP 313692**
Michael Hsieh, Ph.D.
2 meetings
Saturday, 8:30 am–5 pm
April 28 and May 5
Belmont: Belmont Center • $475

NEW THIS TERM

**Smart Grids: Energy-Efficient Buildings**
X423.6 • 1 semester unit in Electrical Engineering

Get a structured overview of smart green buildings. Start with the demand-side management from the energy service provider’s point of view, including the measures of user demand response and energy-efficiency strategies. Gain an understanding of rate structures, energy usage patterns, energy-saving measures for mechanical systems, lighting, motors, appliances, building envelope trade-offs, connecting alternative energy systems and integration with modern green building practices.

**EDP 313700**
Michael Hsieh, Ph.D.
2 meetings
Saturday, 8:30 am–5 pm
May 12 and 19
Belmont: Belmont Center • $475
CEQA Update
0.7 ceu • MCLE credit: 7 hours
This is an important update for planners, attorneys and others involved in land use issues who need to keep up with changes in the use and application of the California Environmental Quality Act (CEQA). The course covers the application of CEQA to special situations, its current use in the environmental impact report process and new legislation of specific relevance to it. Case law is used to focus on changing agency guidelines and interpretations of what constitutes “substantive legal adequacy” of an environmental analysis. Planners, officials and industry representatives should find this course of particular interest. Some knowledge of or experience with CEQA is recommended.

EDP 32352
Jennifer Hernandez, J.D.
1 meeting
Friday, 9 am–5 pm
April 6
San Francisco: Downtown Center • $375

Environmental Management

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/environmental

Managing Sustainable Change in an Organization
X417 • 1 semester unit in Natural Resources
(formerly Overcoming Barriers to Implementing Sustainable Change)
A requirement in the Professional Program in Responsible Global Change Management; an elective in the Professional Program in Leadership in Sustainability and Environmental Management and in the Certificate Program in the Essentials of Green Chemistry
The day-to-day work of implementing organizational change for improved sustainability at the global or local level is challenging and complex. The implementation techniques presented in this course enable sustainability coordinators, green-team staffers and environmental health and safety staff to overcome psychological, technical and financial barriers. Topics include modern sustainability principles and models, community-based social marketing, technical feasibility studies, life-cycle cost-benefit analyses and the role of persuasive narratives to quickly generate support for green projects.

EDP 323691
Justine Burt, M.S.
5 meetings
Thursdays, 6:30–9:30 pm
Feb. 9–March 8
Berkeley Campus: 136 Barrows Hall • $395

Corporate Social Responsibility Reporting
0.7 ceu
A requirement in the Professional Program in Corporate Social Responsibility Reporting
Study the principles and methodology of corporate social responsibility (CSR) reporting according to the Global Reporting Initiative (GRI) standards. Gain insight to key benefits of sustainable corporate citizenship practices, and learn to articulate and professionally communicate them to stakeholders. Examine real-life case studies and sample reports, and practice hands-on exercises in evaluating quality of report content. Learn the systematic report development process, which includes researching, preparing, connecting, defining, monitoring and reporting on sustainable initiatives information.

EDP 32358
Gary Lucks, J.D., CPEA
1 meeting
Friday, 9 am–5 pm
March 2
San Francisco: Downtown Center • $350

New technologies can help counteract the effects of global change in several dynamic fields, and this program provides the ideal preparation. By examining a wide range of issues and career options related to sustainability, you get an introduction to the interrelated issues of environmental quality, sustainability and ecosystem health presented in language relevant to businesses, governments and nonprofit organizations. You also learn best practices and leadership skills that result in career success. With a deep understanding of sustainability and environmental management principles, you are able to analyze issues faced by businesses and policy makers—whether you are an environmental or sustainability manager, planner, consultant or business owner.

Curriculum Requirements
The program consists of 2 courses and 4 one-day workshops for a total of 2 semester units and 2.8 ceu (58 hours of instruction).

Required Courses
• Climate Change and Law AB 32: What It Means for You
• Introduction to Ecological Asset Management (offered this term)
• Introduction to Environmental Management
• Introduction to Sustainability Management
• Overcoming Barriers to Implementing Sustainable Change X417 (offered this term)
• Sustainability Leadership: Strategies and Paradigms X419 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/spos/globalchange.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 302969
Sustainability Leadership: Strategies and Paradigms
X419 • 1 semester unit in Natural Resources
A requirement in the professional programs in Responsible Global Change Management in Corporate Social Responsibility Reporting and in Leadership in Sustainability and Environmental Management; an elective in the Certificate Program in the Essentials of Green Chemistry
Examine the fundamental qualities, attributes and competencies to be an effective sustainability leader. Learn how to determine whether your company is organized in a sustainable manner. This course also helps you understand what is required of you as a leader when the demands of declining resources affect your company’s bottom line. Learn how to effectively communicate sustainability in your work environments; link green initiatives to cost savings and brand recognition; and engage shareholders and stakeholders in making decisions that move individuals, teams and companies toward sustainability. Enrollment is limited.
EDP 323527
Miriam Karel, M.S.L.S.
5 meetings
Thursdays, 6:30–9:30 pm
May 3–31
San Francisco: Art and Design Center • $475
Introduction to Climate Change, Environment and Sustainability
X444 • 2 semester units in Natural Resources
A requirement in the Professional Program in Leadership in Sustainability and Environmental Management
Learn basic concepts of environmental, ecological, agricultural and related health sciences topics. Review scientific evidence and examine issues related to natural cycles of the biosphere, biodiversity, ecological restoration and environmental management. Study a broad spectrum of interrelated global issues through hands-on case studies in which you are equipped with knowledge to begin planning for a sustainable future.
EDP 323733
William G. Coleman, B.A.
5 meetings
Saturdays, 9 am–4 pm
Jan. 7–Feb. 4
Belmont: Belmont Center • $695
New This Term
Food and Beverage Processing and Packaging
X462 • 2 semester units in Natural Resources
Understand the science and economics of food processing and packaging. Learn to make decisions based on facts, with realistic responses to balance popular myths and stereotypes. Understand the reasons people eat and drink and process and package food. Examine industry definitions of food processing, including the meanings of fresh, spoiled and organic and the more than 13 ways of preserving foods and beverages. Study the technology of making and using packages and the business of selling products. Learn to differentiate between real and imagined dangers, and explore the environmental concerns that arise from modern food processing and packaging.
EDP 323725
Allan L. Griff, M.Chem.Eng., M.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 3–March 6
Berkeley: Golden Bear Center • $595
Plastics and the Environment
X463 • 2 semester units in Natural Resources
Explore the impact of plastics on the environment, and learn to understand the relevant science in laypeople’s terms. Examine how plastics are made and how they differ from one another; then, study material sourcing, energy needs, permanence vs. degradability and other environmental issues. Study in detail four case studies in plastics: bisphenol A, grocery bags, polyvinyl chloride and polystyrene foam. Throughout the course, you consider the roles of governments and media and the lifestyles and anxieties that drive public attitudes about plastics.
EDP 323717
Allan L. Griff, M.Chem.Eng., M.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 14–May 16
Berkeley: Golden Bear Center • $595
Sustainable Remediation Methods for Soils and Water
X465 • 2 semester units in Natural Resources
Learn about site contaminant and site remediation of contaminated soil and water.
For course details, see p. 138.
Policy, Legislation and Compliance

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/subject/environmentalpolicy.html

Fundamentals of Environmental Protection and Regulatory Compliance
X445 • 1 semester unit in Natural Resources
An elective in the Professional Program in Leadership in Sustainability and Environmental Management

Learn the fundamentals, strategies and techniques for implementing and managing environmental protection and related regulatory compliance. Understand the methods for effective implementation and compliance with California and federal environmental regulations regarding air quality, water quality, greenhouse gas accounting and overall sustainability. Learn proven techniques and critical skills to articulate, advocate and demonstrate the cost and benefit of proposed programs to stakeholders and gain their support. As emerging environmental professionals, prepare to start or advance your career in the expanding green economy.

EDP 323386
Rebecca Anderson, MEHS
2 meetings
Saturdays, 9 am–5 pm
Jan. 21 and 28
Berkeley Campus: 50 Barrows Hall • $550

Environmental Law and Regulation
X440 • 2 semester units in Public Health
MCLE credit: 30 hours
A requirement in the Professional Program in Leadership in Sustainability and Environmental Management

Study federal, state and local environmental regulations from the perspective of permitting and operational compliance. You get an overview of the key program elements that environmental managers, regulators and consultants need to know. Discussions cover environmental permitting and the California Environmental Quality Act (CEQA), industrial operations and compliance auditing, reporting obligations and cleanup responsibilities and other programs necessary for a complete understanding of the multimedia environmental regulatory framework in California.

EDP 323576
Gary Lucks, J.D., CPEA
4 meetings
Fridays and Saturdays, 9 am–5 pm
April 6–14
San Francisco: Downtown Center • $495

Introduction to Greenhouse Gas Management
0.7 ceu
Prepare to meet California climate change legislation (AB 32) requirements, and learn the latest policies, concepts, methods and tools supporting management of greenhouse gases (GHGs). Study the relationship of GHGs to environmental quality management, sustainability and the emerging market for pollution prevention credits. Understand the significance of GHGs from the perspectives of climate change, sustainability, human health and social welfare. Examine technology options for controlling GHG emissions and mitigating atmospheric carbon dioxide. Learn business development and career opportunities in emerging GHG management markets.

Some professional or technical training and familiarity with science and engineering concepts is recommended.

EDP 323758
William G. Coleman, B.A.
1 meeting
Saturday, 9 am–5 pm
March 3
San Francisco: Downtown Center • $295

Introduction to Ecological Asset Management
0.7 ceu
A requirement in the Professional Program in Responsible Global Change Management

Learn the principles of ecosystem services within the emerging ecological economy. Study the innovative method of ecological asset management for managing investments in sustainable ecosystem services, and explore how these principles are being applied by federal and state agencies in making effective environmental policies. Study certifiable standards and field practices of how natural and human capital are being preserved, restored and enhanced. Review eco-asset-management case studies, and explore the critical role such management can play in enhancing the triple bottom line: financial, environmental and social.

Professional or technical training and familiarity with science or engineering concepts is recommended.

EDP 323741
William G. Coleman, B.A.
1 meeting
Saturday, 9 am–5 pm
Feb. 25
San Francisco: Downtown Center • $295

Professional Program in Leadership in Sustainability and Environmental Management

Take advantage of new opportunities in the emerging global green economy with a structured selection of courses on sustainability leadership and change management, environmental law and policy, compliance management systems and climate change risk-mitigation strategies. In addition to learning how to implement sustainability practices in cost-effective ways in public and private sectors worldwide, you acquire a set of management tools based on sustainability leadership principles. Upon successful completion of the program, you are proficient in the language of the industry and able to understand, research, analyze and articulate the industry’s viewpoints in a professional manner. You are also prepared to further develop advanced expertise and responsibility within the context of sustainability principles.

Curriculum Requirements
The program consists of 4 required courses and 1 elective for a total of 8 semester units (120 hours of instruction).

Required Courses
• Environmental Law and Regulation X440 (offered this term)
• Environmental Management Systems and ISO 14000 X422
• Introduction to Climate Change, Environment and Sustainability X444 (offered this term)
• Sustainability Leadership: Strategies and Paradigms X419 (offered this term)

Electives
For a list of electives available this term, visit extension.berkeley.edu/spos/sustman.html.

Learn More and View the Brochure
extension.berkeley.edu/spos/sustman.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 302985
Buddy Burke, who holds a bachelor’s degree in management from Valdosta State University in Georgia, is a retired Air Force and commercial airline pilot. With interests in public service and the environment, Burke is enjoying a second career as a business consultant—and as a lifelong learner. His reason for enrolling at UC Berkeley Extension is straightforward: “I just simply wanted to learn more,” he says.

UC Berkeley Extension allows Burke to pursue his passions with the right knowledge and mentoring. In the course Writing as a Practice with instructor Jane Anne Staw, her ability to know the individual needs of each student still impresses him. “Jane Anne Staw is wonderful,” Burke says. “She made it seem like each of us was receiving her undivided attention.”

Burke describes his time in class, in courses such as Using Your Voice as a Sales Tool, as “pure enjoyment.” In fact, he still meets regularly with former classmates from his Sustainable Energy: Comparing the Alternatives course to discuss current issues in the field.

“UC Berkeley Extension met my expectations in unexpected ways,” he says.
Broaden your intellectual perspective with UC Berkeley Extension, and change the way you view the world. An array of courses in history, literature, philosophy, culture, cuisine and personal development provides options to suit your interests. Explore the historical context of the classics, gain a greater appreciation of diverse religions, develop your communication skills or refine your palate with a program on fine wines.

You can also study a language to enrich your social, cultural and professional experiences. Whether you want to brush up on your conversational French or learn Mandarin for your next business trip to China, UC Berkeley Extension has the right course for you.

Extension courses offer the academic excellence you expect from a world-class university—and the opportunity to learn from both knowledgeable instructors and fellow students who share your passion for ideas.
The Development of World Civilization: The Neolithic Age to the Renaissance
X19 • 3 semester units in History
Get a comparative study of world civilizations from prehistoric times to the European Renaissance, focusing on spiritual, political, intellectual and artistic developments. Learn about ancient civilizations of Sumer, Egypt, Persia and Greece; the beliefs and social organizations of India, China and Japan; the rise and fall of imperial Rome and China; pre-Columbian America and early-African cultures; the Mongol conquest of Eurasia; medieval culture and the tension between East and West; and the shift toward modernity in the Renaissance.

EDP 867747
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

The Development of World Civilization: 1500 to the Present
X24 • 3 semester units in History
Engage in a comparative introduction to the major cultures of the world since 1500, focusing on social, political, intellectual and artistic developments and responses to the dynamics of modernity. Learn about the civilizations of the Western Hemisphere, Africa and the Middle East; the beliefs and social organization of India, China and Japan; European political and intellectual revolutions; the World Wars and the Cold War; anticolonialist movements; and today’s political, economic and environmental configurations across many regions.

EDP 867754
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

Introduction to the History of the United States: From Colonial Settlement to the Civil War
XBW7A • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 224.
Sharpen your understanding of the people, institutions and ideologies that shaped the formation of the United States. Topics include exploration, settlement, colonial culture, the winning of independence, the Constitution, the new democracy, early-American technology, expansionism, sectional conflict, the Civil War and Reconstruction. Gain practice in analytical methods that historians use to research facts and develop interpretations of events.

EDP 897835
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

Important: Special academic policies apply to XBW courses. See p. 224.
Survey U.S. history from the 1870s to the new millennium, and increase your knowledge of events, institutions and prominent historic figures while developing skills in historical analysis and interpretation. Topics include the settlement of the West, industrial growth, progressivism, the emergence of a consumer culture, the causes and effects of the principal wars since the Civil War, affluence and scarcity since World War II, the cultural revolution of the 1960s, Watergate and the resurgence of conservatism.

EDP 897843
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770
### Principles of Sociology: A Multicultural Perspective

X2 • 3 semester units in Sociology

Examine the basic topics, concepts and principles of sociology. Consider the influence of social phenomena on human behavior, using comparative multicultural and cross-cultural approaches drawing on current, relevant examples. Topics include social ranking and mobility, crime and deviance, poverty, racial and ethnic minority status, gender discrimination, aging as a social process, family, economic systems, political systems, religion, health care, education and types and theories of social change.

**EDP 867796**
Gwymne Pacheco, Ed.D.

Enroll anytime
Online, proctored final exam • $760

### Introduction to American Politics

XBW1 • 4 semester units in Political Science

**Important:** Special academic policies apply to XBW courses. See p. 224.

Explore the theoretical implications of democracy and justice in this in-depth look at the structure of the U.S. political system. Analyze the basic workings of the Constitution and the institutions of the federal government, including Congress, the presidency, the judiciary and governmental bureaucracy. Examine the system of electoral politics—including parties, interest groups, social movements, public opinion and participation—as well as several areas of public policy: defense, foreign policy, civil rights and liberties, social spending, welfare reform and the economy.

**EDP 897850**
Nina Clark, Ph.D.

Enroll anytime
Online, proctored final exam • $760

### The Dialectical Logic of Hegel

X166 • 2 semester units in Philosophy

No major philosopher in the western tradition has ever made bolder claims on behalf of philosophy and thought than Georg Wilhelm Friedrich Hegel. The key to his system was his unique dialectical method of speculation. Yet that method has rarely been directly studied. This course offers a rare opportunity to understand Hegel’s dialectical logic by analyzing Hegel’s most important ontological work *The Science of Logic*. Through reflection on its three stages of Being, Essence and Concept you learn how Hegel conceived the underlying dynamics of reality. The course also locates Hegel’s logic within his whole system comprising Logic, Nature and Spirit, and it delineates the vast influence of Hegel’s philosophy on subsequent European thought.

**EDP 023440**
Josef Chytry, Ph.D., Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Feb. 7–April 17 (no meeting March 27)
Berkeley Campus: 104 Barrows Hall • $225

### The History of the English Language

X102 • 4 semester units in English

The varieties of written and spoken English are astounding and can be perplexing to anyone who has encountered the likes of reggae lyrics, the writings of Geoffrey Chaucer or the litting drawings of the Old South. Examine the grammatical and semantic structure of English as it has evolved over centuries, with attention to the nature and function of languages in general, illuminating the connections between language and other elements of culture.

**Prerequisites:** Access to the Oxford English Dictionary (most libraries now have the compact edition) and the Oxford Dictionary of English Etymology is necessary. You can subscribe to the OED online at http://oed.com/subscribe. Access to a library is recommended.

**EDP 857508**
Gary Tombreson, Ph.D.

Enroll anytime
Online, proctored final exam • $770

### Mystery Fiction

X103.9 • 3 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing; recipient of the Helen Williams Award for Excellence in Collegiate Independent Study from the American Association of Collegiate Independent Study

Survey mystery fiction and its conventions, from the genre’s 19th-century origins to the classic Golden Age puzzle to the hard-boiled American female detective fiction of the 1990s. Understand the mystery novel’s status as a significant form of modern fiction, one that explores how human consciousness makes sense out of what might otherwise be viewed as random experience and meaningless violence.

**EDP 867606**
Mary Ann Koory, Ph.D., Extension Honored Instructor

Enroll anytime
Online, proctored final exam • $715

### Gender and Nation in 20th-Century British and Anglophone Women’s Literature

X474 • 2 semester units in English

Survey British and Anglophone women’s fiction across the 20th century, from the modernist literary experiments of Virginia Woolf to the post-colonial novels of Zadie Smith. Also, take a mid-century excursion through the social comedy and critique of Barbara Pym and Jean Rhys. Explore issues of gender and national identity from a variety of perspectives and literary styles through novels that have had a global impact on what it means to be a writer.

**EDP 023531**
Catherine Hollis, Ph.D.
10 meetings
Mondays, 6:30–9:30 pm
Feb. 27–April 30
Berkeley Campus: 54 Barrows Hall • $275

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**Free Public Event**

### 31st-Annual Panel on the Presidency

**Election Year: The Obama Presidency and the 2012 Campaign**

As President Obama seeks a second term, examine his presidency and the 2012 election in a panel discussion that debates the following questions: Is the president to blame for the stagnant economy that has bedeviled his administration? Would any president have been able to engineer a speedier economic recovery? How has the president managed the foreign policy challenges of his time? Has he met the need for symbolic leadership from the president? And what of the Republicans who seek to replace him? Four years after a dramatic election that made American history, what should we expect from the election of 2012? Get answers to these provocative questions in an intelligent evening devoted to issues that carry much importance as the nation heads toward the 2012 presidential election.

**EDP 023366**
1 meeting
Monday, 7:30–9:30 pm
March 12
Berkeley Campus: 105 Stanley Hall
FREE
The Oxford Berkeley Program
For more than 40 years, the Oxford Berkeley Program has welcomed adults from all walks of life to experience the rich tradition and intellectual challenge of living and studying at the University of Oxford. Join us in summer 2012, and become part of this exciting intellectual tradition.

2012 Seminars
Britain in the Age of Total War, 1914–1963 (FULL)
Capability Brown and All That: Politics, Painting and Planting in the English Landscape Garden
The Elizabethan World
English Cathedrals and Monasteries in the Middle Ages
Excellent Tragedie: Shakespeare’s Tragic Worlds
Haunted Cities, Twisted Minds: The Victorian Gothic
House of All Rarities: English Country House Collections, 1660–1900 (FULL)
The Rise and Fall of the English Medieval Castle
Science Fiction, Science Fact: Alternative Views of the Future
Words and War: British Literature of the Second World War

Learn More extension.berkeley.edu/oxford (510) 642-3824 travel@unex.berkeley.edu

The English Novel
X125 • 4 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Survey the English novel by reading authors such as E.M. Forster, Anthony Trollope, Charles Dickens, Charlotte Brontë, George Eliot, Oscar Wilde, Thomas Hardy and Robert Louis Stevenson. Gain perspective on this literary form with emphasis on how moral, social, psychological, political and philosophical problems were perceived during the Victorian and Edwardian periods.
EDP 897520
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $770

American Fiction
X135A • 3 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Survey the major American novelistists and short-story writers of the 19th and early 20th centuries, including Mark Twain, Edgar Allen Poe, Stephen Crane, Herman Melville, Edith Wharton, Nathaniel Hawthorne and Jack London. In addition to learning about various literary movements such as romanticism, realism and naturalism, you consider questions of aesthetics, morality, poverty, racism, gender and power.
EDP 867622
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $715

Shakespeare
XBW17 • 4 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Important: Special academic policies apply to XBW courses. See p. 224.
Study five of William Shakespeare’s plays (The Taming of the Shrew, Richard III, Othello, Macbeth and The Tempest) recognized as literature of immense cultural importance and popular entertainment. Gain an understanding and appreciation of Shakespearean language and literary forms as well as a critical awareness of the continuing reinterpretation of Shakespeare’s plots and characters.
EDP 897827
Mary Ann Koory, Ph.D., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $770

The Art of Film
Learn the techniques of evaluating and appreciating films. For course schedule, see p. 14.

Philosophy and Religion

Comparative Philosophy
X11 • 3 semester units in Philosophy
Examine some fundamental philosophical questions from a variety of perspectives, including classical Western philosophy; Eastern and Western religious traditions; and specific cultural viewpoints, including feminist, Native American and African thought. The course is intended not as a survey of these various philosophical systems, but as an introduction to basic themes in ethics, epistemology and political and social philosophy. First, learn how these themes are defined in Western philosophy and then how they are approached in other systems of thought.
EDP 867523
Joseph Michael Fedel, M.A.
Enroll anytime
Online, proctored final exam • $715

History of Western Philosophy from the Pre-Socratic Period to the End of the Middle Ages
X20A • 3 semester units in Philosophy
Get an introduction to major philosophical concerns and concepts in Western thought, beginning with early texts in which philosophy first becomes distinguishable from myth and concluding with the philosophical debates of medieval Christianity. Explore philosophical questions relating to politics, metaphysics, natural science, logic, ethics and aesthetics. The philosophers covered include Plato, Aristotle, St. Augustine and Thomas Aquinas.
EDP 867531
Joseph Michael Fedel, M.A.
Enroll anytime
Online, proctored final exam • $715

Views of the Absolute in World Religions
X10 • 3 semester units in Religious Studies
Religion has been a fundamental part of the social, cultural and political fabric of civilizations throughout history. Explore the important aspects of several important world religions, focusing on their definitions of the absolute (for example, God, Tao, the void) and how the individual relates to it. Diverse religions are covered, including Islam, Judaism, Christianity, Hinduism, Taoism, Buddhism and Native American traditions.
EDP 867549
Joseph Michael Fedel, M.A.
Enroll anytime
Online, proctored final exam • $730
How Relationships Work
Everyone experiences love differently, but for most people to feel loved, five qualities stand out: attention, acceptance, appreciation, affection and the freedom to live in accordance with their deepest personal needs. Examine the nature of intimate relationships, and learn skills to make relationships more effective. Explore the stages and aspects of love and relationships, and learn techniques to resolve conflict and build an enduring bond.
EDP 023309
David Richo, Ph.D., MFT
1 meeting
Saturday, 9:30 am–4:30 pm
Feb. 4
San Francisco: Art and Design Center • $175

Speaking and Presentation Skills
2.4 ceu
Become a comfortable, compelling speaker by building rapport with your audience and delivering your message clearly. Learn to handle your nerves and speaking fears. Study methods to assess your audience and organize your information. Learn tips for managing a successful Q&A, and study the effective use of visuals and Microsoft PowerPoint. Weekly practice and coaching give you confidence and encourage you to develop your personal speaking style.
EDP 023382
Deborah Biron, B.A.
8 meetings
Wednesdays, 6–9 pm
Jan. 18–March 7
San Francisco: Art and Design Center • $445

Wine and Food Studies
Fundamentals of Wine Studies I: Wines of California and Europe
2.4 ceu
A requirement in the Professional Sequence in Wine Studies
Explore the characteristics of different wine types, the methods of production and aging and the history of California’s wine industry. Learn tasting techniques and the proper care and serving of wine. Tastings of representative California, French, German, Italian, Spanish and Portuguese wines follow the lectures, with emphasis on comparing Californian and European wines of similar types.
Note: Bring six wineglasses to each session. You must be at least 21 years old to enroll in this course.
Sec. 1 EDP 023457
David Lee, B.S., CSW
8 meetings
Thursdays, 6:30–9:30 pm
Feb. 2–March 22
Belmont: Belmont Center • $495
Sec. 2 EDP 023390
Christopher Greene, B.A.
8 meetings
Wednesdays, 6:30–9:30 pm
March 28–May 16
San Francisco: Art and Design Center • $495

Wines of Germany and Eastern Europe
1.8 ceu
An elective in the Professional Sequence in Wine Studies
Savvy sommeliers love food-friendly German and Austrian wines, and the wines from other Eastern European countries are stepping into the international spotlight as vintners reclaim and modernize their ancient wine-making traditions. In this class, you taste wines from all of these areas to gain an in-depth knowledge of the characteristics of different grapes and growing regions. You also learn about each country’s geography, history and modern wine-making philosophy.
Note: Bring six wineglasses to each session. You must be at least 21 years old to enroll in this course.
EDP 023408
Christopher Greene, B.A.
5 meetings
Tuesdays, 6:30–9:30 pm
April 24–May 22
San Francisco: Art and Design Center • $355
**Which Language Course Is Best for You?**

Select a course based on your knowledge of the language and the prerequisites listed for each course. After the first class session, if you have placed yourself incorrectly, you may transfer to an appropriate-level course if space permits.

**Note:** Enrollment in all language courses is limited, and early enrollment is advised.

**Level I**
A beginning course for those who have little or no background in the language.

**Level II**
For students who can communicate with relative ease in a limited range of everyday situations (for example, greetings, introductions, getting around, shopping, ordering food and expressing simple feelings and wants).

**Level III**
For students who can converse on more complex subjects in present, past and future tense. Students in Level III courses typically finish a first-year college-level textbook by the end of the course.

**Level IV**
For students who have been introduced to major grammatical forms and who want to build fluency. Students in Level IV courses typically review grammar and read short stories and articles from magazines and newspapers.

**Level V and Higher**
These courses are for students who have good speaking and reading knowledge of the language and can engage in spontaneous conversations and discussions.

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**Languages**

**COURSE INFORMATION**

<table>
<thead>
<tr>
<th>Code</th>
<th>Instructor</th>
<th>Meetings</th>
<th>Location</th>
<th>Fee</th>
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**Chinese**

**Mandarin I**

X22 • 2 semester units in East Asian Languages

Learn basic pronunciation, sentence patterns and reading and writing characters in this introduction to Mandarin Chinese. By the end of the course, you should be able to pronounce the sounds of Mandarin with reasonable accuracy; introduce yourself and others; accept and decline simple invitations; and discuss nationalities, occupations and family relationships. You should also be able to read and write 135 simplified characters and their corresponding pinyin romanization. *Enrollment is limited.*

**EDP 023325**

Natalija Wible, M.A., Extension Honored Instructor

18 meetings

Mondays and Thursdays, 6:30–9 pm
Jan. 30–April 2 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $545

**Mandarin II**

X23 • 2 semester units in East Asian Languages

Increase your general comprehension and facility with the language. By the end of the course, you should be able to place a simple restaurant order, tell time, talk about daily activities, discuss appointments and holidays, describe clothing and homes, make and respond to suggestions and ask for and give opinions. You should also be able to read and write 300 simplified characters and their corresponding pinyin romanization. *Enrollment is limited.*

**Prerequisite:** Mandarin I X22 or equivalent

**EDP 023333**

B. Paul Jia, M.A.

15 meetings

Mondays, 6:30–9:30 pm
Jan. 30–May 14 (no meeting Feb. 20)
San Francisco: Downtown Center • $545

**Mandarin IV**

X25 • 2 semester units in East Asian Languages

Further develop your expressive power in Chinese. Topics and language functions include showing concern, discussing plans, making suggestions, identifying directions and locations, describing and commenting on past events and experiences and talking about actions in progress. You learn to use about 180 new characters in different words and phrases and in various contexts.

**Prerequisite:** Mandarin III X24 or equivalent

**EDP 023341**

B. Paul Jia, M.A.

15 meetings

Wednesdays, 6:30–9:30 pm
Feb. 8–May 16
San Francisco: Downtown Center • $545

**French**

**French I**

X15 • 2 semester units in French

Get an introduction to the basic structures of French. By the end of the course, you should be able to greet others; ask and answer questions; and express basic feelings, intentions and reactions. *Enrollment is limited.*

**EDP 023275**

Catherine Philippon, M.A., Extension Honored Instructor

10 meetings

Wednesdays, 6:30–9:30 pm
Jan. 18–March 21
Berkeley: Golden Bear Center • $425

**French II**

X16 • 2 semester units in French

Develop your conversational fluency in the present, past and future tenses. Learn to share knowledge and express values and opinions. *Enrollment is limited.*

**Prerequisite:** French I X15 or the equivalent

**EDP 023283**

Marie-Claude Le Gall

10 meetings

Thursdays, 6:30–9:30 pm
Jan. 19–March 22
San Francisco: Art and Design Center • $425

**German**

**Introduction to Conversational German**

X15 • 3 semester units in German

Gain an understanding of the German language, even if you have no prior experience. Learn to conjugate verbs in the present tense, meet people, make introductions and talk about yourself and your family. By the end of the 10-week course, you should be able to carry on a simple conversation with a native German speaker.

**EDP 023267**

Hamid Emami, M.A.

15 meetings

Mondays, 6:30–9:30 pm
Feb. 6–May 21 (no meeting Feb. 20)
Berkeley Campus: 78 Barrows Hall • $545
### Greek

**Attic Greek I**  
X13 • 3 semester units in Classics  
Get an introduction to Attic Greek, the language of Thucydides, Plato and the Greek tragedians. Your study of grammar, syntax and vocabulary helps you appreciate not only the unique and influential work of the Greeks but also the universal way humans think and communicate. By the end of the semester, you should be able to read simple Greek sentences and understand the complexities involved in interpretation of Greek grammar and lexicon. Class work is based on the problem-solving approach and done in groups under the supervision of the instructor.  
EDP 023259  
Rali Christo, Ph.D.  
15 meetings  
Saturdays, 10 am–1 pm  
Feb. 4–May 19 (no meeting Feb. 18)  
Berkeley: Golden Bear Center • $545

### Latin

**Latin I**  
X20 • 3 semester units in Classics  
This course provides an introduction to the grammar, syntax and vocabulary of classical Latin. Instruction includes passages from Roman poets such as Catullus, Horace, Virgil, Ovid and Martial, as well as from great prose writers and thinkers such as Cicero. Enrollment is limited.  
EDP 023317  
Rali Christo, Ph.D.  
15 meetings  
Saturdays, 2–5 pm  
Feb. 4–May 19 (no meeting Feb. 18)  
Berkeley: Golden Bear Center • $545

### Spanish

**Spanish I**  
X15 • 3 semester units in Spanish and Portuguese  
Develop your ability to understand everyday spoken Spanish and to communicate in a variety of everyday situations in this introductory course. Gain the skills to greet others; ask and answer questions; improvise responses; and express basic needs, attitudes and emotions. Enrollment is limited.  
EDP 023432  
Instructor to be announced  
15 meetings  
Mondays, 6:30–9:30 pm  
Feb. 6–May 21 (no meeting Feb. 20)  
Berkeley Campus: 151 Barrows Hall • $545

**Spanish II**  
X16 • 3 semester units in Spanish and Portuguese  
In this continuation of Spanish I X15, you further develop your speaking and listening skills. Acquire new vocabulary and common expressions (modismos), and practice new grammatical structures, such as the past, future and imperfect tenses. Enrollment is limited.  
Prerequisite: Spanish I X15 or equivalent  
EDP 023374  
Juan Calvo, Ph.D.  
15 meetings  
Tuesdays, 6:30–9:30 pm  
Feb. 7–May 15  
San Francisco: Art and Design Center • $545

**Spanish for Medical Professionals**  
X410 • 2 semester units in Spanish  
An elective in the Post-Baccalaureate Health Professions Program  
This unique course offers health care professionals a thorough foundation for Spanish conversation and comprehension. In each meeting, activities and discussions emphasize the vocabulary of the medical world. Learn to conduct basic professional conversations with Spanish speakers.  
No prior Spanish experience is necessary.  
EDP 023424  
Instructor to be announced  
10 meetings  
Mondays, 6:30–9:30 pm  
March 5–May 7  
Berkeley Campus: 175 Barrows Hall • $425

### English as a Second Language (ESL)

**Course Information**  
(510) 642-1171  
askeducation@unex.berkeley.edu  
extension.berkeley.edu/subject/english.html

If you are a student or professional whose native language is not English, you can benefit from the following English as a second language (ESL) courses. Study with other professionals, and learn how to speak, write and interact with more confidence.

**Finding Your Dream Job**  
X408 • 2 semester units in Education  
Become a more effective and bold communicator with regard to your own strengths and skills. Learn critical techniques to network successfully, negotiate in global business and work situations, and prepare for interviews. In this course, you mimic many international business situations by working in teams and participating in mock interviews, self-promotion and networking exercises. Learn how to promote yourself to your best advantage.  
This course is intended for intermediate to advanced English learners.  
Sec. 1 EDP 203158  
Zuleica Acker, M.A. in TESOL  
10 meetings  
Tuesdays, 6–9 pm  
Jan. 31–April 3  
San Francisco: Art and Design Center • $550

Sec. 2 EDP 203919  
Instructor to be announced  
10 meetings  
Wednesdays, 6–9 pm  
Feb. 8–April 11  
Belmont: Belmont Center • $550

**Academic Writing for ESL**  
X400.1 • 2 semester units in Writing  
Improve your accuracy in writing mechanics, grammar, effective writing style and organizing essentials. This course is designed for intermediate to advanced nonnative English speakers who are proficient in English but need to improve their academic writing skills. Lectures and writing workshops help you in writing summaries, abstracts, technical reports and academic papers. Structured exercises and instructor feedback teach you to assess your own writing and that of your peers.  
This course is intended for intermediate to advanced English learners.  
EDP 203356  
Ben Feinbaum, M.Ed.  
10 meetings  
Mondays, 6:30–9:30 pm  
Feb. 27–April 30  
Berkeley Campus: 50 Barrows Hall • $500
Which ESL Course Is Best for You?

Intermediate courses are for nonnative speakers who:

- can speak or write in sentences or short paragraphs about familiar topics but have difficulty expressing themselves in longer paragraphs,
- have studied grammar but have trouble using correct grammar within speaking or writing contexts,
- sometimes have trouble finding the correct word or phrase to express their meaning.

High-intermediate to low-advanced courses are for nonnative speakers who:

- can speak and write with some ease in full paragraphs about a wide range of subjects, with a high degree of grammatical accuracy;
- need to improve their sensitivity to formal and informal language and the appropriateness of expressions in certain situations;
- can express their meaning but need to improve use of vocabulary and idioms.

Advanced courses are for nonnative speakers who:

- can speak and write fluently but need more complex vocabulary and grammar;
- make occasional errors in grammar and vocabulary that do not interfere with comprehension;
- can frequently, but not always, speak and write with appropriate tone and style.

You are welcome to attend the first class to consult the instructor about your English-language level, but space in the class is not guaranteed. If you have any questions, prior to enrollment, please contact the Education department at (510) 642-1171 or email questions to askeducation@extension.berkeley.edu.

Intermediate Grammar Essentials for ESL

X406 • 2 semester units in Education

Explore grammar so you can use English more effectively. Review the main types of grammar in communicative situations. Use and review grammatical structures through a variety of speaking and writing exercises. Build on prior knowledge and new grammar structures learned within class, and develop communicative competence in English as a second language.

This course is intended for intermediate English learners.

EDP 203166
Zuleica Acker, M.A.
10 meetings
Wednesdays, 6–9 pm
Jan. 25–March 28
San Francisco: Art and Design Center • $550

Advanced Grammar Skills in ESL

X402 • 2 semester units in Writing

Are problems with grammar holding you back? Designed for nonnative English speakers, this course helps perfect and polish your English grammar, with the goal of increasing your effectiveness and confidence in the workplace. Review and practice advanced grammar points in the contexts of oral communication, reading and writing.

This course is intended for advanced English learners.

EDP 203190
Steven L. West, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Feb. 21–April 24
Berkeley: Golden Bear Center • $550

Idiomatic English and Oral Communication Skills for ESL

X407 • 2 semester units in Education

Learn to communicate more fluently and naturally in many everyday situations. Using a variety of fun and engaging classroom speaking activities, build your vocabulary and your ability to use idioms to communicate more accurately and express yourself more effectively. Examine common American English idioms, expressions, slang and word combinations in popular movies, songs and texts. Learn in a lively, fun classroom environment, and build confidence in your English conversation skills.

This course is intended for intermediate to advanced English learners.

EDP 203364
Ben Feinbaum, M.Ed.
10 meetings
Thursdays, 6:30–9:30 pm
Feb. 23–April 26
Berkeley: Golden Bear Center • $550

Conversational Skills for ESL Learners and Speakers

X405 • 2 semester units in Writing

Increase your fluency, confidence and comfort level when speaking English with both native and nonnative speakers. Through constant practice, using dialogues and situational role-playing, learn strategies and specific conversational techniques to help you improve your spoken English. Learn in a lively, fun classroom environment where you can build confidence in conversing in English while further developing your speaking and listening skills.

This course is intended for intermediate to advanced English learners.

EDP 203703
Ingrid Bosetti, M.A.
10 meetings
Thursdays, 6–9 pm
March 8–May 10
San Francisco: Downtown Center • $500

Pronunciation Improvement for Effective Communication in ESL

X404 • 2 semester units in Writing

Learn how to improve your intonation, rhythm and stress patterns to speak more clearly. The instructor works closely with you to correct individual errors and gives you strategies to help improve your accent. You become a better communicator of English through intensive classroom practice and structured activities. You also become aware of your own pronunciation and learn to monitor yourself for continued improvement in the future.

This course is intended for intermediate to advanced English learners.

Sec. 1 EDP 203273
Ilze Duarte, Ph.D.
10 meetings
Saturdays, 1–4 pm
Feb. 4–April 14 (no meeting Feb. 18)
Berkeley: Golden Bear Center • $500

Sec. 2 EDP 203711
Ingrid Bosetti, M.A.
10 meetings
Tuesdays, 6–9 pm
March 6–May 8
San Francisco: Art and Design Center • $500

Certificate Program in Teaching Chinese as a Heritage/Foreign Language

Become an effective teacher of Mandarin Chinese if you are a native speaker. Prepare to work in a variety of educational settings, including charter schools, dedicated language schools, after-school and weekend programs, community colleges and universities.

See p. 119 for complete certificate details.
Get started with a free information session

Discover how UC Berkeley Extension can help you achieve your goals. Learn more about programs. Get to know instructors. Meet your fellow students. Ask questions. Visit extension.berkeley.edu/infosessions.

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Professional Sequence in Sales Management (p. 85)
Open House: Specialized Sequence in Professional Writing (p. 187)
Professional Sequences in Personal Financial Planning and in Wealth Management (p. 86)
Erin Garcia calls herself a “professional germaphobe” and for good reason: She works as a surveillance officer for the California Emerging Infections Program, which serves as a resource for surveillance, prevention and control of infectious diseases in the Bay Area. Eventually, Garcia plans to take her knowledge of infectious disease to the national level and help control potential outbreaks, and the Professional Biomedical Sciences Program can help her do just that.

With a bachelor’s in public health from UC Berkeley and master’s in public health (with a concentration in epidemiology) from San Diego State University, Garcia hopes to get her doctorate in epidemiology and work for the Centers for Disease Control and Prevention as an epidemiologist. The Professional Biomedical Sciences Program is assisting her transition into the next phase. “I want to do an infectious disease/epidemiology-type dissertation, and I need the building blocks—immunology and microbiology—because a lot of the people in that specific field have it, and I don’t yet,” she says.

But Garcia isn’t in a hurry to complete her Extension curriculum, because she’s having too much fun in the learning process. “I have five years to finish, and I might just take the whole time because there are so many courses to take,” she says. “Everything’s so interesting!”
Enhance your career in the sciences with UC Berkeley Extension. Stay competitive with training that reflects the latest thinking in various fields. Courses developed and taught by industry innovators and subject experts enable you to connect with medical professionals, business leaders and biotechnology pioneers.

Prepare for advanced programs in medicine, dentistry, veterinary medicine, nursing, pharmacy and other health professions. Meet the math and statistics requirements to enter the Haas School of Business at UC Berkeley or other M.B.A. programs. Courses in everything from biology and physics to analytic geometry and calculus ensure you find the appropriate education. For the specialized math and science knowledge you need to take your career to the next level, come to UC Berkeley Extension.
Health Professions Preparation

COURSE INFORMATION
(510) 643-0598
science@unex.berkeley.edu
extension.berkeley.edu/subject/healthprofessions.html

FREE INFORMATION SESSION

Post-Baccalaureate Health Professions Program

This specially designed program provides academic preparation in the sciences and advising to enhance your application for admission to medical, dental or veterinary school or to other advanced degree programs in the health professions. Discover how you can prepare for medical school and other advanced health career training programs with UC Berkeley Extension’s top-flight science courses. For details, see p. 155 or visit extension.berkeley.edu/spos/premed.html.

EDP 401927
1 meeting
Saturday, Dec. 10, 10 am–12 pm
San Francisco: Downtown Center • FREE

EDP 403873
1 meeting
Wednesday, Jan. 11, 6–7:30 pm
Berkeley: Golden Bear Center • FREE

EDP 403881
1 meeting
Thursday, March 29, 6:30–8 pm
San Francisco: Downtown Center • FREE

EDP 413203
1 meeting
Tuesday, April 3, 6:30–8 pm
Belmont: Belmont Center • FREE

EDP 413211
1 meeting
Saturday, May 12, 10 am–12 pm
Belmont: Belmont Center • FREE

Free Information Sessions

Attend a free information session to discover how UC Berkeley Extension can help you achieve your goals. Learn more about courses and programs, meet other prospective students, talk to instructors and staff and ask questions. To reserve your space, call (510) 642-4111 or visit extension.berkeley.edu/infosessions.

Certificate and Professional Programs in the Life Sciences Industry

EDP 413542
Saturday, Jan. 21, 10–11 am
San Francisco: Downtown Center

EDP 413559
Saturday, May 12, 10–11 am
San Francisco: Downtown Center

Post-Baccalaureate Health Professions Program

EDP 401927
Saturday, Dec. 10, 10 am–12 pm
San Francisco: Downtown Center

EDP 403873
Wednesday, Jan. 11, 6–7:30 pm
Berkeley: Golden Bear Center

EDP 403881
Thursday, March 29, 6:30–8 pm
San Francisco: Downtown Center

EDP 413203
Tuesday, April 3, 6:30–8 pm
Belmont: Belmont Center

EDP 413211
Saturday, May 12, 10 am–12 pm
Belmont: Belmont Center

Professional Programs in Biotechnology and Bioscience Business

EDP 411801
Thursday, Dec. 8, 6–7:30 pm
San Francisco: Downtown Center

EDP 413526
Saturday, Jan. 21, 11:30 am–12:30 pm
San Francisco: Downtown Center

EDP 413534
Saturday, May 12, 11:30 am–12:30 pm
San Francisco: Downtown Center

Professional Program in Project Management for Biopharmaceuticals

EDP 413567
Saturday, Jan. 21, 1–2 pm
San Francisco: Downtown Center

EDP 413575
Saturday, May 12, 1–2 pm
San Francisco: Downtown Center
Health Careers Seminar I

0.4 ceu

A requirement in the Post-Baccalaureate Health Professions Program

This course orients you to the Post-Baccalaureate Health Professions Program and assists you in planning your course of study. Learn skills that support your success in the program, and clarify your understanding of and interest in specific health care careers.

Prerequisite: You must be officially accepted into the Health Professions Program.

EDP 403527
Alexandra Tan, Ph.D.

1 meeting
Sunday, 9 am–1 pm
Jan. 22
Berkeley: Golden Bear Center • $315

Health Careers Seminar II

1.5 ceu

A requirement in the Post-Baccalaureate Health Professions Program

This second installment of a two-course required sequence prepares you for the comprehensive application process to health career professional programs. You further clarify your understanding of admission requirements, length of study and workforce issues. You plan your approach for the written application form, learn to write personal statements and discuss interviews. You also learn strategies to finance your health care education. Your classroom experience includes lectures, in-class interactive presentations, group work with your fellow students and opportunities for private and semi-private meetings with instructors.

Prerequisite: Health Careers Seminar I

EDP 403535
Alexandra Tan, Ph.D., and Juhn Verano, M.S.

1 meeting
Sunday, 10 am–1 pm
Feb. 5–March 11 (no meeting Feb. 19)
San Francisco: Art and Design Center • $600

Health Care Journalism

Learn to identify health news, translate medicalese, question experts, interview patients and get published.

For course schedule, see p. 191.

Expository Writing: Crafting the Graduate Admission Essay

Get practice writing the personal statement that is commonly required for graduate-program applicants.

For course schedule, see p. 192.

Biology

COURSE INFORMATION

(510) 643-0598
science@unex.berkeley.edu
extension.berkeley.edu/sciences

ONLINE COURSE INFORMATION

(510) 643-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

General Biology I

X15A • 3 semester units in Molecular and Cell Biology

An elective in the Post-Baccalaureate Health Professions Program

Gain an introduction to fundamental concepts in biology, including cell structure and function; prokaryotes; eukaryotes; metabolism; molecular and organismal genetics; classification; and animal development, form and function. Designed for biology majors and premedical and pre-health students, this course is also appropriate for returning students interested in a refresher biology class and professionals in other disciplines considering a career change to the biological sciences. This course is associated with General Biology Laboratory I X15.1A. The lecture may be taken without the laboratory.

High school chemistry is recommended.

Sec. 1 EDP 403329
Carla Digenaro
15 meetings
Tuesdays, 6–10 pm
Jan. 17–April 24
Berkeley: Golden Bear Center • $940

Sec. 2 EDP 403923
Janet Kalesnikoff, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 18–April 25
Belmont: Belmont Center • $940

Sec. 3 EDP 403337
Kelly Kruger, Ph.D.
15 meetings
Thursdays, 6–10 pm
Jan. 19–April 26
Berkeley: Golden Bear Center • $940

Post-Baccalaureate Health Professions Program

For the science education required for advanced study in medicine and other health professions, turn to UC Berkeley Extension. The convenience of evening and weekend study makes it possible to continue working while you’re enrolled. Courses meeting the academic standards of UC Berkeley along with comprehensive advisement ensure that your education is of the highest quality. In-depth advising helps you tailor a course plan, identify the medical or health program that fits your needs and prepare an application for further study. With the Post-Baccalaureate Health Professions Program, you’re ready to join others who have completed the program and gained admission to a wide range of health care programs.

Curriculum Requirements

The curriculum consists of 2 required courses and a varied number of electives (depending on specific courses needed) for a total of 24 semester units.

Required Courses

• Health Careers Seminar I (offered this term)
• Health Careers Seminar II (offered this term)

Electives

For a list of available electives, visit extension.berkeley.edu/spos/premed.html.

Learn More and View the Brochure

extension.berkeley.edu/spos/premed.html
(510) 643-6918
science@unex.berkeley.edu

Register using EDP 402305
Helping people is really what Mike Hadley wants out of his career. After spending 20 successful years in business and then taking a full inventory of his life, Hadley is following his true passion: to become an orthopedic surgeon. Thanks to program director Dr. Patrick Brown, Hadley is confident in his decision to pursue the Post-Baccalaureate Health Professions Program. “Dr. Brown laid out the path,” he says. “And when I saw that there was structure to it, that I could put a time line to it, I dived right in.”

Dive, indeed: The Purdue University graduate—who also holds a master’s degree in business from the University of California, Berkeley—recounts the steps along this new path: selling his restaurant-management firm, registering for the program, volunteering at hospitals, shadowing an orthopedic surgeon and prepping for the MCAT.

“I know that Extension’s success rate of getting people into medical school is pretty impressive,” he says. But that doesn’t mean that Hadley is in a rush to finish the program.

“I don’t know that people see school as a means to an end, but I’m as excited about the path as I am the destination,” he says.
Introductory Biology With Lab, Part A
X19A • 5 semester units in Molecular and Cell Biology
An elective in the Post-Baccalaureate Health Professions Program

How do cells convert nutrients into usable energy? What is the relationship among genes, chromosomes and DNA? Learn the answers to these and other questions while building a solid foundation in the fundamental concepts of molecular and cell biology, including cell structure and function, metabolism and genetics, as well as animal development, form and function. Put theory into practice with “home wet lab” and virtual experiments, and explore the relationship between biological issues and current topics in experimental research, biotechnology and medicine.

Familiarity with basic chemistry is recommended but not required.

EDP 897579
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online, proctored final exam • $830

Introductory Biology With Lab, Part B
X19B • 5 semester units in Molecular and Cell Biology
An elective in the Post-Baccalaureate Health Professions Program

What are the mechanisms of evolution? How do plants perform basic biological functions? How do organisms interact with each other and their environment? Discover the answers to these and other questions while gaining a solid foundation in macroscopic biological issues, including organismal diversity—with particular emphasis given to plants, evolution, evolutionary biology and ecology. Learn about biological diversity and ecological principles, including the effects of human activity on the environment. Put principles into action through “home wet lab” and virtual experiments.

Familiarity with basic chemistry is recommended but not required.

EDP 897587
Susan Parkinson, Ph.D.
Enroll anytime
Online, proctored final exam • $830

General Human Anatomy
X104 • 3 semester units in Integrative Biology
An elective in the Post-Baccalaureate Health Professions Program

Examine the correlations between the structures and functions of the body’s various systems in this intensive introductory course. Explore the functional anatomy of the human body through both gross and microscopic examination. Topics include the cardiovascular, respiratory, gastrointestinal, nervous and skeletal muscular systems, with an introduction to biomechanical principles. Investigate disease pathologies affecting normal body function. The course is especially useful as an introduction to human anatomy for students interested in the medical profession.

Prerequisite: One year of college-level general biology for majors

Sec. 1 EDP 403501
Kathleen Azevedo, R.N., MSN
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–May 1 (no meeting March 27)
Berkeley Campus: 166 Barrows Hall • $840

Sec. 2 EDP 403493
James D. Smiley, B.A., D.C.
15 meetings
Tuesdays, 2–5 pm
Jan. 17–April 24
Berkeley: Golden Bear Center • $840

Sec. 3 EDP 403485
Instructor to be announced
15 meetings
Saturdays, 9:30 am–12:30 pm
Jan. 21–May 19 (no meetings Feb. 18, March 31 and April 21)
Berkeley Campus: 110 Barrows Hall • $840

Sec. 4 EDP 413104
James Smiley, B.A., DC
15 meetings
Mondays, 6:30–9:30 pm
Jan. 23–May 7 (no meeting Feb. 20)
Belmont: Belmont Center • $840

Sec. 5 EDP 857524
James D. Smiley, B.A., D.C.
Enroll anytime
Online • $850

Human Anatomy Laboratory
X10B • 1 semester unit in Integrative Biology
An elective in the Post-Baccalaureate Health Professions Program

Focus on the correlation between the structure and function of the various body systems, and examine topics such as the musculoskeletal, nervous, endocrine, cardiovascular, respiratory, urinary and reproductive systems. Gain an understanding of how the structures of the various body systems are related to their functions. Become familiar with dissection and basic microscopic examination of tissues. Biology majors, premedical and pre-health students and those looking for a career change or to refresh their biological knowledge can benefit greatly from this experience.

Prerequisite: General Human Anatomy X104 must be completed with a C or better or taken concurrently.

Sec. 1 EDP 413054
James D. Smiley, B.A., D.C.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–May 1 (no meeting March 20)
Hayward: Life Chiropractic College West, 25001 Industrial Blvd., Room 170 • $815

Sec. 2 EDP 403568
James D. Smiley, B.A., D.C.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 18–May 2 (no meeting April 4)
Oakland: Merritt College, 12500 Campus Dr. • $815

Sec. 3 EDP 403550
David T. Larue, M.A.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 23–May 14 (no meetings Feb. 20 and April 2)
Oakland: Merritt College, 12500 Campus Dr. • $815
Jon Zaid is on the path to become an emergency room (ER) doctor—after an initial career
false start. A graduate of George Washington University with a degree in biology, Zaid
recounts his time at Fox Chase Cancer Center in Philadelphia as a lab technician, which he now
knows is not his calling: “I was so isolated. I would see these cells every day, and in the end, I
was talking to them,” he says with a laugh.

A certified emergency medical technician, Zaid is drawn to the human connection in emergency
medicine, which is driving his goal to attend medical school. The Post-Baccalaureate Health
Professionals Program is paving the way for him, with guidance from advisers Dr. Alexandra
Tan and Dr. Patrick Brown. “Their main focus is to get you into whatever school you want,” Zaid
says. “That’s really special about Extension.”

Zaid is also vice president of Extension’s American Medical Students Association (AMSA)
group, yet another boon to his ER aspirations. “It’s hard to get into medical school by
yourself,” he says. “You need a support structure for questions about applying to medical
school, taking the MCAT, the interview process and volunteer hours. AMSA’s really helped
foster a community.”
### Introduction to Medical Microbiology

**X111**  •  3 semester units in Public Health

An elective in the Post-Baccalaureate Health Professions Program

Infectious diseases present formidable challenges to human health and well-being. Study medically important microbes from the perspective of disease in this introductory survey designed for students in microbiology, medical technology and nursing, as well as for those with a biological science background who are interested in infectious diseases and their causes. Learn common terms and basic concepts of medical microbiology, then focus on the mechanisms of microbial diseases. Gain an awareness of the versatility of microbes and an understanding of how humans and microbes coexist.

**Prerequisites:** One year of both college-level general biology for majors and chemistry

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<tr>
<td>Sec. 1 EDP 403634</td>
<td>Gillian Edwards, M.S., SM (NRCM), RM (NRCM), PHM</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>Berkeley: Golden Bear Center  •  $840</td>
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<td>Sec. 2 EDP 413096</td>
<td>Nidhi Ahuja, Ph.D.</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>Belmont: Belmont Center  •  $840</td>
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<td>Sec. 3 EDP 403642</td>
<td>Srinivas Garlapati, Ph.D.</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>Belmont: Belmont Center  •  $840</td>
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<tr>
<th>Section</th>
<th>Instructor</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Sec. 4 EDP 403659</td>
<td>Medora Huseby, Ph.D.</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>Belmont: Belmont Center  •  $840</td>
</tr>
</tbody>
</table>

### Microbiology Laboratory

**X491**  •  1 semester unit in Public Health

An elective in the Post-Baccalaureate Health Professions Program

Get an introduction to various microorganisms of particular importance to human health, with emphasis on those involved in causing human disease. Laboratory work includes microscopy, staining, aseptic and sterile transfer techniques, assessment of morphological and biochemical properties of microorganisms, medical and biotechnological-related procedures and microbial identification.

**Prerequisites:** Introduction to Medical Microbiology X111 must be completed with a grade of C or better or taken concurrently.

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<th>Section</th>
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<tbody>
<tr>
<td>Sec. 1 EDP 403667</td>
<td>Srinivas Garlapati, Ph.D.</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>Oakland: Merritt College, 12500 Campus Dr.  •  $815</td>
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<th>Section</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>Sec. 2 EDP 413096</td>
<td>Nidhi Ahuja, Ph.D.</td>
<td>Thursdays, 6:30–9:30 pm</td>
<td>Redwood City: Cañada College, Building 16, Room 204  •  $815</td>
</tr>
</tbody>
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### Cell Biology

**X116**  •  3 semester units in Molecular and Cell Biology

An elective in the Post-Baccalaureate Health Professions Program

Get an introduction to cell biology from a molecular perspective. Learn how cells are studied, and investigate current knowledge of cell membranes, organelles, cytoskeletons, cell growth and division, cell communication and particularly the mechanism underlying cellular events. At the end of this course, you should have an understanding of general concepts in cell biology and be able to read and interpret cell biology literature.

**Prerequisites:** One year of college-level general biology for majors

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<th>Section</th>
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<tbody>
<tr>
<td>Sec. 1 EDP 403295</td>
<td>Raymond Blind, Ph.D.</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>San Francisco: Art and Design Center  •  $840</td>
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<tr>
<th>Section</th>
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<tbody>
<tr>
<td>Sec. 2 EDP 413120</td>
<td>Nidhi Ahuja, Ph.D.</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>Belmont: Belmont Center  •  $840</td>
</tr>
</tbody>
</table>
SCIESCIES, BIOTECHNOLOGY AND MATHEMATICS

Biochemistry
X115A • 3 semester units in Molecular and Cell Biology
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Study the common molecular processes and chemical reactions that underlie diverse life forms. Begin by examining the relationship between the three-dimensional structure of proteins and their biological activity. Next, look at the mechanism of enzyme action, how enzymes recognize their substrates and enhance reaction rates and the control of enzymatic activity. Finally, develop an integrated picture of metabolism in the body by examining metabolic pathways and their regulation and control.

Prerequisites: One year of both college-level general biology for majors and organic chemistry

Sec. 1 EDP 413112
Louisa Weng Chi Man, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 18–April 25
Belmont: Belmont Center • $840

Sec. 2 EDP 403238
Srinivas Garlapati, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–May 3 (no meeting March 29)
Berkeley Campus: 166 Barrows Hall • $840

Sec. 3 EDP 403246
Cary Lai, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 23–May 7 (no meeting Feb. 20)
San Francisco: Downtown Center • $840

Neuroscience
X108 • 3 semester units in Molecular and Cell Biology
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Get an overview of the fundamental principles of the organization, function and development of the human nervous system, including neural development and diseases of the nervous system. Examine experimental approaches from anatomy to molecular biology, and critically evaluate papers from the primary scientific literature. Ultimately, this course is a foundation for advanced study in the neurosciences.

Prerequisite: One year of college-level general biology for majors

EDP 843847
Natalia Caporale, Ph.D.
Jan. 17–April 10
Online, proctored final exam • $850

Introductory Biochemistry
X105 • 3 semester units in Molecular and Cell Biology
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Understand the basic chemistry and overall structure of the most important biological macromolecules, including the study of enzyme catalysis; cellular architecture; intermediary metabolism; and special processes such as photosynthesis, biological oxidation and energy production. Explore the various ways that biological systems react to their environment.

Prerequisites: College-level courses in elementary chemistry and biology required. One or two semesters of organic chemistry is recommended.

Sec. 1 EDP 857672
Nidhi Anuja, Ph.D.
Enroll anytime
Online • $770

Sec. 2 EDP 857300
Rebekah S. Marsh
Enroll anytime
Online, proctored final exam • $770

Sec. 3 EDP 857532
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam • $770

Introduction to Neurobiology
XB160 • 4 semester units in Molecular and Cell Biology
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Get a general understanding of the nervous system, including how it functions, how it develops and how it changes with learning and memory in this introductory course geared for students who already have some background in the biological sciences, typically upper-division undergraduates. Study increasingly complex systems, from the level of molecules to cells to simple circuits to complex networks to higher brain functions, including special sections on brain diseases.

Prerequisites: One year of college-level general biology for majors and one year of college-level physics

EDP 403683
Natalia Caporale, Ph.D.
20 meetings
Wednesdays, 7–10 pm
Jan. 18–April 26 (no meeting March 29)
San Francisco: Downtown Center • $840

Genetics
X143 • 3 semester units in Molecular and Cell Biology • 45 hours CE credit: BRN provider 00226
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Learn to integrate the most important concepts in classical and molecular genetics into an overall picture of what a gene is, how it functions, how it may be altered and how it is inherited. Study the molecular basis of gene function and mutation, Mendelian genetics, transmission systems, regulation of cellular processes, developmental genetics, cytoplasmic inheritance, population genetics and multifactorial inheritance. Learn about recent advances in biotechnology that have genetic implications, including the Human Genome Project and advances in genetic engineering technology.

Prerequisites: One year of college-level general biology for majors

Sec. 1 EDP 413146
Steven Kelley, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 18–April 25
Belmont: Belmont Center • $840

Sec. 2 EDP 403519
Mary Alice Yund, Ph.D., Extension
Honored Instructor
14 meetings
Thursdays, 6:30–9:45 pm
Jan. 19–April 26 (no meeting March 29)
Belkire Campus: 107 Genetics and Plant Biology Building • $840

Sec. 3 EDP 857698
Keith Earnshaw, M.S., Ph.D.
Enroll anytime
Online • $795

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
### Principles of Molecular Biology

**X107A** • 3 semester units in Molecular and Cell Biology

An elective in the Post-Baccalaureate Health Professions Program

Study DNA structure and replication, RNA and protein synthesis and the genetic code. Gain an understanding of the fundamental concepts and complexities of aspects of molecular biology, including both structures and processes, common to most organisms. Critically evaluate current scientific literature, learn about important molecular biology tools and techniques, and investigate the experimental basis of molecular biology.

**Prerequisites:** College-level chemistry and general biology are required. Some background in genetics and cell biology is helpful.

**Sec. 1 EDP 403907**  
Jennifer Wade, Ph.D.  
15 meetings  
Wednesdays, 6:30–9:30 pm  
Jan. 18–April 25  
San Francisco: Downtown Center • $840

**Sec. 2 EDP 413195**  
Cary Lai, Ph.D.  
15 meetings  
Thursdays, 6:30–9:30 pm  
Jan. 19–April 26  
Belmont: Belmont Center • $840

### Molecular Endocrinology

**X125** • 3 semester units in Molecular and Cell Biology

An elective in the Post-Baccalaureate Health Professions Program

Study the molecular mechanisms of hormone and growth factor action. After a basic primer in general endocrinology, you examine the various mechanisms of steroid and peptide hormone action, as well as the cross-talk between the pathways and their role in cellular signaling. Then, focus your study on how these pathways are involved in human diseases such as diabetes, thyroid disorders and endocrine-related cancer.

**Prerequisites:** One year of both college-level general biology for majors and chemistry

**EDP 403675**  
Shyam Sundar, Ph.D.  
15 meetings  
Saturdays, 1–4 pm  
Jan. 21–May 19 (no meetings Feb. 18, March 31 and April 21)  
Berkeley Campus: 56 Barrows Hall • $840

### Virology

**X126** • 3 semester units in Molecular and Cell Biology

An elective in the Post-Baccalaureate Health Professions Program

Get an introduction to modern medical virology, with emphasis on structure, molecular biology, viral replication, mutations, evolution of viruses, host cell interactions and pathogenesis, as well as diagnosis, control and prevention of infection.

**Prerequisite:** One year of college-level general biology for majors

**EDP 403915**  
Rajeev Banerjee, M.S., Ph.D.  
15 meetings  
Thursdays, 6:30–9:30 pm  
Jan. 26–May 3  
Berkeley Campus: 56 Barrows Hall • $840

### Immunology

**X110** • 3 semester units in Molecular and Cell Biology • 45 hours CE credit: BRN provider 00226

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

The immune system plays the crucial role of battling infection and cancer in the body. As a defense system, it must recognize and distinguish between what is foreign and what is self. Examine the basic principles of immunology, and study the tissues and cells that make up the immune system. Understand the structure and function of immunoglobulins, and investigate the nature of their interactions with antigens. Learn to discuss biotherapeutics, cancer and AIDS from an informed standpoint.

**Prerequisite:** One year of college-level general biology for majors

**Sec. 1 EDP 843508**  
Monica Ranes-Goldberg, Ph.D.  
Jan. 17–April 10  
Online, proctored final exam • $799

**Sec. 2 EDP 403600**  
Amy S. Morgan, Ph.D.  
15 meetings  
Thursdays, 6:30–9:30 pm  
Jan. 19–April 26  
San Francisco: Downtown Center • $840

**Sec. 3 EDP 413179**  
Helen Kwan, Ph.D.  
15 meetings  
Saturdays, 9:30 am–12:30 pm  
Jan. 21–May 5 (no meeting Feb. 18)  
Belmont: Belmont Center • $840

**Sec. 4 EDP 867952**  
Amy S. Morgan, Ph.D.  
Enroll anytime  
Online, proctored final exam • $795
NEW THIS TERM

**Toxicology**

X127  •  2 semester units in Molecular and Cell Biology

*An elective in the Post-Baccalaureate Health Professions Program*

Toxicology is an interdisciplinary field studying the adverse effects of xenobiotics on living systems. Get an introduction to the fundamentals, principles and applications of toxicology. Examine a wide spectrum of topics, including disposition and kinetics of toxicants, toxic mechanisms, target organ responses, toxic agents, risk assessment and regulatory toxicology. Learn about applications of toxicological principles to current issues in the environment, workplace and pharmaceutical industries.

**EDP 413294**

Weiwei Li, Ph.D.

10 meetings

Wednesdays, 6:30–9:30 pm

Jan. 17–March 20

Berkeley Campus: 136 Barrows Hall  •  $565

**Immunobiology: Molecular Pathogenesis and Inflammation**

X409  •  2 semester units in Molecular and Cell Biology

*An elective in the Post-Baccalaureate Health Professions Program*

Get a comprehensive overview of the basic principles in immunology, including innate immunity, the development of mature lymphocyte repertoire, antigen recognition and adaptive responses to foreign and self antigens. Examine these basic principles in conjunction with an overview of the various inflammatory processes—such as viruses, bacteria, fungi and worms—that protect humans from disease pathogens. You also study genetics and the immunological inflammatory mechanisms that can result in allergy, asthma, cancer and autoimmunity.

**Prerequisite:** One year of college-level biology

**EDP 413161**

Rachael H. Webster, Ph.D.

10 meetings

Tuesdays, 6:30–9:30 pm

Jan. 24–March 27

Belmont: Belmont Center  •  $565

<table>
<thead>
<tr>
<th>The Biology of Human Cancer</th>
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<tbody>
<tr>
<td>X124  •  3 semester units in Molecular and Cell Biology</td>
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<tr>
<td><em>An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program</em></td>
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<tr>
<td>Learn cancer biology fundamentals, including cell proliferation, cell death, the process of metastasis and tumor progression, oncogenes and tumor suppressor genes and cancer therapeutics. Explore scientific and clinical research on cancer through readings and presentations.</td>
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<tr>
<td><strong>EDP 403766</strong></td>
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<tr>
<td>Shyam Sundar, Ph.D.</td>
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<td>15 meetings</td>
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<tr>
<td>Saturdays, 9 am–12 pm</td>
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<tr>
<td>Jan. 21–May 19 (no meetings Feb. 18, March 31 and April 21)</td>
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<tr>
<td>Berkeley Campus: 56 Barrows Hall  •  $840</td>
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<tr>
<th>The Biology of Cancer</th>
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<tr>
<td>X26  •  3 semester units in Molecular and Cell Biology</td>
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<tr>
<td><em>An elective in the Certificate Program in the Essentials of Green Chemistry</em></td>
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<tr>
<td>Examine the molecular, cellular and genetic basis for the 270 diseases called cancer. Topics include the biology of uncontrolled cellular growth, the etiology of cancer, clinical presentation, diagnosis, staging, treatment and the psychological effects of cancer on patients and their families.</td>
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<tr>
<td>A background in high school– or college-level biology is recommended.</td>
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<tr>
<td><strong>EDP 867994</strong></td>
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<tr>
<td>David Lieu, Ph.D., M.D.</td>
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<td>Enroll anytime</td>
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<tr>
<td>Online, proctored final exam  •  $770</td>
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<tr>
<th>Marine Biology</th>
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<tr>
<td>X55  •  3 semester units in Integrative Biology</td>
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<tr>
<td><em>An elective in the Post-Baccalaureate Health Professions Program</em></td>
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<td>Examine the types of organisms that inhabit the marine environment and the types of habitats and ecological systems in seas and oceans. In this introductory course, you also consider human use of the marine environment and the resulting problems and issues, including pollution, habitat modification and exploitation of resources.</td>
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<tr>
<td><strong>EDP 877035</strong></td>
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<tr>
<td>Stephen W. Shaner, Ph.D.</td>
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<tr>
<td>Enroll anytime</td>
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<tr>
<td>Online, proctored final exam  •  $770</td>
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**Advanced Bioscience**

**COURSE INFORMATION**

(510) 643-6901

science@unex.berkeley.edu

extension.berkeley.edu/sciences

**ONLINE COURSE INFORMATION**

(510) 643-7343

online@unex.berkeley.edu

extension.berkeley.edu/online

**Advanced Biomedical Seminar: Orientation and Career Compass**

0.2 ceu

A requirement in the Professional Biomedical Sciences Program

Receive a formal orientation to the Professional Biomedical Sciences Program and to policies and resources available at UC Berkeley Extension. Learn skills that support success in this program, and begin to clarify your interest in biomedical careers. Create a course of study with hands-on counseling and assistance from the instructor.

Open only to students registered in the Professional Biomedical Sciences Program

**EDP 403279**

Victoria Sharma, Ph.D.

1 meeting

Saturday, 10 am–12 pm

March 3

Berkeley: Golden Bear Center  •  $200

**Current Topics in the Biosciences**

X427  •  2 semester units in Molecular and Cell Biology

*A requirement in the Professional Biomedical Sciences Program*

Study current topics in the biosciences, including the areas of cell biology, molecular biology, neurobiology, genetics, developmental biology and virology, immunology and infectious disease. Learn to prepare and deliver a scientific presentation. This course is intended for advanced science students with some previous knowledge of cell biology, molecular biology and genetics. Both industry professionals and health professions students can benefit from this course.

**Sec. 1 EDP 843458**

Natalia Caporale, Ph.D.

Jan. 17–April 10

Online  •  $575

**Sec. 2 EDP 403303**

Robin Ball, Ph.D.

10 meetings

Mondays, 6:30–9:30 pm

Jan. 23–April 2 (no meeting Feb. 20)

San Francisco: Downtown Center  •  $565
Epigenetics of Human Development and Disease

X423 • 3 semester units in Molecular and Cell Biology

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Professional Biomedical Sciences Program

Epigenetics is the study of heritable changes in gene expression that do not involve changes in the DNA sequence. Epigenetic mechanisms play important roles in development from a fertilized egg into a complex human being, as well as in aging and in various diseases (including cancer). Prepare to study topics such as DNA methylation, histone modification, RNAi, cancer epigenetics, stem cells and the environment (for example, nutrition and stress) as potential modifiers of the human epigenome. Although there are no formal prerequisites to this course, some background in molecular biology and genetics is helpful.

EDP 897777
Rebekah S. Marsh
Enroll anytime
Online • $795

NEW THIS TERM

Hematology

X499.4 • 3 semester units in Molecular and Cell Biology

Study fundamental concepts of hematology—primarily human—including blood-forming organs and the origin and function of blood cells and plasma. You also examine the theoretical and clinical aspects of normal and pathological conditions of erythrocytes, leukocytes, platelets, coagulation and blood group systems.

Prerequisite: One year of college-level general biology for majors

EDP 403576
Aliye Sarmasik, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 18–April 25
San Francisco: Downtown Center • $840

HIV/AIDS: From Particles and Pathogenesis to Pandemic and Politics

X400.6 • 2 semester units in Public Health

An elective in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program

In this comprehensive overview of the HIV/AIDS epidemic, you explore key aspects of HIV epidemiology, the underlying molecular and cellular biology, the complex interactions of the virus with the host immune system, current drug therapies, vaccine development and public health approaches toward the global HIV pandemic. You gain a foundational understanding of HIV, its biology and its implications for the health care system and society at large.

Prerequisite: Introductory undergraduate biology course

EDP 413153
Michael H. Bachmann, M.D., Sc.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 24–March 27
Belmont: Belmont Center • $565

Professional Biomedical Sciences Program

One of the pressing challenges in the biomedical sciences is how to turn advances in research into new treatments and cures for unmet medical needs. Continuing education for biomedical professionals not only enhances innovation and discovery but also catalyzes the conversion of basic research into products that address critical needs. With the Professional Biomedical Sciences Program, you can update your previous academic training, learn about current topics and techniques and participate in a flexible professional development program that prepares you for career advancement within the biosciences. A required advising seminar ensures that a customized and advanced professional curriculum is designed to meet your needs and career goals. Then, choose 4–5 electives in subject areas that meet your needs based on the advising seminar. Topics include ion channels, green chemistry, stem cell research and synthetic biology.

Curriculum Requirements

The curriculum consists of 2 required courses and a varied number of electives for a minimum of 10 semester units (150 hours of instruction).

Required Courses

• Advanced Biomedical Seminar:Orientation and Career Compass (offered this term)
• Current Topics in the Biosciences X427 (offered this term)

Electives

For a list of electives available this term, visit extension.berkeley.edu/spos/biomedicalsciences.html.

Learn More and View the Brochure
extension.berkeley.edu/spos/biomedicalsciences.html
(510) 643-6901
science@unex.berkeley.edu

Register using EDP 402404

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Introduction to Bioethics
X400 • 2 semester units in Public Health
An elective in the Certificate Program in the Essentials of Green Chemistry, in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program
Gain an understanding of the fundamental issues in modern bioethics and health care ethics. Explore policy and issues that health care workers face in their daily routines, and then incorporate that knowledge into a presentation that reflects your new understanding of bioethics.
EDP 403253
Anjali Lilani, J.D.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 19—March 22
San Francisco: Downtown Center • $565

Introduction to Biostatistics
X471 • 2 semester units in Molecular and Cell Biology
An elective in the Certificate Program in the Essentials of Green Chemistry, in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program
The health and behavioral sciences commonly use several statistical methods (linear regression, ANOVA, logistical regression, survival analysis and nonparametric methods) to study biological problems. Gain the statistical skills to read scientific articles in your field, understand the statistical methods used and interpret the results on your own. Learn to use computers and software for statistical analysis. This course is designed for upper-division undergraduate students, premedical students and professionals who are interested in biostatistics.
Prerequisites: Basic mathematics course and computer literacy
EDP 403287
Steven Kelley, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–April 24
San Francisco: Downtown Center • $840

Ion Channels as Targets for the Drug Discovery Industry
X418 • 2 semester units in Molecular and Cell Biology
An elective in the Professional Biomedical Sciences Program
Ion channels are among the most prominent biochemical entities being targeted by the new drug discovery industry. Acquiring new knowledge and training in this field provides the required skills to work on project teams dealing with this class of molecular targets in biotech and pharmaceutical companies. The course is for those with a Bachelor of Science degree or any other professionals new to the field or already involved in the drug discovery and development industry.
Prerequisites: Undergraduate-level courses in general biology and molecular biology or cell biology
EDP 413609
Arturo Picones, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Feb. 7–April 10
San Francisco: Downtown Center • $625

Molecular Pharmacology
X410 • 2 semester units in Molecular and Cell Biology
An elective in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program
Molecular pharmacology is the study of drugs and how they interact with the cell at a molecular level. Designed for professionals working in pharmaceutical or biotechnology fields, this course examines advances in molecular pharmacology that have changed understanding of the ways in which drugs act. The instructor discusses the interaction between drug or neurotransmitter and receptor, the interaction between receptor and cell and the relationship between receptors and drug design. In addition to the role of recombinant DNA technology and its use within the field, plan to study recent research on the structure and function of receptors and the application of this research to the design of novel therapeutics.
Prerequisite: One year of college-level general biology for majors is required. Molecular biology and biochemistry are recommended.
EDP 413187
Arturo Picones, Ph.D.
10 meetings
Saturdays, 1:30–4:30 pm
Jan. 21–March 31 (no meeting Feb. 18)
Belmont: Belmont Center • $565

NEW THIS TERM
Physiology of the Cardiac and Respiratory Systems
X499.5 • 3 semester units in Molecular and Cell Biology
An elective in the Professional Biomedical Sciences Program
Get an introduction to the human cardiovascular and respiratory systems in this course, including normal physiology, exercise and pathophysiology. Examine current topics in diagnosis, control and prevention of disease through case studies and journal articles.
Prerequisites: One college-level course in general biology and one in physiology
EDP 403865
Natalia Caporale, Ph.D.
15 meetings
Mondays, 7–10 pm
Jan. 23–May 14 (no meetings Feb. 20 and March 19)
San Francisco: Downtown Center • $840

Stem Cell Biology, Research and Discovery
X424 • 3 semester units in Molecular and Cell Biology
An elective in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program
Review the science and current research topics in the field of human embryonic stem cells, and learn how they are being applied to regenerative medicine. Examine the basic elements of human embryonic stem cell biology and development as well as the derivation, cultivation and development of technologies in the field. This course is associated with three other core courses that focus in detail on the ethical, business and process development issues surrounding research, development and commercialization of therapies and products from human embryonic stem cells.
EDP 413724
R. Geoffrey Sargent, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 11–April 18
San Francisco: Downtown Center • $940
General Chemistry I
X19A • 3 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to the fundamental concepts of inorganic chemistry, including matter, atoms, molecules, solutions, thermochemistry, chemical bonding and intermolecular forces. General Chemistry I is designed for biology majors and premedical students, this course is also appropriate for returning students interested in chemistry and for professionals in other disciplines considering a career change to the sciences. It is associated with General Chemistry Laboratory I X19.1A. The lecture portion of the course may be taken without the laboratory. Algebra and high school chemistry are recommended.

Sec. 1 EDP 403436
Gregory Watkins, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 210 Latimer Hall • $815

Sec. 2 EDP 403444
Miranda Sarachine, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 205 Latimer Hall • $815

Sec. 3 EDP 403964
Jennifer Liu, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting April 5)
Redwood City: Cañada College, Building 18, Room 305 • $815

General Chemistry Laboratory I
X19.1A • 1 semester unit in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to the fundamental concepts of inorganic chemistry, including matter, atoms, molecules, solutions, thermochemistry, chemical bonding and intermolecular forces. Develop laboratory skills such as instrumentation, data analysis and observation skills. Designed for biology majors and premedical students, this course is also appropriate for returning students interested in chemistry and for professionals in other disciplines considering a career change to the sciences. It is associated with General Chemistry I X19A.

Prerequisite: General Chemistry I X19A must be completed with a C or better or taken concurrently.

Sec. 1 EDP 403436
Gregory Watkins, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 210 Latimer Hall • $815

Sec. 2 EDP 403444
Miranda Sarachine, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 205 Latimer Hall • $815

Sec. 3 EDP 403964
Jennifer Liu, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–May 3 (no meeting April 5)
Redwood City: Cañada College, Building 18, Room 305 • $815

General Chemistry II
X19B • 3 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Study the fundamental concepts of inorganic chemistry, including properties of solutions, kinetics, equilibria, electrochemistry, nuclear chemistry, metals, nonmetals and other topics of interest. General Chemistry II is aimed at biology, premedical and pre-health students. In addition, it is appropriate for returning students interested in chemistry and for professionals in other disciplines considering a career change to the sciences. It is associated with General Chemistry Laboratory II X19.1B. Lecture may be taken without the laboratory.

Prerequisite: General Chemistry I X19A must be completed with a C or better.

Sec. 1 EDP 403980
Instructor to be announced
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–April 26
Belmont: Belmont Center • $840

Sec. 2 EDP 403410
Joshua Patin, Ph.D.
15 meetings
Mondays, 2:30–5:30 pm
Jan. 23–May 7 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $840

Sec. 3 EDP 403428
Zoran Kurtovic, Ph.D.
15 meetings
Mondays, 7–10 pm
Jan. 23–May 14 (no meetings Feb. 20 and March 26)
Berkeley Campus: 20 Barrows Hall • $840
General Chemistry Laboratory II
X19.1B • 1 semester unit in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Learn the fundamental concepts of inorganic chemistry, including properties of solutions, kinetics, equilibria, thermodynamics, electrochemistry, nuclear chemistry, metals, nonmetals and other topics of interest. Emphasis is given to the development of laboratory skills, such as instrumentation, data analysis and observational skills. This course is aimed at biology majors and premedical students. In addition, it is appropriate for returning students interested in chemistry and for professionals in other disciplines considering a career change to the sciences. It is associated with General Chemistry II X19B.
Prerequisites: General Chemistry I X19A and General Chemistry Laboratory I X19.1A must be completed with a C or better. General Chemistry II X19B must be completed with a C or better or taken concurrently.
Sec. 1 EDP 403451
Christian Canlas, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 200 Latimer Hall • $815
Sec. 2 EDP 403469
Zoran Kurtovic, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 201 Latimer Hall • $815
Sec. 3 EDP 403477
Gurnam Singh, Ph.D.
15 meetings
Wednesdays, 7–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 202 Latimer Hall • $815
Sec. 4 EDP 403998
James Schweppe, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 23–May 14 (no meetings Feb. 20 and April 2)
Redwood City: Cañada College, Building 18, Room 305 • $815

Introduction to Chemistry
X16 • 3 semester units in Chemistry
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program
This nonlab course offers an introduction to basic principles in chemistry and demonstrates the role chemistry plays in various aspects of everyday lives.
Prerequisite: Although a background in chemistry is not necessary, students are required to have a basic knowledge of math, including algebra.
EDP 897645
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam • $770

Introductory Organic Chemistry
X18 • 3 semester units in Chemistry
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program
Examine the compounds that comprise most living mass. Following an introduction to covalent bonding and isomerism, move into a detailed discussion of the molecular structures and properties of various classes of organic and other biologically important compounds.
Prerequisites: One course in introductory chemistry and knowledge of basic algebra
EDP 897652
Weiwei Gu, Ph.D.
Enroll anytime
Online • $770

Organic Chemistry I
X36A • 3 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Learn the structure, nomenclature, bonding, properties and reactions of carbon compounds. You study the organic chemistry of alkanes, acids and bases, alkenes, alkenes, alcohols, ethers, sulfides and epoxides. This course is aimed at science majors; premedical, pre-health and returning students; and professionals interested in chemistry. Organic Chemistry Laboratory I X36.1A is associated with this course. This lecture may be taken without the laboratory.
Prerequisite: One year of college-level general chemistry with a C or better
Sec. 1 EDP 413013
Jean Dupon, Ph.D.
15 meetings
Tuesdays, 6–10 pm
Jan. 17–April 24
Belmont: Belmont Center • $940
Sec. 2 EDP 403691
Samuel Gillette, Ph.D.
15 meetings
Mondays, 6–10 pm
Jan. 23–May 7 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $940

Organic Chemistry Laboratory I
X36.1A • 2 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Acquire a variety of fundamental laboratory techniques applicable to the study, separation, purification and preparation of organic compounds. This course is designed for biology majors; premedical, pre-health and returning students; and professionals interested in chemistry. It is associated with Organic Chemistry I X36A.
Prerequisites: One year of college-level general chemistry with laboratory. Organic Chemistry I X36A must be taken concurrently or already completed with a C or better.
Sec. 1 EDP 403725
Maurizio Franzini, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 310 Latimer Hall • $940
Sec. 2 EDP 403733
Instructor to be announced
15 meetings
Wednesdays, 6–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 320 Latimer Hall • $940
Sec. 3 EDP 413021
Jean Dupon, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 18–May 2 (no meeting April 4)
Redwood City: Cañada College, Building 18, Room 311 • $940

Organic Chemistry II
X36B • 3 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Study reactions of functional groups and inter-actions of polyfunctional compounds, infrared spectroscopy, nuclear magnetic resonance, mass spectrometry and ultraviolet-visible spectroscopy. Get an introduction to biochemistry, lipids, carbohydrates, proteins and nucleic acids. This course is designed for science majors, premedical and pre-health students and professionals interested in chemistry. Organic Chemistry Laboratory II X36.1B is associated with this course. This lecture may be taken without the laboratory.
Prerequisite: Organic Chemistry I X36A must be completed with a C or better
Sec. 1 EDP 403717
Instructor to be announced
15 meetings
Wednesdays, 1–5 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley: Golden Bear Center • $940
Sec. 2 EDP 403709
Ryan Bremer, Ph.D.
15 meetings
Mondays, 6–10 pm
Jan. 23–May 7 (no meeting Feb. 20)
Berkeley: Golden Bear Center • $940
Certificate Program in the Essentials of Green Chemistry

Green chemistry enables scientists and engineers to design chemicals and materials with minimal generation and use of hazardous substances. Growing public concern about product safety, along with new chemical policies in the United States and the European Union, poses an imperative for decision makers in business, government and nongovernmental organizations (NGOs) to understand the business strategy and market drivers for green chemistry. In addition to new opportunities for growth and competitive advantage, businesses have new positions in green chemistry opening at points throughout the supply chain. The Certificate Program in the Essentials of Green Chemistry—developed in association with the UC Berkeley School of Public Health—trains professionals in chemistry, engineering, public policy, toxicology and business so that they can collaborate with green chemistry colleagues in the United States and beyond.

Curriculum Requirements
The curriculum consists of 5 required courses—Principles of Green Chemistry X413 and any 4 of the other 6 required courses (10 semester units)—and a varied number of elective courses for a minimum of 14 semester units (210 hours of instruction). Principles of Green Chemistry X413 does not need to be taken first.

Required Courses
- Principles of Green Chemistry X413 (offered this term)
- Decision Making and Comparative Risk Assessment X473
  or Toxicology and Risk Assessment X408.2
- Green Chemistry and Chemicals Policy X400.8 (offered this term)
- Alternatives Assessment: Chemicals, Materials, Products and Processes X415
- Business and Financial Planning for Green Chemistry Innovation X413.8 (offered this term)
- Current Topics in Green Chemistry X414

Electives
Electives are available in both Environmental Engineering and Management and Sciences, Biotechnology and Mathematics. For a list of electives available this term, visit extension.berkeley.edu/cert/greenchem.html.

Learn More and View the Flyer
extension.berkeley.edu/cert/greenchem.html
science@unex.berkeley.edu
(510) 642-1062

Register using EDP 402421
Organic Chemistry Laboratory II
X36.1B • 2 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
This laboratory covers a variety of fundamental laboratory techniques applicable to the study, separation, purification and preparation of organic compounds. This course is aimed at biology majors; premedical, pre-health and returning students; and professionals interested in chemistry. It is associated with the Organic Chemistry II X36B.

Prerequisites: Completion of Organic Chemistry I X36A and Organic Chemistry Laboratory I X36.1A with a C or better. Organic Chemistry II X36B must be completed with a C or better or taken concurrently.

Sec. 1 EDP 403113
Marcus Strawn, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 322 Latimer Hall • $940

Sec. 2 EDP 403741
Heike Angelika Heid, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 310 Latimer Hall • $940

Sec. 3 EDP 403758
Peter M. Stonebraker, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 18–May 2 (no meeting March 28)
Berkeley Campus: 320 Latimer Hall • $940

Biochemistry
Understand common molecular processes and chemical reactions that underlie diverse life forms.
For course schedule, see p. 160.

Green Chemistry

Green Chemistry
Principles of Green Chemistry
X413 • 2 semester units in Chemistry
A requirement in the Certificate Program in the Essentials of Green Chemistry; an elective in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program
Learn the core principles of green chemistry, and connect your knowledge of green chemistry to your own experiences through real-world examples and projects. Green chemistry unleashes the creativity of scientists and engineers in designing and discovering the next generation of chemicals and materials so that they provide increased performance while protecting and enhancing human health and the environment.

Sec. 1 EDP 843623
Instructor to be announced
Jan. 17–April 10
Online • $575

Sec. 2 EDP 413245
Jennifer Tripp, Ph.D.
10 meetings
Mondays, 6:30–9:30 pm
Feb. 13–April 30 (no meetings Feb. 20 and March 28)
San Francisco: Art and Design Center • $565

Green Chemistry and Chemicals Policy
X400.8 • 2 semester units in Public Health
A requirement in the Certificate Program in the Essentials of Green Chemistry
Learn the current and historical policy context of industrial chemical regulation, as well as the relevance of the concepts and application of green chemistry and green engineering. Study the weaknesses of historical approaches to chemicals management in protecting public and environmental health, as well as the key challenges that remain in implementing comprehensive chemicals policy reform.

EDP 843490
Ann Blake, Ph.D.
Jan. 7–April 10
Online • $575

Business and Financial Planning for Green Chemistry Innovation
X413.B • 2 semester units in Business Administration
A requirement in the Certificate Program in the Essentials of Green Chemistry
Get an introduction to the core principles of economics, finance and accounting to help you understand the steps necessary to bring green chemistry innovations to market. Explore other relevant topics in business administration and sustainability, including business models, ecological economics, entrepreneurship and service design.

EDP 843441
Jane Talkington, M.B.A.
Jan. 7–April 10
Online • $575
Physics Laboratory I
X3.1A • 1 semester unit in Physics
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to the fundamental concepts of physics, including introduction to forces, properties of matter, kinetics, thermodynamics, heat, wave motion, fluids, sound and other topics of interest. This course is associated with Physics I X3A.
Prerequisite: Physics I X3A must be completed with a C or better or taken concurrently.

Sec. 1 EDP 413047
Achilles Speliotopoulos, Ph.D.
15 meetings
Saturdays, 10 am–1 pm
Jan. 14–May 5 (no meetings Feb. 18 and April 7)
Redwood City: Cañada College, Building 16, Room 106 • $815

Sec. 2 EDP 403808
Keith Gilmore, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–May 3 (no meeting March 29)
Berkeley Campus: 211 LeConte Hall • $815

Sec. 3 EDP 403816
Instructor to be announced
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–May 3 (no meeting March 29)
Berkeley Campus: 231 LeConte Hall • $815

Physics II
X3B • 3 semester units in Physics
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to fundamental concepts in physics including electricity, magnetism, electromagnetic waves and optics. Aimed at biology, premedical, pre-health and architecture students, this course is also appropriate for returning students interested in physics and professionals in other disciplines considering a career change to the sciences. This course is associated with Physics Laboratory II X3.1B. The lecture may be taken without the laboratory.
Prerequisite: Physics I X3A must be completed with a C or better.

Sec. 1 EDP 403782
Alice Pevyhouse, M.S.
15 meetings
Tuesdays, 6:30–10 pm
Jan. 17–May 1 (no meeting March 27)
Berkeley Campus: 20 Barrows Hall • $940

Sec. 2 EDP 403790
Karim Wahha, M.S., Ph.D.
15 meetings
Thursdays, 6:30–10 pm
Jan. 19–May 3 (no meeting March 29)
Berkeley Campus: 20 Barrows Hall • $940

Physics Laboratory II
X3.1B • 1 semester unit in Physics
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to fundamental concepts in physics, including electricity, magnetism, electromagnetic waves and optics. Aimed at biology, premedical, pre-health and architecture students, this course is also appropriate for returning students interested in physics and professionals in other disciplines considering a career change to the sciences. This course is associated with Physics II X3B.
Prerequisites: Physics I X3A and Physics Laboratory I X3.1A must be completed with a C or better.

Sec. 1 EDP 403840
Sudha Rao, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–May 1 (no meeting March 27)
Berkeley Campus: 201 LeConte Hall • $815

Sec. 2 EDP 403857
Shafinaz Ali, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 17–May 1 (no meeting March 27)
Berkeley Campus: 205 LeConte Hall • $815

Sec. 3 EDP 403824
Prabir K. Roy, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–May 3 (no meeting March 29)
Berkeley Campus: 201 LeConte Hall • $815

Sec. 4 EDP 403832
Frank D. Bello, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–May 3 (no meeting March 29)
Berkeley Campus: 205 LeConte Hall • $815

Concepts of Physics
X11 • 4 semester units in Physics
Gain an understanding of the principles of physics in the context of how everyday objects work. Intended for students majoring in the humanities and social sciences, as well as anyone with an interest in the subject, this course covers forces and motion, conservation laws, heat, fluids, vibrations and waves, electricity and magnetism and sound and light, with emphasis on applying the principles to everyday experience. Study the concepts of physics with a minimum of mathematics.

EDP 897660
Raja Almukahhal, Ph.D.
Enroll anytime
Online, proctored final exam • $770
Professional Program in Biopharmaceutical Business

Learn the specific business needs of the biopharmaceutical industries. Focusing on the aspects of business and development unique to biotechnology, medical devices, vaccines and pharmaceuticals, the Professional Program in Biopharmaceutical Business provides the knowledge to start, develop, expand and operate a successful business in the life sciences and pharmaceutical industries. Electives cover other areas within the life sciences and business and management industries to ensure that professionals from all backgrounds can communicate effectively and understand the roles of various functions within disparate business units. Choose business or bioscience electives that apply to multiple programs, allowing you to earn credit while tailoring the program to meet your needs.

Curriculum Requirements
The curriculum consists of 7 required courses and 4 electives for a total of 11 semester units and 0.5 ceu (at least 170 hours of instruction).

Required Courses
• Biotechnology Business Development X415.1
• The Business of Biotechnology (offered this term)
• Entrepreneurship in the Life Sciences Industries X414.7
• Initiating a Start-Up Company in the Life Sciences Industries X475.2
• The Pharmaceutical Development Process X408.8
• Strategic Management in Biopharmaceuticals X400.7
• Venture Funding and Due Diligence: Financing a Biotechnology Company X436.8 (offered this term)

Electives
For a list of electives available this term, see extension.berkeley.edu/spos/biopharmbusiness.html.

Learn More and View the Brochure
extension.berkeley.edu/spos/biopharmbusiness.html
(510) 642-1061
science@unex.berkeley.edu

Register using EDP 402397

Biotechnology and Bioscience Business

COURSE INFORMATION
(510) 642-1062
science@unex.berkeley.edu
extension.berkeley.edu/subject/biotech.html

FREE INFORMATION SESSION
Professional Programs in Biopharmaceutical Business

The Professional Program in Biopharmaceutical Business features a comprehensive curriculum that encompasses the specific business needs of the biopharmaceutical industries. For program details, see this page or visit extension.berkeley.edu/spos/biopharmbusiness.html. In addition, there are two, five-day intensive seminars that give you a focused introduction and immersion in their topics. For details on Bioscience Essentials for Industry Professionals, see p. 171 or visit extension.berkeley.edu/catalog/course389.html. For details on The Drug Development Process, see p. 172 or visit extension.berkeley.edu/catalog/course94.html.

EDP 411801
1 meeting
Thursday, 6–7:30 pm
Dec. 8
San Francisco: Downtown Center • FREE

EDP 413526
1 meeting
Saturday, 11:30 am–12:30 pm
Jan. 21
San Francisco: Downtown Center • FREE

EDP 413534
1 meeting
Saturday, 11:30 am–12:30 pm
May 12
San Francisco: Downtown Center • FREE

The Business of Biotechnology
0.5 ceu
A requirement in the Professional Program in Biopharmaceutical Business

Gain an understanding of the biotechnology industry—what makes it so compelling and what makes it one of the riskiest sectors for investors. Study the career paths of some of the innovative entrepreneurs who created the industry back in the late 1970s. Learn about the risks they took and how the value they generated surpassed even that of dot-com successes. You also get a guided tour of the mysteries of the drug development process and the convoluted funding trail, from venture capital through the all-important initial public offering (IPO).

EDP 413393
Carolyn “Carrie” Kahn, Ph.D.
1 meeting
Saturday, 9 am–3 pm
Feb. 4
San Francisco: Downtown Center • $295

Biopharmaceutical Marketing
X467.7 • 1 semester unit in Business Administration

Learn to develop marketing strategies in the biopharmaceutical industry. Such marketing is unique in that the targeted audience includes both the licensed practitioner and the end consumer. Get an introduction to the concepts of marketing, consumer behavior and the unique issues involved with biopharmaceutical marketing, such as coordinated activities—traditional outbound and nontraditional inbound strategies.

EDP 413369
Leala Thomas, M.B.A.
3 meetings
Saturdays, 9 am–3 pm
Feb. 4–25 (no meeting Feb. 18)
San Francisco: Downtown Center • $575

Effective Presentation Skills for Scientists
X425 • 1 semester unit in Molecular and Cell Biology

An elective in the Professional Program in Biopharmaceutical Business

Focus on the skills needed to prepare and deliver a high-impact scientific presentation. Working professionals and students in professional or graduate science programs learn how to effectively prepare and comfortably deliver scientific presentations of various formats, including short research talks, research seminars, formal conference presentations, informal lab group meetings and job talks. In addition, learn how to deliver constructive criticism. You should have a basic working knowledge of Microsoft PowerPoint.

EDP 413468
Sheryl P. Denker, Ph.D.
5 meetings
Tuesdays, 6:30–9:30 pm
April 24–May 22
San Francisco: Downtown Center • $575
NEW THIS TERM

Intellectual Property and Biopharmaceutical Patent Law
X413.9 • 2 semester units in Business Administration

Master the important concepts surrounding critical patent law and intellectual property protection in the life sciences industry. Learn about the various forms of intellectual property and protection methods as well as the concept of intellectual property, its importance to the industry and its regulations. Study patentability and the process of obtaining a patent in a life sciences technology company. Gain exposure to patent infringement and legal protection for intellectual property.

EDP 413583
Rekha Bansal, J.D.
10 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–April 4
Belmont: Belmont Center • $895

Introduction to Nanotechnology in Medicine
X470.2 • 1 semester unit in Public Health

An elective in the Certificate Program in the Essentials of Green Chemistry

Get an introduction to the basic concepts and principles of nanotechnology, with particular focus on its many uses in medicine and cancer therapy. Examine ongoing applications of nanotechnology in disease diagnosis and treatment.

Prerequisite: Some basic knowledge of biology

EDP 413591
Matthias Steiert, Ph.D.
5 meetings
Wednesdays, 6:30–9:30 pm
Feb. 1–29
San Francisco: Downtown Center • $575

NEW THIS TERM

Life Sciences Business and Marketing: Their Integral Roles for Success
X442.4 • 1 semester unit in Business Administration

Experienced and newer business and marketing professionals—as well as scientific, clinical, regulatory and legal professionals—can benefit from this introduction to the business and marketing aspects of the life sciences industry and how to research and develop solutions to handle its challenges. The rapidly changing bioscience industry depends on the innovation of Bay Area entrepreneurs and experienced business and marketing professionals for success. This course provides scientists, engineers and startup staff with the training and practical skills to successfully discover and create needed products.

EDP 413617
Audrey Erbes, Ph.D.
2 meetings
Thursday and Friday, 8:30 am–5 pm
April 19–20
Belmont: Belmont Center • $795

Life Sciences Product Marketing: It’s All in the Plan
X442.5 • 1 semester unit in Business Administration

Learn how to research, plan, strategize and implement a successful marketing plan. Understand the role and functions of life sciences marketing staff in providing strategic marketing and product planning, as well as tactical marketing programs, in support of life sciences products and technology.

EDP 413633
Audrey Erbes, Ph.D.
6 meetings
Thursdays, 6–9 pm
Feb. 16–March 29 (no meeting March 22)
Belmont: Belmont Center • $695

Bioscience Essentials for Industry Professionals
3.5 ceu • MCLE credit: 35 hours

A recommended course in the Professional Program in Project Management for Biopharmaceuticals

From scientists to managers, professionals in all fields can get a focused introduction to the fundamental concepts and principles of biology in the context of their relevance and application to the bioscience industry. Develop the basic conceptual framework and vocabulary necessary to communicate effectively with technical specialists and comprehend the basic scientific concepts in proposals, prospectuses and market and technical assessment reports. Explore current techniques and technologies while developing an appreciation of the process and the challenge of turning scientific discoveries into successful products. Breakfast, lunch and course materials are included in the course fee.

EDP 413377
Mary Alice Yund, Ph.D., Extension
Honored Instructor
5 meetings
Monday, 1–5 pm
April 9 (also Tuesday and Wednesday,
April 10–11, 8:30 am–5:30 pm;
Thursday and Friday, April 12–13,
8:30 am–4:30 pm)
San Francisco: Downtown Center • $1,975

Guest Speakers
Barbara H. Bowman, Ph.D., teaches molecular cell biology and general biology at Mills College; she has taught biochemistry and molecular biology at UC Berkeley Extension and UC Berkeley.

Jennifer Lange, B.S., M.S., teaches biology and anatomy at Chabot College. She has taught physiology, anatomy and cell biology at UCLA and UCLA Extension and physiology and anatomy for UC Berkeley Extension.

Monica Ranes-Goldberg, Ph.D., currently teaches at UC Santa Cruz Extension. Since 1994, she has taught courses in immunology, microbial pathogenesis, cancer biology and introductory biology for UC Berkeley Extension.

John M. Young, Ph.D., is a former senior pharmaceutical executive and now consultant with more than 40 years of experience in all aspects of development. He now focuses on pharmacology, pharmacokinetics and toxicology in support of biotechnology development.
Overview of the Medical Device Industry

X400.1 • 1 semester unit in Business Administration

An elective in the Professional Program in Biopharmaceutical Business

The medical device industry is one of the fastest-growing high-tech sectors in the United States and in the world. There are currently more than 8,000 types of medical device products, and the industry promises even further growth. Scientific advances in medicine, the demographics of an aging population, the integration of drugs and biologics into devices and the increase in consumer-directed self-care are powering this growth. Gain perspective on the current state of the medical device industry, including local and global opportunities and challenges.

Clinical and Regulatory Sciences

EDP 413666
Sudhi Gautam, OLO, M.Tech, Ph.D.
Venture Funding and Due Diligence: Financing a Biotechnology Company

X436.8 • 1 semester unit in Business Administration

A requirement in the Professional Program in Biopharmaceutical Business

Focus on the financing how-tos for venture-funded startups in the life sciences sector. Study contemporary startup topics covering the history, culture and evolution of biotech businesses and business models. You are introduced to the basics of starting a biotechnology or life sciences company from the perspective of a first-time entrepreneur. Creating a business, finding funding and passing investor due diligence are covered in detail with many examples of successful biotech business models and funding sources.

EDP 413765
Frank Eeckman, Ph.D.

Clinical Research

FREE INFORMATION SESSION
Certificate and Professional Programs in Clinical and Regulatory Sciences

Master practical aspects of clinical trial conduct and management, and learn how to oversee quality and regulatory compliance functions within the biotechnology industry. Learn more at a free, no-obligation event. For Certificate Program in Clinical Research Conduct and Management details, see p. 173 or visit extension.berkeley.edu/cert/clinical.html. For Professional Program in Quality and Compliance for Biotechnology details, see p. 175 or visit extension.berkeley.edu/spos/compliance.html. For Professional Program in Regulatory Affairs details, see p. 176 or visit extension.berkeley.edu/spos/regulatory.html.

EDP 413542
1 meeting
Saturday, 10–11 am
Jan. 21
San Francisco: Downtown Center • FREE

EDP 413559
1 meeting
Saturday, 10–11 am
May 12
San Francisco: Downtown Center • FREE
Certificate Program in Clinical Research Conduct and Management

The human testing process, also known as a clinical trial, determines whether a drug, biologic or medical device is safe and effective before approval for marketing and sale. Regulations and guidelines govern the clinical trials process; thus, thorough knowledge of the procedures at every stage is essential. The Certificate Program in Clinical Research Conduct and Management enables you to master practical aspects of clinical trial conduct and management, including clinical trial phases and design, planning, implementation, data analysis, regulatory and procedural guidelines and ethical considerations.

Curriculum Requirements
The curriculum consists of 4 required courses for a total of 12 semester units (180 hours of instruction).

Required Courses
- Introduction to Clinical Research: Clinical Trial Phases and Design X400.2 (offered this term)
- Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities X400.3 (offered this term)
- Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting X400.4 (offered this term)
- Clinical Trial: Data Analysis, Regulatory Audits, Vendor Selection and Project Management X400.5 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/cert/clinical.html
science@unex.berkeley.edu
(510) 642-1062

Register using EDP 402389
One year of college-level biology or biochemistry is preferred.

EDP 413476
Liz Wool
4 meetings
Saturdays, 9 am–5 pm
Feb. 4–March 17 (no meetings Feb. 11, Feb. 18 and March 10)
San Francisco: Downtown Center • $875

Introduction to Clinical Research: Clinical Trial Phases and Design
X400.2 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management; an elective in the Professional Program in Quality and Compliance for Biotechnology

Review the drug development process, principles of good clinical practice, clinical trial phases and design, principal players in clinical research, regulatory strategies and medical terminology.

Sec. 1 EDP 843540
Michael Dubinsky, B.S.
Jan. 3–Feb. 28
Online • $1,895

Sec. 2 EDP 413427
Maryann Lenoci, M.A.
4 meetings
Saturdays, 9 am–5 pm
Jan. 7, Jan. 21, Feb. 4 and Feb. 25, 9 am–5 pm; no meetings Jan. 14, Jan. 28 and Feb. 11
San Francisco: Downtown Center • $1,825

Sec. 3 EDP 843557
Michael Dubinsky, B.S.
March 1–April 26
Online • $1,895

Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities
X400.3 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management; an elective in the Professional Program in Quality and Compliance for Biotechnology

Learn the procedures inherent to planning clinical trials, including protocol development, case report form design, institutional review board (IRB) submission, prestudy visits and more.

Prerequisite: Introduction to Clinical Research: Clinical Trial Phases and Design X400.2

Sec. 1 EDP 843565
Karen Henry, M.P.H.
Jan. 3–Feb. 28
Online • $1,895

Sec. 2 EDP 843573
Karen Henry, M.P.H.
March 1–April 26
Online • $1,895

Sec. 3 EDP 843435
Maryann Lenoci, M.A.
5 meetings
Saturdays, 9 am–5 pm
March 10–May 12 (no meetings March 17, March 31, April 7 and April 21)
San Francisco: Downtown Center • $1,825

Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting
X400.4 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management

Get a thorough look at the role of clinical trial monitors. Understand the various aspects of study monitoring, such as data review, safety reporting and drug accountability. Study global drug development and subject recruitment and retention, topics that are crucial to meeting study timelines.

Prerequisites: Introduction to Clinical Research: Clinical Trial Phases and Design X400.2 and Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities X400.3

Sec. 1 EDP 843581
David R. Leonard, Ph.D.
Jan. 3–Feb. 28
Online • $1,895

Sec. 2 EDP 413419
Maryann Lenoci, M.A.
4 meetings
Saturdays, 9 am–5 pm
Jan. 28–March 17 (no meetings Feb. 4, Feb. 18, Feb. 25 and March 10)
San Francisco: Downtown Center • $1,825

Sec. 3 EDP 843599
David R. Leonard, Ph.D.
March 1–April 26
Online • $1,895

Clinical Trial: Data Analysis, Regulatory Audits, Vendor Selection and Project Management
X400.5 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management

Learn the clinical study report and other procedures at study close-out to prepare yourself for regulatory audits and inspections. Get an overview of project management and vendor selection in clinical research.

Prerequisites: Introduction to Clinical Research: Clinical Trial Phases and Design X400.2; Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities X400.3; and Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting X400.4

Sec. 1 EDP 843607
Ken Sansone, B.S., CCRA
Jan. 3–Feb. 28
Online • $1,895

Sec. 2 EDP 843615
Daniel Redline, B.A.
March 1–April 26
Online • $1,895

Sec. 3 EDP 413401
Maryann Lenoci, M.A.
4 meetings
Saturdays, 9 am–5 pm
April 7–May 19 (no meetings April 14, April 28 and May 5)
San Francisco: Downtown Center • $1,825

Quality and Compliance

Principles of Quality and Compliance
X401.5 • 1 semester unit in Public Health
A requirement in the professional programs in Quality and Compliance for Biotechnology, in Regulatory Affairs, in Bioscience Manufacturing and Supply Chain and in Biopharmaceutical Product and Process Development; an elective in the Professional Program in Biopharmaceutical Business

Get an introduction to the regulatory authorities whose regulations must be implemented to ensure compliance with the laws governing the biotech industry. Learn to understand what the regulations require and how to apply them in principle.

Prerequisite: College-level biology, biochemistry, chemistry or engineering

EDP 413690
Peter Calcott, B.Sc., D.Phil.
2 meetings
Friday and Saturday, 9 am–5 pm
Jan. 20–21
Berkeley Campus: 155 Barrows Hall • $575
Good Manufacturing Practices (GMP): Quality Assurance (QA) in Practice

A requirement in the Professional Program in Quality and Compliance for Biotechnology

Gain an understanding of the role of quality assurance (QA) in the functional plant that makes materials for clinical trials and commercial operations. Understand the role of quality assurance in a functional GMP plant. Using case studies, examine the various systems and how they interface with the rest of the plant. Learn how to implement the elements and expectations of the regulations in the clinical trial industry.

Prerequisite: One year of college-level biology, biochemistry, chemistry or engineering

EDP 413484
Peter Calcott, B.Sc., D.Phil.
4 meetings
Fridays and Saturdays, 9 am–5 pm
March 2–3 and March 9–10
Berkeley: Golden Bear Center • $875

Validation and Interfacing With Quality Assurance (QA)

A requirement in the Professional Program in Quality and Compliance for Biotechnology

Get an introduction to the principles of validation and the associated requirements defined by regulatory authorities. Study the validation regulatory elements and expectations and how they must be implemented for quality. Examine the role of quality assurance (QA) and how quality and compliance requires interfacing with QA.

Prerequisite: College-level biology and biochemistry or chemistry

EDP 413732
Peter Calcott, B.Sc., D.Phil.
2 meetings
Saturdays, 9 am–5 pm
April 7 and 14
Berkeley: Golden Bear Center • $575

Professional Program in Quality and Compliance for Biotechnology

Build a thorough foundation in the skills and knowledge needed to perform and oversee quality and regulatory compliance functions within the biotechnology industry. Regulations and guidelines govern the manufacturing and clinical trials processes of drugs, biologics and medical devices; therefore, knowledge of the procedures at every stage of the process is essential. Review FDA regulations; International Conference on Harmonisation (ICH) and GXP principles, including guidelines for Good Manufacturing Practices (GMP), Good Clinical Practices (GCP) and Good Laboratory Practices (GLP); practical procedural guidelines; and ethical considerations covering the manufacture of drugs.

Curriculum Requirements

This program consists of 6 required courses and a minimum of 2 electives for a total of 10 semester units (150 hours of instruction). Because the discipline requires broad understanding of various aspects of the industry, the electives include courses from related and interfacing disciplines.

Required Courses

- Principles of Quality and Compliance X401.6 (offered this term)
- Good Manufacturing Practices (GMP): Quality Assurance (QA) in Practice X401.4 (offered this term)
- Good Manufacturing Practices (GMP): Quality Control (QC) in Quality and Compliance X401.7 (offered this term)
- Inspections and Audits for Quality and Compliance X401.5
- Good Clinical Practices (GCP): Drugs and Biologics X475.3 (offered this term)
- Validation and Interfacing with Quality Assurance (QA) X401.8 (offered this term)

Electives

For a list of electives available this term, visit extension.berkeley.edu/spos/compliance.html.

Learn More and View the Brochure
extension.berkeley.edu/spos/compliance.html
(510) 642-1062
science@unex.berkeley.edu

Register using EDP 402363

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175
Professional Program in Regulatory Affairs

Regulatory affairs personnel are the first-line assurance that company products and documentation are in accordance with regulatory bodies worldwide. The Professional Program in Regulatory Affairs provides the training to manage these activities and reviews FDA regulations and other guidelines, Good Pharmaceutical Practice (GPP) principles and ethical considerations covering the development of drugs and dossiers for clinical trials and licensure. Additional coursework draws from the related functional areas of clinical research, product and process development, manufacturing and supply chain, and quality and compliance.

Curriculum Requirements
The curriculum consists of 11 required courses for a total of 14 semester units (210 hours of instruction).

Required Courses
- Principles of Regulatory Affairs X401.3 (offered this term)
- Principles of Supply Chain and Manufacturing X475.7
- Principles of Quality and Compliance X401.6 (offered this term)
- Principles of Product and Process Development X431 (offered this term)
- CMC Regulatory Compliance for Pharmaceutical Products X401.1 (offered this term)
- Good Clinical Practices (GCP): Drugs and Biologics X475.3 (offered this term)
- Harmonization Across Worldwide Applications X402.1
- IND/CTA Enabling Studies and Agency Interfaces X402.4 (offered this term)
- IND/CTA Preparation and Submission X402.3 (offered this term)
- Post-Approval Activities X403.1 (offered this term)
- BLA/NDA/MAA Submissions and Commercialization X402.2 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/spos/regulatory.html
(510) 642-1062
science@unex.berkeley.edu

Register using EDP 402454

Regulatory Affairs
BLA/NDA/MAA Submissions and Commercialization
X402.2 • 2 semester units in Public Health
A requirement in the Professional Program in Regulatory Affairs
Understand the role of regulatory affairs in the course of clinical trials. In addition to learning roles and responsibilities, study how they interface between the professional and other departments and the regulatory bodies. Using case studies, master the various components and processes to enable a successful licensure of a biotechnology product.

EDP 413385
Linda Yang, Ph.D.
4 meetings
Fridays and Saturdays, 9 am–5 pm
April 6–7 and April 20–21
Berkeley: Golden Bear Center • $875

IND/CTA Enabling Studies and Agency Interfaces
X402.4 • 1 semester unit in Public Health
A requirement in the Professional Program in Regulatory Affairs
Regulatory affairs plays an important role during the first stages of product development in ensuring that all appropriate studies are performed to prepare and submit the IND/CTA. Understand this role, and master the initial steps that regulatory affairs professionals take in the product development life cycle, including the responsibilities as facilitators and conduits between companies and regulatory agencies. Using case studies, understand the various elements of IND/CTA enabling studies and how to negotiate with agencies to achieve success.

Prerequisite: One year of college-level biology, biochemistry, chemistry or engineering

EDP 413500
Donna Kato, M.B.A.
2 meetings
Saturdays, 9 am–5 pm
April 21 and 28
San Francisco: Art and Design Center • $575

IND/CTA Preparation and Submission
X402.3 • 1 semester unit in Public Health
A requirement in the Professional Program in Regulatory Affairs
Master the role of regulatory affairs in the preparation, development, submission and approval of the IND/CTA. Using case studies, examine the various components of the submission, how it is prepared using subject matter experts, how its accuracy can be assured, how it is submitted, how to respond to regulatory inquiries and how to initiate trials.

Prerequisite: One year of college-level biology, biochemistry, chemistry or engineering

EDP 413518
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
March 3 and 10
Berkeley Campus: 155 Barrows Hall • $575

Post-Approval Activities
X403.1 • 1 semester unit in Public Health
A requirement in the Professional Program in Regulatory Affairs
Understand the role of regulatory affairs after licensure and commercialization of a biopharmaceutical product, including responsibilities and relationships with other functions. Using case studies, examine Phase 4 studies, safety surveillance, label management, sNDA, sBLA preparation and submissions, prior approval supplements, CBE-30 and annual reportable supplements, field alerts and recalls.

Prerequisite: One year of college-level biology, biochemistry, chemistry or engineering

EDP 413674
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
March 17 and 24
Berkeley: Golden Bear Center • $575

Principles of Regulatory Affairs
X401.3 • 1 semester unit in Public Health
A requirement in the Professional Program in Regulatory Affairs, in Bioscience Manufacturing and Supply Chain and in Biopharmaceutical Product and Process Development; an elective in the professional programs in Quality and Compliance for Biotechnology and in Biopharmaceutical Business
Get an introduction to the regulatory authorities whose regulations and requirements must be implemented and met to ensure compliance with the laws governing this industry. Learn the steps leading to testing products in humans, the approval of products and post-approval requirements and industry implementation.

Prerequisite: College-level biology, biochemistry, chemistry or engineering

EDP 413716
Ronald H. Carlson, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Feb. 4 and 11
Berkeley: Golden Bear Center • $575
Development and Manufacturing

**COURSE INFORMATION**

(510) 642-1062
science@unex.berkeley.edu
extension.berkeley.edu/subject/development.html

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**Bioscience Manufacturing**

The Manufacturing Plant—Design Through Commissioning

X402.9 • 1 semester unit in Public Health

A requirement in the Professional Program in Bioscience Manufacturing and Supply Chain

Understand the role of supply chain and manufacturing professionals in the design and construction of manufacturing facilities in a regulated environment. Gain an understanding and working knowledge of the process, from design to commissioning a current good manufacturing practice (cGMP) manufacturing facility. Study the interactions and relationships within an organization to design and successfully commission a manufacturing facility.

**Prerequisite:** One year of college-level biology, biochemistry, chemistry or engineering

**EDP 413641**

Marilee Brooks, M.S.

2 meetings

Saturdays, 9 am–5 pm

May 5 and 12

San Francisco: Downtown Center • $575

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Product and Process Development

**Principles of Product and Process Development**

X431 • 1 semester unit in Molecular and Cell Biology

A requirement in the professional programs in Regulatory Affairs, in Bioscience Manufacturing and Supply Chain and in Biopharmaceutical Product and Process Development; an elective in the professional programs in Quality and Compliance for Biotechnology and in Biopharmaceutical Business

Gain an overview of product and process development in a biopharmaceutical setting. Learn the steps and requirements for developing products and processes for eventual use in clinical trials and introduction into commercial plants. Understand the various elements and expectations of the regulations and how they must be implemented. In addition to up-to-date information on regulatory agencies’ current expectations, you receive a critical understanding of the regulations’ requirements and how to apply them in principle.

**Prerequisite:** One year of college-level biology, biochemistry, chemistry or engineering

**EDP 413708**

Peter Calcott, B.Sc., D.Phil.

2 meetings

Saturdays, 9 am–5 pm

April 28 and May 5

Berkeley: Golden Bear Center • $575

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Preparing for Commercialization

X428 • 1 semester unit in Molecular and Cell Biology

A requirement in the Professional Program in Biopharmaceutical Product and Process Development

The role of product and process development is integral in preparing for licensure of a biopharmaceutical product. Become a procedural subject matter expert, and learn to write the Chemistry, Manufacturing and Controls (CMC) section of the NDA/BLA/MAA. Define process, development, product characterization, testing and stability. Gain up-to-date information on regulatory agencies’ current policies, and critically understand how to apply them.

**Prerequisite:** One year of college-level biology, biochemistry, chemistry or engineering

**EDP 413682**

Cynthia Cowgill, Ph.D.

2 meetings

Saturdays, 9 am–5 pm

April 14 and 21

San Francisco: Downtown Center • $575

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Professional Program in Bioscience Manufacturing and Supply Chain

To get new drugs, biologics and medical devices to market, trained professionals must work together to ensure compliance with industry standards and to meet requirements for licensure and approval. This professional program prepares you to manage these processes. In addition to FDA and other regulatory body regulations and requirements, you learn the International Conference on Harmonisation (ICH) principles and the Good Manufacturing Practices (GMP).

**Curriculum Requirements**

The curriculum consists of 11 required courses for a total of 12 semester units (180 hours of instruction).

**Required Courses**

- Principles of Supply Chain and Manufacturing X475.7
- Principles of Regulatory Affairs X401.3 (offered this term)
- Principles of Quality and Compliance X401.6 (offered this term)
- Principles of Product and Process Development X431 (offered this term)
- Procurement Through Distribution: Logistics X402.8
- Manufacturing Operations X402.5
- Outsourcing the Supply Chain X402.6 (offered this term)
- The Manufacturing Plant—Design Through Commissioning X402.9 (offered this term)
- Preparing for Submissions and Inspections X402.7
- CMC Regulatory Compliance for Pharmaceutical Products X401.1 (offered this term)
- Good Clinical Practices (GCP): Drugs and Biologics X475.3 (offered this term)

**Learn More and View the Brochure**

extension.berkeley.edu/spos/supplychain.html

(510) 642-1062

science@unex.berkeley.edu

Register using EDP 402438

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ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
**Professional Program in Biopharmaceutical Product and Process Development**

Learn to define products for use in clinical trials and for commercial sale and to develop manufacturing processes for those products. You also review FDA and other regulatory body requirements, International Conference on Harmonisation (ICH) principles, Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP), as well as how these principles fit into the product and process development life cycle.

**Curriculum Requirements**
The curriculum consists of 11 required courses for a total of 12 semester units (180 hours of instruction).

**Required Courses**
- Principles of Product and Process Development X431 (offered this term)
- Principles of Regulatory Affairs X401.3 (offered this term)
- Principles of Quality and Compliance X401.5 (offered this term)
- Principles of Supply Chain and Manufacturing X475.7
- Developing Processes X430
- Manufacturing Under Regulations X433
- Preparing for Commercialization X428 (offered this term)
- Product Characterization and Analytical Development X434
- Product Definition and Delivery X432
- The Role of Product and Process Development Post-Commercialization X429
- Good Clinical Practices (GCP); Drugs and Biologics X475.3 (offered this term)

**Learn More and View the Brochure**
extension.berkeley.edu/spos/biopharmproduct.html
(510) 642-1062
science@unex.berkeley.edu

**REGISTER USING EDP 402446**

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**Project Management for Biopharmaceuticals**

**COURSE INFORMATION**
(510) 642-1062
science@unex.berkeley.edu
extension.berkeley.edu/subject/biopharmpm.html

**Free Information Session:**
**Professional Program in Project Management for Biopharmaceuticals**

Come meet UC Berkeley Extension instructors and staff members, and find out more about the curriculum and direction of this program. An opening presentation is followed by a Q&A session. To reserve your space, please call (510) 642-4111. For more information, see p. 179 or visit extension.berkeley.edu/spos/biopharmpm.html.

**EDP 413567**
1 meeting
Saturday, 1–2 pm
Jan. 21
San Francisco: Downtown Center • FREE

**EDP 413575**
1 meeting
Saturday, 1–2 pm
May 12
San Francisco: Downtown Center • FREE

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**Alliance Management in the Biopharmaceutical Industry**
X484.5 • 1 semester unit in Business Administration
15 pdu: PMI provider 1173

A requirement in the Professional Sequence in Project Management for Biopharmaceuticals

Learn the necessary project management tools, techniques and trends in managing alliances with partners, vendors and contractors.

**Prerequisites:** One year of experience in drug development and project planning or completion of the following courses: Bioscience Essentials for Industry Professionals, The Drug Development Process, Project Planning and Control X471.9.

**EDP 413302**
Melanie Ebojo, M.B.A., PMP
2 meetings
Friday and Saturday, 8:30 am–5 pm
Feb. 24–25
San Francisco: Downtown Center • $995

**Applying the Principles of Project Management in Clinical Development**
X484.2 • 1 semester unit in Business Administration
15 pdu: PMI provider 1173

A requirement in the Professional Program in Project Management for Biopharmaceuticals

Learn to use the tools and techniques of project management as they apply to industry-specific needs in clinical development.

**EDP 413310**
Kay Monroe, M.B.A.
2 meetings
Friday and Saturday, 8:30 am–5 pm
Feb. 10–11
San Francisco: Downtown Center • $995

**Applying the Principles of Project Management in Life-Cycle Management for Biopharmaceuticals**
X484.3 • 1 semester unit in Business Administration
15 pdu: PMI provider 1173

A requirement in the Professional Sequence in Project Management for Biopharmaceuticals

Learn to use the tools and techniques of project management as they apply to industry-specific needs in life-cycle management. The course covers scope management, time management, successful commercialization, cost, procurement and risk management. Learn through lectures, case studies, problem sets and class discussions.

**EDP 413336**
Yong Zhu, M.B.A., Ph.D.
2 meetings
Friday and Saturday, 8:30 am–5 pm
March 16–17
San Francisco: Downtown Center • $995
Applying the Principles of Project Management in Preclinical Development
X478.5 • 1 semester unit in Business Administration
15 pd: PMI provider 1173
A requirement in the Professional Program in Project Management for Biopharmaceuticals
Learn to understand, define, apply and execute project management best practices in drug discovery and preclinical development. Master the framework for developing a preclinical plan based on a solid target product profile, and explore ways to gain efficiencies in terms of time budgets and resource usage. This course covers the critical elements of the drug development discovery phase before detailing how project management can make the preclinical phase of drug development more efficient.
Prerequisites: Experience in drug development and project planning or completion of the following: Bioscience Essentials for Industry Professionals, The Drug Development Process and Project Planning and Control X471.9
EDP 413238
Melanie Ebojo, M.B.A., PMP
2 meetings
Friday and Saturday, 8:30 am–5 pm
Jan. 27–28
San Francisco: Downtown Center • $995

Best Practices Approaches in Project Management for Biopharmaceuticals, Medical Devices and Vaccines
X484.6 • 1 semester unit in Business Administration
15 pd: PMI provider 1173
A requirement in the Professional Program in Project Management for Biopharmaceuticals; an elective in the Professional Program in Biopharmaceutical Business
This course introduces biopharmaceutical professionals to the current best practices of project management in the areas of biopharmaceuticals, medical devices, vaccines and blood testing. Learn through lectures, case studies, problem sets, class discussions and student projects.
Prerequisites: One year of experience in drug development and project planning or completion of the following courses: Bioscience Essentials for Industry Professionals, The Drug Development Process and Project Planning and Control X471.9
EDP 413344
Elie Asmar, M.S.E., PMP, CKM, Extension Honored Instructor
2 meetings
Saturdays, 8:30 am–5 pm
March 24 and 31
San Francisco: Downtown Center • $995

Best Practices in Project Management of CMC Planning
X484.7 • 1 semester unit in Business Administration
A requirement in the Professional Program in Project Management for Biopharmaceuticals
Learn the current best practices of project management tools and techniques in the pharmaceuticals, medical devices and biologics targeted to Chemistry, Manufacturing and Controls (CMC) planning and implementation.
Prerequisites: One year of experience in drug development and project planning, or completion of the following courses: Bioscience Essentials for Industry Professionals, The Drug Development Process: An Intensive Seminar and Project Planning and Control X471.9
EDP 413351
Hossein Khoshkhooh, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
May 12 and 19
Berkeley: Golden Bear Center • $1,150

Opportunities and Challenges in Managing Global Projects
X484.4 • 1 semester unit in Business Administration
15 pd: PMI provider 1173
A requirement in the Professional Program in Project Management for Biopharmaceuticals; an elective in the Professional Program in Biopharmaceutical Business
Acquire the necessary project management tools and techniques to manage global projects. Learn how to manage resources across borders to take advantage of the growing opportunities and challenges of clinical trials in Europe, Asia and Latin America. Learn through lectures, case studies, problem sets, class discussion and student projects.
Prerequisites: One year of experience in drug development and project planning or completion of the following courses: Bioscience Essentials for Industry Professionals, The Drug Development Process: An Intensive Seminar and Project Planning and Control X471.9
EDP 413658
Julie Bukar, M.B.A.
2 meetings
Friday and Saturday, 8:30 am–5 pm
Feb. 3–4
San Francisco: Downtown Center • $995

Professional Program in Project Management for Biopharmaceuticals

Learn biopharmaceutical-specific project management processes, and gain exposure to the latest professional trends in the pharmaceutical, biotechnology, medical device and diagnostics industries. Use your existing skills and experience to advance or shift your career in this booming field.

Curriculum Requirements
The curriculum consists of 6 required two-day courses for a total of 6 semester units (90 hours of instruction). Choose 6 of the 7 required courses.

Required Courses
• Applying the Principles of Project Management in Preclinical Development X478.5
• Applying the Principles of Project Management in Clinical Development X484.2 (offered this term)
• Applying the Principles of Project Management in Life-Cycle Management for Biopharmaceuticals X484.3 (offered this term)
• Opportunities and Challenges in Managing Global Projects X484.4 (offered this term)
• Alliance Management in the Biopharmaceutical Industry X484.5 (offered this term)
• Best Practices Approaches in Project Management for Biopharmaceuticals, Medical Devices and Vaccines X484.6 (offered this term)
• Best Practices in Project Management of CMC Planning X484.7 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/spos/
biopharmpm.html
(510) 642-1061
science@unex.berkeley.edu
Register using EDP 402339
Mathematics and Statistics

COURSE INFORMATION
(510) 642-1061
mathstat@unex.berkeley.edu
extension.berkeley.edu/subject/math.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Mathematics

Mathematics Refresher
2.8 ceu
Brush up on essential math skills, including selected topics in algebra, geometry, trigonometry, probability and statistics. Note: This course does not address test-taking strategies for specific tests, but rather covers the mathematics skills necessary for you to succeed on the exams.

EDP 403204
Dieter Jurkat, M.S., Extension Honored Instructor
4 meetings
Saturdays, 9 am–5 pm
Jan. 21–Feb. 11
San Francisco: Downtown Center • $350

Satisfy Your Haas M.B.A. Prerequisites in Mathematics and Statistics

Let UC Berkeley Extension help you meet the math and statistics requirements for the Haas School of Business Evening and Weekend M.B.A. Program. For the math prerequisite, choose one of the following courses in either self-paced or classroom format:

• Precalculus
• Analytic Geometry and Calculus
• Calculus

The statistics prerequisite can be satisfied by taking Statistics XB2 in the classroom.

For more information about the Haas School of Business Evening and Weekend M.B.A. Program, visit www.haas.berkeley.edu. For other institutions, inquire directly with individual admissions offices to determine whether these courses meet their requirements.

Analytic Geometry and Calculus-A
XB16A • 3 semester units in Mathematics
An elective in the Post-Baccalaureate Health Professions Program
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program. Important: Special academic policies apply to XB courses. See p. 224.

Review the function concept and basic graphing techniques for simple functions in this introductory course in calculus. Study the limit concept and continuity, as well as the derivative and its application to optimization problems, related rates and curve sketching. Study the basic properties of logarithms and exponents, and get an introduction to the logarithmic and exponential functions and their derivatives, as well as an introduction to integration. Examine the development of calculus concepts and their applications to problems in business and biological sciences.

Prerequisites: Algebra including trigonometry and one semester of calculus

EDP 403212
Dieter Jurkat, M.S., Extension Honored Instructor
11 meetings
Thursdays, 6–10 pm
Jan. 12–March 8 (also Sunday, Jan. 22, 9 am–12 pm; Sunday, Feb. 12, 9 am–4 pm)
San Francisco: Downtown Center • $650

Calculus X1A
X1A • 4 semester units in Mathematics
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program

In this introduction to differential and integral calculus, examine the key concepts of limit, derivative and continuity, as well as the main applications of derivatives in graphing functions and optimizing functions. Then, explore the fundamental theorem of calculus, which leads to the concept of integration and one of its main applications in calculating volumes through solids of revolution.

Prerequisite: Three-and-one-half years of high school mathematics, including trigonometry and analytic geometry

Sec. 1 EDP 857722
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $790

Sec. 2 EDP 867820
Merlin Miller, M.A.
Enroll anytime
Online, proctored final exam • $785

Sec. 3 EDP 857441
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $785

Calculus X1B
X1B • 4 semester units in Mathematics
This continuation of Calculus X1A includes techniques and applications of integration, infinite sequences and series, first-order ordinary differential equations, exact equations, second-order ordinary differential equations, oscillation and damping and series solutions of ordinary differential equations.

Prerequisite: Calculus X1A or equivalent

EDP 857706
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $790

EDP 857714
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $790

Precalculus
X9 • 2 semester units in Mathematics
Gain exposure to concepts in basic and advanced algebra and some trigonometry. Topics such as logarithms, solving or graphing linear equations and factoring a polynomial should be familiar to some students. However, this class goes into these topics at a more advanced level than a beginning or intermediate algebra class does. You gain a good foundation for study in future calculus classes. Note: An integral component of this course is the interactive website MyMathLab. For complete system requirements, go to www.mymathlab.com/system.html.

Prerequisites: Two years of high school algebra, or the equivalent of a beginning and an intermediate algebra class and one year of high school geometry or its equivalent

EDP 857656
Flor Feldman, M.Sc.
Enroll anytime
Online • $720
Statistics

Introduction to Statistics

- XB2 • 4 semester units in Statistics
- XBW2 for online sections

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program.

Important: Special academic policies apply to XB and XBW courses. See p. 224.

Learn basic concepts of probability and statistical inference, focusing on an intuitive approach to understanding concepts and methodologies. Get an introduction to statistical and critical thinking, including descriptive statistics, probability, sampling distributions, interval estimation, hypothesis testing and regression. Note: If you want to complete Haas M.B.A. prerequisites, you must be in the online course for three months before you can take the final exam.

The online course is the recipient of the Helen Williams Award for Excellence in Collegiate Independent Study from the American Association for Collegiate Independent Study (AACIS).

Prerequisites: Two years of high school algebra; a recent course in college algebra is recommended. Note: An accelerated online section will be offered in the spring and summer semesters.

Sec. 1 EDP 403220
Dieter Jurkat, M.S., Extension Honored Instructor
15 meetings
Tuesdays, 6–10 pm
Jan. 10–March 20 (also Sundays, Jan. 29, Feb. 26, March 11 and March 18, 9 am–1 pm)
San Francisco: Downtown Center • $720

Sec. 2 EDP 857615
G. James Pan, Ph.D.
Enroll anytime
Online, proctored final exam • $785

Sec. 3 EDP 857623
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $785

Sec. 4 EDP 857631
Dieter Jurkat, M.S., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $785

Introduction to Biostatistics

Gain the statistical skills to read scientific articles, understand the statistical methods used and interpret the results. Upper-division undergraduate students, premedical students and professionals who are interested in biostatistics can benefit most from this knowledge.

For course schedule, see p. 164.

Self-Paced Courses in Mathematics

The content of these courses is identical to that of our traditional courses except in the method of instruction: There are no formal lectures. Rather, you cover the material at your own pace, using a series of study guides. An instructor is available for individual instruction and to administer exams. Attend as many of the class meetings as you need. This is not an online or correspondence course. Three or more semester units in any self-paced math course, excluding Algebra and Trigonometry XP-S, satisfy the math prerequisite for the Haas School of Business Evening and Weekend M.B.A. Program.

Algebra and Trigonometry XP-S
1–2 semester units in Mathematics
Prerequisite: Two years of high school math or equivalent
EDP 403147

Precalculus X32-S
1–4 semester units in Mathematics
Prerequisite: Three years of high school math with one year of algebra
EDP 403196

Analytic Geometry and Calculus X16A-S
1–3 semester units in Mathematics
Prerequisite: Three years of high school math, including trigonometry
EDP 403154

Analytic Geometry and Calculus X16B-S
1–3 semester units in Mathematics
Prerequisite: Analytic Geometry and Calculus X16A-S or X16A, or equivalent
EDP 403162

Calculus X1A-S
1–4 semester units in Mathematics
Prerequisite: Three-and-a-half years of high school math, including trigonometry and analytic geometry, or precalculus
EDP 403170

Calculus X1B-S
1–4 semester units in Mathematics
Prerequisite: Calculus X1A-S or X16A, or equivalent
EDP 403188

Instructor: Flor Feldman, M.Sc.
Wednesdays, 6:30–10 pm
Jan. 18–March 17 (also Saturdays, Jan. 28, Feb. 11, Feb. 25 and March 17, 10 am–1:30 pm; no meeting Feb. 29)
Berkeley Campus: 118 Barrows Hall • $675 per course

For detailed information about the course structure and refund policy, call (510) 642-1061, visit extension.berkeley.edu/math/selfpaced.html or email mathstat@unex.berkeley.edu.
Michele Melonas has a bachelor’s degree in art history from San Diego State University and an envious cache of travel memories—visiting more than 40 countries to date. Wanting to get in touch with her creative side and possibly write about her adventures, Melonas is a student in UC Berkeley Extension’s Post-Baccalaureate Certificate Program in Writing. “You know the question, ‘If money and talent didn’t matter, what would you like to be?’” Melonas says. “I found myself saying, ‘Writer.’”

After taking Introduction to Writing Fiction, Melonas knows now that she can write. “The course is exactly what I wanted,” she says. “I wanted a place where I could learn, where I could interact, where I could feel safe.” Melonas credits instructor Daniel Coshnear with encouraging the class’s supportive environment. “His criticism was soft in that you didn’t feel bad, but it was very constructive at the same time,” she explains. “It’s really boosted my confidence to continue writing. I feel like I made the right decision.”

Each term, promising students are selected to share some of their works at a public reading. Selected to read this past summer, Melonas is on her way to turning her dream job into reality.
Your path to growth as a writer starts here. With UC Berkeley Extension, you can add polish to your work no matter what kind of writing you do. Take courses on writing everything from poetry, short stories and novels to memoirs, travel features and technical documents. Learn how to break into publishing, or strengthen your skills in editing and grammar. Instructors who are published writers ensure you’re learning from the very best.

If you’re ready to make a greater commitment to your craft, the Post-Baccalaureate Certificate Program in Writing is one of a kind in the Bay Area and the ideal way to formalize your training. The certificate helps you build a strong portfolio and enhance your candidacy for graduate study in creative writing.

Whether you come for a weekend retreat or a professional certificate, UC Berkeley Extension can help you take your writing to the next level.
Writing

Free Information Sessions
Attend a free information session to discover how UC Berkeley Extension can help you achieve your goals. Learn more about courses and programs, meet other prospective students, talk to instructors and staff and ask questions. To reserve your space, call (510) 642-4111 or visit extension.berkeley.edu.

Post-Baccalaureate Certificate Program in Writing
EDP 023465
Thursday, Jan. 12, 5:30–6:30 pm
Berkeley: Golden Bear Center

Professional Sequence in Editing
EDP 023549
Thursday, Jan. 26, 5–6 pm
Berkeley: Golden Bear Center

Specialized Sequence in Professional Writing
EDP 023515
Thursday, Jan. 26, 6–7 pm
Berkeley: Golden Bear Center

Literature and Humanities

See the range of literature courses that Extension offers in the Humanities, Languages and Personal Development department, beginning on p. 142.

Editing

COURSE INFORMATION
(510) 642-6362
letters@unex.berkeley.edu
extension.berkeley.edu/subject/editing.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

FREE INFORMATION SESSION
Professional Sequence in Editing
Discover how UC Berkeley Extension’s program can help you develop the skills to enter the editing field or add to your expertise as a professional editor. An opening presentation is followed by an opportunity to get your questions answered. For more information, see p. 185 or visit extension.berkeley.edu/spos/edit.html.

EDP 023549
1 meeting
Thursday, 5–6 pm
Jan. 26
Berkeley: Golden Bear Center • FREE

Grammar, Mechanics and Usage for Editors
X445 • 2 semester units in English
A requirement in the Professional Sequence in Editing
Editors must have a strong command of English grammar, syntax and mechanics to edit the work of others clearly, confidently and correctly. Gain a practical understanding of grammar and the logic governing syntax and punctuation use. Learn to analyze grammar and syntax, understand sentence structure, transition from one idea to another and choose the right words to convey meaning, among other topics. Homework exercises, frequent quizzes and a multidraft editing assignment help build your expertise. Enrollment is limited.

Prerequisite: You must be proficient in English and have a solid grasp of English grammar.

Sec. 1 EDP 843342
Linda R. Thompson, M.A.
Jan. 17–April 10
Online • $595

Sec. 2 EDP 843359
Leda Ciraolo, Ph.D.
Jan. 24–April 17
Online • $595

Sec. 3 EDP 843367
Barbara Magalnick, M.S.
Jan. 24–April 17
Online • $595

Sec. 4 EDP 023135
Vici Casana, M.A.
12 meetings
Wednesdays, 6:30–9 pm
Feb. 8–April 25
Berkeley Campus: 54 Barrows Hall • $595

Editorial Workshop I: Introduction to Copyediting
X405 • 2 semester units in Journalism
A requirement in the Professional Sequence in Editing
Get an overview of the editorial process in this beginning copyediting course, including the use of style manuals and reference books, creation of style sheets and methods of querying authors and project editors. Learn how to edit using conventional marks and symbols; apply the appropriate level of copyediting; eliminate bias; query permissions; ensure consistency; typeset a manuscript; and copyedit and insert figures, tables and artwork. Enrollment is limited.

Prerequisite: Grammar, Mechanics and Usage for Editors X445

Sec. 1 EDP 843375
Leda Ciraolo, Ph.D.
Jan. 17–April 10
Online • $599

Sec. 2 EDP 843383
John Curley, B.A.
Jan. 24–April 17
Online • $599

Sec. 3 EDP 843391
Gail Hynes Shea, B.A.
Jan. 24–April 17
Online • $599

Sec. 4 EDP 023044
Instructor to be announced
10 meetings
Wednesdays, 6:30–9:30 pm
March 21–May 23
Berkeley Campus: 140 Barrows Hall • $595

Editorial Workshop II: Intermediate Copyediting
X415 • 2 semester units in Journalism
A requirement in the Professional Sequence in Editing
Study more complex aspects of copyediting and the fine points of editorial style that editors of book-length manuscripts must master. Practice working within the three levels of copyediting—light, medium and heavy—and learn how to edit using different style manuals. You also get additional practical work with codes and type specifications, photos and artwork, tables and references and footnotes. Frequent editing assignments are required.

Prerequisite: Editorial Workshop I: Introduction to Copyediting X405

Sec. 1 EDP 843409
Linda R. Thompson, M.A.
Jan. 17–April 10
Online • $599

Sec. 2 EDP 023051
Gail Hynes Shea, B.A.
10 meetings
Saturdays, 9:30 am–12:30 pm
Jan. 28–April 7 (no meeting Feb. 18)
Berkeley Campus: 175 Barrows Hall • $595
Advanced Editorial Workshop: Substantive Editing
X425 • 2 semester units in Journalism

A requirement in the Professional Sequence in Editing

Develop your skills in applying the principles of effective writing to the editing of nonfiction book manuscripts. Examine two phases of substantive editing—line editing and developmental editing—and learn the art of proposing editorial changes other than those required to correct errors or to achieve a consistent editorial style. Learn how to edit for clarity and concision, how to identify problems of cohesion and coherence (logical flow) and how to refine and invigorate an author’s style.

Prerequisites: Editorial Workshop II: Intermediate Copyediting X415
EDP 843417
Instructor to be announced
Jan. 17–April 10
Online • $599

Indexing: Theory and Application
X477 • 3 semester units in Journalism

Recipient of the 2005 Distance Learning “Community of Practice” Course Award from the University Continuing Education Association (UCEA)

A good index greatly enhances the usability and value of a book, yet few writers and editors know how to construct this vital part of a nonfiction publication. Learn the fundamentals of writing, editing and delivering back-of-book indexes to publishing clients. You also learn the basic format, guidelines and term-selection approaches of embedded and Web indexing, using three major indexing software programs to complete several of your assignments.

Prerequisites: Strong language, reading, computer and Internet skills. A PC running the Windows OS is highly recommended. See Web for details.

This course has six rotating sections with varying instructors: Sylvia Coates, Heather Ebbs, Lucie Haskins, Fred Leise, Max McMaster and Jan C. Wright.

For information about available sections, visit extension.berkeley.edu/catalog/course394.html.

Professional Sequence in Editing

Offering proficiency in copyediting, line editing and developmental editing, the Professional Sequence in Editing is the ideal editorial training if you have a passion for fine-tuning the written word. Whether you want to develop an editing career, rise to a management position in publishing or master the editorial components of a related profession, this program can help turn your editorial sensibilities into marketable skills.

Required Courses
You must take these courses in the following sequence:

- Grammar, Mechanics and Usage for Editors X445 (offered this term)
- Editorial Workshop I: Introduction to Copyediting X405 (offered this term)
- Editorial Workshop II: Intermediate Copyediting X415 (offered this term)
- Advanced Editorial Workshop: Substantive Editing X425* (offered this term)

*A course of equivalent length and unit value from the Professional Sequence in Technical Communication may be substituted for Advanced Editorial Workshop: Substantive Editing X425.

Curriculum Requirements
The curriculum consists of 4 required courses for a total of 8 semester units (120 hours of instruction).

Learn More and View the Brochure
extension.berkeley.edu/spos/edit.html
(510) 642-6362
letters@unex.berkeley.edu

Register using EDP 022343

Free Public Event

15th-Annual Student Reading Series

Come hear students in the Post-Baccalaureate Certificate Program in Writing share their works of poetry, nonfiction and fiction at our annual student reading events in May.

Sunday, May 6, 4 pm
Books, Inc., 601 Van Ness Ave., San Francisco • FREE

Sunday, May 20, 3 pm
Diesel, A Bookstore, 5433 College Ave., Oakland • FREE
Technical Communication

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/subject/techcom.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Technical Communication I
X465 • 2 semester units in Journalism

A requirement in the Professional Sequence in Technical Communication

Learn the requirements for designing and developing technical documentation from start to finish. As you develop your class project, practice how to define your audience and purpose, determine appropriate document format and style, improve the clarity and organization of your writing and review and edit your work more effectively. Learn about teamwork, oral communication and presentation skills that can increase your success in the technical communication field.

Prerequisites: Basic computer literacy, word processing skills and good writing skills, including knowledge of correct grammar, usage and punctuation.

Technical Communication II
X466 • 2 semester units in Journalism

A requirement in the Professional Sequence in Technical Communication

Build on the skills you developed in Technical Communication I X465, and hone your ability to define the audience and purpose of a document to present the information in an optimal form. Improve your technical writing style and technique while creating writing samples that include a variety of document types for both paper and online presentation. Review technical communication tools and technology, as well as current Web content and formatting languages.

Prerequisite: Technical Communication I X465 or Technical Writing X412 or equivalent

Technical Communication I

Sec. 1 EDP 313163
Linda Urban, B.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 29–May 31
San Francisco: Art and Design Center • $595

Sec. 2 EDP 877803
John Tabor, B.A.
Enroll anytime
Online, proctored final exam • $550

Technical Writing
X412 • 3 semester units in English

May be substituted for Technical Communication I X465 in the Professional Sequence in Technical Communication

Develop your ability to organize and craft information for manuals, journal articles, reports and other technical publications. Learn document design and production principles, computerized interactive documentation, the use of desktop publishing and the publication-to-print process.

EDP 877845
John Tabor, B.A.
Enroll anytime
Online • $770
Writing

COURSE INFORMATION
(510) 642-6362
letters@unex.berkeley.edu
extension.berkeley.edu/subject/write.html

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Open House: Post-Baccalaureate Certificate Program in Writing
Find out how UC Berkeley Extension’s post-baccalaureate certificate for aspiring writers can help formalize your training and prepare you for graduate study in creative writing. Join us for an evening of community and inspiration as the instructors in the Post-Baccalaureate Certificate Program in Writing read from their work and discuss their spring courses. For more information, see p. 189 or visit extension.berkeley.edu/cert/writing.html.

EDP 023465
1 meeting
Thursday, 5:30–6:30 pm
Jan. 12
Berkeley: Golden Bear Center • FREE

Open House: Specialized Program in Professional Writing
Find out how this new specialized program can help you to write successfully and effectively at a professional level and across industries, in both print and digital formats. Join us for an evening of community and inspiration as the instructors in the Specialized Program in Professional Writing read from their work and discuss their spring courses. For more information, see p. 190 or visit extension.berkeley.edu/spos/professionalwriting.html.

EDP 023515
1 meeting
Thursday, 6–7 pm
Jan. 26
Berkeley: Golden Bear Center • FREE

Creative Writing

Exploring Your Creative Writing Potential
X70 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Learn to assess your potential, identify your strengths and develop valuable writing techniques in this course for beginning writers. Class exercises and weekly writing assignments help you discover your talents in a variety of forms: short fictional scenes, short stories, poetry and journalistic writing. The supportive atmosphere helps you see how others respond to your writing.

EDP 867689
Mimi Albert, M.F.A.
Enroll anytime
Online • $550

The Craft of Writing
X421 • 2 semester units in English
A requirement in the Post-Baccalaureate Certificate Program in Writing

As a creative writing student, you need to become comfortable with elements of the craft, whether they are fine-tuning an image in a poem or introducing a character in the beginning of a short story. Gain practical exposure to the uses, demands and possibilities of craft in fiction, poetry and nonfiction in this course. Enrollment is limited.

Sec. 1 EDP 843425
David Rompf, J.D.
Jan. 17–April 10
Online • $555

Sec. 2 EDP 023010
Lindsey Crittenden, M.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 1–May 10
San Francisco: Art and Design Center • $525

Introduction to Writing Fiction
X464 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Learn the basic concepts and techniques of writing fiction, with the aim of heightening your sense of language and developing your ability to solve problems of structure, characterization, viewpoint, story line, imagery, dialogue and believability. The instructor evaluates your manuscripts and allows time for classroom discussion. Enrollment is limited.

Sec. 1 EDP 023200
Daniel Coshnear, M.F.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 20–May 22
San Francisco: Downtown Center • $525

Sec. 2 EDP 897371
Mimi Albert, M.F.A.
Enroll anytime
Online • $550

Summer Fiction Writing Intensive
X404 • 2 semester units in English

Mark your calendar now for this exciting weeklong intensive that helps you take your fiction writing to the next level. Immerse yourself in daily writing exercises, workshops, craft lectures and readings by guest authors. The course is limited to 24 participants and counts as an elective in the Post-Baccalaureate Certificate Program in Writing.

5 meetings
Monday–Friday, 9 am–5 pm
July 9–13
San Francisco: Art and Design Center

Learn More
Contact the Writing department.
letters@unex.berkeley.edu
(510) 642-6362
Poets Studied and in Conversation

X110.2 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Study, emulate and engage in discussion with five noted Bay Area poets. The course is divided into two-week segments, each devoted to an individual poet. The first week you study the poet's work, including one of his or her latest books. The second week, that poet attends class for a discussion of poetics and process. You also write your own poems from exercises inspired by the five poets' work, and a part of each class will be devoted to a workshop of students' writing. Emphasis is on the exploration of new writing ideas and approaches arising from the work studied.

Guest Poets

Micah Ballard coedits Auguste Press and Lew Gallery Editions, and he codirects the University of San Francisco’s Master of Fine Arts in Writing Program. His recent books include Parish Krewes (Bootstrap Press, 2008) and Waits and Strays (City Lights Books, 2011). Winner of the 2011 American Book Award and the California Book Award Silver Medal, Camille T. Dungy is author of three books, including Smith Blue (Southern Illinois University Press, 2011). Dungy is a professor in the Creative Writing department at San Francisco State University.


Aaron Shurin is the author of 11 books, including Involuntary Lyrics (Omnidawn, 2005) and The Paradise of Forms (Talisman House, 1999), a Publishers Weekly Best Book. He is a professor in the University of San Francisco’s Master of Fine Arts in Writing Program.

A former National Endowment for the Arts fellow, Brian Teare is the author of four books, including the Lambda Literary Award–winning Pleasure (Ahsahta Press, 2010). An assistant professor at Temple University, he also makes books by hand for his micropress, Albion Books.

EDP 023176
Laura Walker, M.F.A.
10 meetings
Thursdays, 7–10 pm
Feb. 2–April 5
Berkeley Campus: 50 Barrows Hall • $525

Intermediate Fiction Writing

X440 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Explore the craft of writing fiction, particularly if you have already completed Introduction to Writing Fiction X464 or the equivalent. Lectures and in-class exercises focus on the short story; however, if you are primarily interested in working on a novel, you can still benefit greatly. Examine the intricacies of plotting, narrative voice and personal style. Class sessions include instructor-led critiques of your work and focus on improving your ability to edit and revise your stories. Enrollment is limited to 19.

EDP 023101
Monica Wesolowska, B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 7–May 23
Berkeley Campus: 78 Barrows Hall • $525

Advanced Fiction Writing

X410 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Skilled fiction writers, take your writing to the next level with 10 tips over 10 weeks that will make you more powerful fiction writers. Here’s an opportunity to hone your craft and realize your vision on the page. Prepare to discuss and refine manuscripts in a highly supportive workshop environment, with publication as the goal. Enrollment is limited to 18.

EDP 023093
Laurie Ann Doyle, M.F.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 8–May 10
Berkeley Campus: 80 Barrows Hall • $525

Learning from the Masters: Techniques of the Literary Greats

X425 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Develop your skills at creating fiction by closely studying the work and methods of great writers, including writers as diverse as Raymond Carver, James Baldwin, Ernest Hemingway and Alice Munro. You examine how these authors draw the reader in, introduce tension, sustain momentum and use vivid details and specific incidents to create unforgettable settings and characters. Enrollment is limited.

EDP 023168
Laurie Ann Doyle, M.F.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 19–March 22
Berkeley Campus: 80 Barrows Hall • $525

Developing the Novel I

X125.1 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Explore the craft of longer fiction and how to meet its creative challenges. Each session includes a lecture on craft, supported by discussion of assigned readings and exercises to unlock the potential of your ideas. Learn how to develop characters, language, voice, pace, tone, theme and setting, and participate in a group critique of student work. Enrollment is limited to 18.

EDP 867614
Mimi Albert, M.F.A.
Enroll anytime
Online • $550

Developing the Novel II

X125.3 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

This course deepens instruction on the elements of the novel introduced in Developing the Novel I X125.1, or the equivalent, and provides you with a structure for making progress with a story idea. Class meetings combine lecture, discussion and writing exercises with an emphasis on peer critiques of ongoing work (workshops). You focus on more sustained aspects of fiction: crafting point of view and narrative transitions, sequencing and structuring scenes, selecting telling details, mixing dialogue and description and shaping the plot.

EDP 023036
Mary Ann Koory, Ph.D., Extension
Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
March 8–May 10
San Francisco: Art and Design Center • $525

Weekend Writer’s Retreat

1.2 ceu

Whether you are engaged in an ongoing writing project or have always wanted to write, this weekend retreat provides the stimulation and concentration you need. In this two-day writing intensive, you explore writing activities that connect you to your own passion and voice, and experiment with exercises that help push your writing to the next level. Using techniques as diverse as meditation and guided visualization, writing prompts, Gestalt exercises and self-dialogue, you explore all facets of the writing process. You also learn what it takes to find and sustain a regular writing time and recognize the possibilities in your own writing. The weekend includes lecture, discussion, guided writing exercises and readings by guest writers. Enrollment is limited.

EDP 023184
Jane Anne Staw, Ph.D., M.F.A., Extension
Honored Instructor
2 meetings
Saturday and Sunday, 10 am–5 pm
April 28–29
Berkeley: Golden Bear Center • $295
Post-Baccalaureate Certificate Program in Writing

For aspiring writers serious about their craft, the UC Berkeley Extension Post-Baccalaureate Certificate Program in Writing is ideal. Formalize your training and prepare for graduate study in writing with this professional certificate—the only one of its kind in the Bay Area. Build your writing portfolio, and gain a credential that shows your commitment. Join a community of writers who share your dedication and aid your development as a writer. Discover what it takes to be published. Be inspired as you read exemplary works of literature. And learn from respected instructors who can help you stand out from the competition for a coveted place in a master of fine arts (M.F.A.) writing program.

Curriculum Requirements
The curriculum consists of 7 courses for a minimum of 14 semester units (210 hours of instruction), which includes 2 required courses and 5 restricted electives selected from two categories: literature (2 workshops) and writing (3 workshops).

Required Courses
• The Craft of Writing X421 (offered this term)
• Writing Skills Workshop X13 (offered this term)

Literature and Writing Workshop Electives
For a complete list of electives available this term, please visit extension.berkeley.edu/cert/writing.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/writing.html
(510) 642-6362
letters@unex.berkeley.edu

Register using EDP 022466
NEW THIS TERM
Specialized Program in Professional Writing

Writing well and communicating effectively are critical skills that are in demand. Whether you are writing a business proposal, fund-raising letter, ad copy, feature story or blog, strong, persuasive writing is necessary to your organization’s success. The Specialized Program in Professional Writing offers a comprehensive curriculum to provide you with the skills to write successfully and effectively at a professional level across industries, in both print and digital formats. Learn how to craft well-written communications; describe ideas, products and services succinctly and compellingly; analyze and process large amounts of data into narrative form; and write for new and emerging forms of communication.

Curriculum Requirements
The curriculum consists of 5 required courses and 1 elective for a total of 7 semester units and 0.7 ceu (112 hours of instruction).

Required Courses
• Effective Writing in the Workplace (offered this term)
• From Pitch to Print: A Five-Week Introduction to Public Relations Workshop (offered this term)
• Writing for Social Media: Prose That Works for Web 2.0 (offered this term)
• Writing Skills Workshop (offered this term)

Electives
For a complete list of electives available this term, please visit extension.berkeley.edu/spos/professionalwriting.html

Learn More and View the Flyer
extension.berkeley.edu/spos/professionalwriting.html
(510) 642-6362
letters@unex.berkeley.edu

Register using EDP 022559

Nonfiction

Writing Skills Workshop
X13 • 2 semester units in English
A requirement in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing

Good writing isn’t fuzzy. It’s clear, concise and grammatically correct—no matter the audience or purpose. In this class, you draft, write and revise your own work; read literary essays as examples of effective syntax and coherent structure; share work in a supportive, focused workshop environment; and review common grammar pitfalls. This course is designed both for students in the certificate program and for those wishing to hone their skills for any writing need.

Prerequisite: You must be proficient in English and have a solid grasp of English grammar.

Sec. 1 EDP 843433
Margaret Steen, M.J., Extension Honored Instructor
Jan. 17–April 10
Online • $555

Sec. 2 EDP 023242
Cody Gates, M.F.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 13–May 15
Berkeley: Golden Bear Center • $525

Effective Writing in the Workplace
X456 • 1 semester unit in English
A requirement in the Specialized Program in Professional Writing

Whether you are writing a memo to your boss or a letter to the editor, it is crucial to craft your argument clearly and persuasively. Build confidence by improving your writing’s organization, logic and style so that, whatever kind of writing your work requires, you can get your point across more eloquently and quickly. Delve into the details of the writing process: identifying an audience, choosing the best structure and revising early drafts of your work. Enrollment is limited.

Prerequisite: You must be proficient in English and have a solid grasp of English grammar.

EDP 023069
Margaret Steen, M.J., Extension Honored Instructor
5 meetings
Wednesdays, 10 am–1 pm
Feb. 1–March 28 (no meetings Feb. 8, Feb. 22, March 7 and March 21)
San Francisco: Art and Design Center • $375

Brushing Up on English Grammar
As a writer, you must have a strong, flexible command of English grammar, syntax and mechanics. You must also understand how these elements are affected by the purpose and the intended audience. Gain a practical understanding of grammar, syntax and punctuation. Learn how to analyze sentence structure, untangle convoluted sentences, connect ideas logically and adapt punctuation and word choice for different readers and contexts. In-class exercises and homework assignments help build expertise.

Prerequisites: English-language proficiency

EDP 013995
Stuart Froman, M.A.
4 meetings
Saturdays, 9 am–1 pm
Feb. 25–March 17
Berkeley: Golden Bear Center • $350

Journalism Workshop
X473 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing

Journalism is undergoing historic change as citizen reporters publish on the Internet while mainstream news organizations race to add interactivity, context and diversity to their traditional focus on accuracy. Get a practical, task-based introduction to news writing and reporting and learn standards embraced by the best media practitioners, old and new. Study story selection and planning. Learn how to develop sources; interview and research; write fast, vivid prose; and revise and edit. You also get an introduction to multimedia and blogging.

EDP 023150
Thomas Abate, M.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 6–May 8
San Francisco: Downtown Center • $525
From Pitch to Print: A Five-Week Introduction to Public Relations Workshop
X481 • 1 semester unit in Journalism
A requirement in the Specialized Program in Professional Writing
Study the essentials of public relations, and get a start on a new career. Learn how to make your message newsworthy and how to understand media conventions so you can pitch effectively and ensure optimal coverage. Learn how to write press releases and email pitches and how to package and sell them. Explore techniques to spread your news through strategic use of new media. Final press packets are critiqued by the instructor and guest journalist, giving you the experience to think and write as both a publicist and a journalist.
EDP 023119
Debra Levi Holtz, M.S.J.
5 meetings
Wednesdays, 6:30–9:30 pm
May 2–May 30
San Francisco: Art and Design Center • $375

Health Care Journalism
X479 • 2 semester units in Journalism
(formerly Medical Journalism)
An elective in the Post-Baccalaureate Certificate Program in Writing, in the Post-Baccalaureate Health Professions Program, in the Professional Biomedical Sciences Program and in the Specialized Program in Professional Writing
Learn to identify health news, translate medical jargon, question experts, interview patients and get published. In addition to many in-class exercises, you write a magazine-style article. Guest speakers introduce aspects of academic writing. Although open to the general public, the class is ideal for health professionals looking to broaden their career options. Enrollment is limited.
EDP 023143
Laird Harrison, B.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 15–May 17
Berkeley Campus: 151 Barrows Hall • $525

The Well-Crafted Memo
X461 • 1 semester unit in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Delve deeper into the craft of autobiographical writing, and investigate the apparatus of the well-written memoir. Prepare to discuss character, setting, scene, and point of view. Discover the right balance between narration and reflection, exposition and imagery. Study techniques used by published authors and then try them in your own writing. Compose impromptu pieces and receive feedback to help you develop what you write. Each class includes brief lectures, sample readings and in-class exercises to help you work with a mix of writing forms and strategies. Enrollment is limited to 18.
EDP 023507
Deborah Lichtman, Ph.D.
6 meetings
Wednesdays, 6:30–9 pm
Feb. 22–March 28
Berkeley Campus: 104 Barrows Hall • $375

Writing for Social Media: Prose That Works for Web 2.0
X468 • 1 semester unit in English
A requirement in the Specialized Program in Professional Writing
Learn how to write for the Web 2.0 and social networking era, including microblogging on Twitter and posting to Facebook. Explore how form shapes content, how to engage readers with an increasingly limited attention span and how to ensure your core messages remain intact and credible. Expect to create core principles for your organization (real or hypothetical); develop a social media style guide; and write blogs, tweets and other forms of Web 2.0 writing for critique and discussion.
EDP 023218
Timothy B. Peters, M.A., B.S.
5 meetings
Wednesdays, 6:30–9:30 pm
March 21–April 18
San Francisco: Art and Design Center • $375

Fundamentals of Freelancing
0.7 ceu
An elective in the Specialized Program in Professional Writing
Are you interested in learning about a freelance writing and editing career? This one-day seminar helps you examine the changing media landscape and develop strategies to both survive and thrive in it. Deepen your understanding of what magazines, newspapers, books and websites look for, and discuss where and how social media and blogging fit in. You also consider how to support dream projects with good work that pays the bills — whether it’s tech writing, teaching, ghostwriting or corporate editing. Guests share their unvarnished experiences, and innovative course materials help you define your goals, sharpen your skills and develop a personal strategy. The presentations are rich in wisdom, the exercises rigorous but fun.
Instructor
Constance Hale, a best-selling author and widely published magazine writer, has been an editor at the San Francisco Examiner, Wired and Health. Her book Sin and Syntax (Three Rivers Press, 2011) is a primer on polishing sentences. She draws on two decades of freelance experience writing and editing for regional and national magazines. She has edited two dozen books and written three. A member of the San Francisco Writers Grotto, she is a popular teacher at UC Berkeley Extension, the Book Passage, the San Francisco Writers Conference and the annual conference of the American Society of Journalists and authors.

Guest Speakers
Journalist Monica Campbell covers women in Mexico, troops in Afghanistan and culture in the Bay Area for newspapers, magazines and radio.
Larry Habegger, a founder of Travelers’ Tales Books, has more than 30 years of experience as a writer and editor, especially in the travel and personal essay genres. He currently edits for various Bay Area media outlets as well as private clients. He is a founder of the Prose Doctors.
EDP 023127
Constance Hale, M.A.
1 meeting
Saturday, 10 am–5 pm
March 17
San Francisco: Art and Design Center • $275

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Fact or Fiction: Reading and Writing the Personal Essay
X473 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
A diatribe against braggarts? A consolation to a lonely wife? An ode to Japanese design? The personal essay genre encompasses it all. In this class, you read across continents and centuries, from Seneca to Sedaris, to discover the joy of the form that marries the logic of nonfiction to the dialogue and drama of fiction. Through a broad range of writers, you survey the connections among social context, thought and form. You practice in-class writing exercises, craft your own essays and present your writing for response and the inspiration to rewrite.

EDP 023085
Audrey Ferber, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Feb. 8–April 11
San Francisco: Art and Design Center • $525

Creative Nonfiction Workshop
X140 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Learn to apply the techniques of storytelling to nonfiction prose pieces, including personal essays, features, commentaries, reviews, reports, journal entries and memoirs. Together, the instructor and other participants form your audience, offering support and critical feedback about your pieces. Weekly class discussions and writing assignments focus on story principles—such as plot, tension, scene and dialogue—that increase the readability of your work and form your material into publishable pieces.

Sec. 1 EDP 867630
Arlene Plevin, M.F.A., Ph.D.
Enroll anytime
Online • $550

Sec. 2 EDP 023028
David Schweidler, M.F.A.
10 meetings
Thursdays, 7–10 pm
Feb. 2–April 5
Berkeley Campus: 78 Barrows Hall • $525

Writing the Feature Story
X419 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing
Learn how to find, research and write articles for print or online publications, and discover how freelancers write stories that sell. With the instructor’s help, you come up with a nonfiction story idea, do the reporting and interviewing to gather details and quotes, write and revise the article and submit it to an editor for possible publication. Class participation supplements lectures and writing exercises.

EDP 897488
Margaret Steen, M.J., Extension Honored Instructor
Enroll anytime
Online • $550

Expository Writing: Crafting the Graduate Admission Essay
X454 • 1 semester unit in English
Get practice writing the personal statement that is commonly required for graduate-program applicants, and develop techniques to efficiently complete secondary essays. Prepare to identify personal traits and achievements and develop techniques for self-promotion in written communication. The oral presentation format is also discussed.

EDP 023077
Alexandra Tan, Ph.D.
6 meetings
Sundays, 1:30–4:30 pm
Jan. 29–March 11 (no meeting Feb. 19)
San Francisco: Art and Design Center • $425

Introductory Composition
X2A • 3 semester units in English
Learn how to compose well-crafted college-level essays by exploring each step in the writing process. In various writing assignments, you gain practice with descriptive, narrative and other forms of expository writing.

EDP 867648
Gary Tomblen, Ph.D.
Enroll anytime
Online, proctored final exam • $715

Composition and Literature
X2B • 3 semester units in English
Learn the critical-thinking skills that teach you to write about literature with thoughtful analysis, evaluation and enjoyment of representative literary forms such as short stories, poems, plays and novels.

Introductory Composition X2A is not a prerequisite for this online course, X2B.

EDP 867655
Gary Tomblen, Ph.D.
Enroll anytime
Online, proctored final exam • $715
Get started with a free information session

Discover how UC Berkeley Extension can help you achieve your goals. Learn more about programs. Get to know instructors. Meet your fellow students. Ask questions. Visit extension.berkeley.edu/infosessions.
Mark Burger has a bachelor’s degree in genetics from the University of California, Berkeley, and a master of business administration from St. Mary’s College. At RMG Partners, Burger has to stay on top of the latest trends in finance and emerging markets, and he knows that online learning is crucial to the continued success of education. “The platform is migrating there,” he says. “It’s brilliant.”

A graduate of the Certificate Program in Accounting, Burger is a big fan of his own online learning experience in Financial Statement Analysis. “The course was much harder than I thought it would be,” he admits. Citing weekly Web postings, written assignments, and a final exam, Burger is impressed with the rigor of Extension’s online coursework. “There was no skating through it,” Burger says. “You had to do everything in writing and submit it. So it was really nice to have a framework that ensured the students were doing the actual work.”

Burger’s business acumen tells him that Extension’s course offerings are a steal. “It’s a brilliant value proposition,” he says. “You get first-rate instruction from people who are typically at the high end of their careers and experience level, and the cost is incredibly inexpensive. And some of the courses you can transfer to a university or to UC Berkeley for credit toward a degree. It’s a tremendous value.”
Get Berkeley quality online. More than 165 online courses let you experience world-class education at your convenience. UC Berkeley reviews and approves our online curricula, and all courses are offered for college credit.

A large and devoted online department, including student services and technical support, guides you through your online experience. Our experienced and talented instructors combine a love of teaching with expertise in the latest online learning techniques.

Courses in a wide range of subjects—computer technology and information management, humanities, business, education, science, and more—ensure UC Berkeley Extension has the online education you want. We offer online courses in two formats: The self-paced format enables you to enroll anytime throughout the year; the fixed-date format is offered on a term basis. Readings, projects, case studies, and interactions with your peers and instructors give you many ways to learn. Plus, you can tailor your study to your needs, choosing from individual courses or a full certificate or program in a field such as project management or editing.

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Art and Design

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Visual Arts

The Art of Film
X20 • 3 semester units in Film Studies
An elective in the Post-Baccalaureate Certificate in Visual Arts
Survey a range of classic and modern works, and learn to recognize what makes a well-crafted motion picture. Topics include the handling of space and time in motion pictures, as well as the history and uses of sound, editing, performance, directing, narrative style and screenwriting. You are responsible for renting and viewing films as part of this course.

EDP 867739
L. Thomas Pollard, Ph.D.
Enroll anytime
Online • $715

Graphic and Interactive Design

Creating Websites With HTML
X453.1 • 2 semester units in Computer Science
An elective in the Professional Sequence in Graphic Design; recipient of the Distinguished Course Award from the University Continuing Education Association (UCEA)
HTML is the universal language that underpins every page displayed on the Web. Using a straightforward, step-by-step approach, you learn to build pages of increasing sophistication and design, acquiring a sound working knowledge of HTML and Web design.
See Web for technical requirements.

EDP 877985
Julia Ann Smith, Ph.D.
Enroll anytime
Online • $595

Landscape Architecture

Gardens, Parks and Urban Open Spaces I
X416 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture and in the Professional Sequence in Cultural Landscape Preservation and Management
Examine the development of the built environment in terms of landscape architecture, architecture, urban design and their interrelationship. Topics include Islamic achievements in Asia; urban planning during the Italian Renaissance; the gardens of Eastern Asia; and the emergence and evolution of public parks and open spaces.

EDP 843474
Julia Pon, M.A.
Jan. 17–April 10
Online • $820

Gardens, Parks and Urban Open Spaces II
X418 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture and in the Professional Sequence in Cultural Landscape Preservation and Management
Study the interrelationship among landscape architecture, architecture and urban design. Slide-illustrated lectures survey the built environment from professional landscape architecture’s beginnings in the 19th-century English social reform movement to the present. Emphasis is on the evolution and growth of the landscape architecture profession.
Prerequisite: Gardens, Parks and Urban Open Spaces I X416

EDP 843482
Maria Landoni
Jan. 17–April 10
Online • $820

Practical Applications of Sustainable Design

X470.1 • 2 semester units in Architecture
A requirement in the Professional Program in Sustainable Design
Translate your knowledge of sustainable design concepts into practical, deployable and tangible methods. Learn to take responsibility for your work by understanding the impact that your designs have on the environment and how to control this impact. Through research of materials, systems and construction methods, you explore ways to design and build in an environmentally responsible manner. Using case studies, look at how others are creating communities, solving economic problems and developing new solutions to design. Class involves lectures, discussions and student presentations exploring these ideas.

EDP 843524
David Waldorf, M.Arch., B.Arch., BSID, CGP
Jan. 17–April 10
Online • $799

Sustainable Design

Principles of Sustainable Design
X400.6 • 2 semester units in Architecture
A requirement in the Professional Program in Sustainable Design; an elective in the Certificate Program in the Essentials of Green Chemistry
Examine the history and development of sustainability as a social goal, and explore its implications for the design of built environments. Study concepts such as permaculture, biophilia, localism, life-cycle analysis, biomimicry, natural capitalism, cradle-to-cradle production, systems thinking and ecological design. Explore government programs, legislation, industry regulations and codes, green certifications, LEED and nonprofit organizations involved with sustainability.

EDP 843532
Jessica Carew Kraft, Ph.D.
Jan. 17–April 10
Online • $799
<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Nutrition</td>
<td>X18 • 3 semester units in Nutritional Sciences</td>
<td>Explore current theories about the physical, mental, emotional, social and personality characteristics of adolescents. By examining research findings from growth studies in this and other cultures, you learn to identify the roles American adolescents play in the home, school, social realm and community.</td>
</tr>
<tr>
<td>Abnormal Psychology</td>
<td>X146 • 3 semester units in Psychology</td>
<td>A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions</td>
</tr>
<tr>
<td></td>
<td>4.5 ceu • 45 hours CE credit: BRN</td>
<td>Designed for anyone interested in the way humans perceive and respond to experiences, and especially for people considering careers in psychology, this course helps you learn the dynamics and prevention of abnormal behavior, including neuroses, psychoses, character disorders, psychosomatic reactions, schizophrenia and other abnormal personality patterns.</td>
</tr>
<tr>
<td>General Psychology</td>
<td>X146 • 3 semester units in Psychology</td>
<td>A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions</td>
</tr>
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<td></td>
<td>4.5 ceu • 45 hours CE credit: BRN</td>
<td>Designed for anyone interested in the way humans perceive and respond to experiences, and especially for people considering careers in psychology, this course helps you learn the dynamics and prevention of abnormal behavior, including neuroses, psychoses, character disorders, psychosomatic reactions, schizophrenia and other abnormal personality patterns.</td>
</tr>
<tr>
<td>Assessment and Treatment of Alcohol and Drug Problems</td>
<td>X437 • 1 semester unit in Public Health</td>
<td>Get an overview of the diagnosis and treatment of chemically dependent clients, the basic physical effects and pharmacologic actions of commonly abused substances and the changing patterns of assessment and treatment of chemical dependency. Study models for understanding chemical addiction and its treatment, especially as it differs from other psychological approaches. Note: You are expected to visit one self-help meeting and do a brief writeup. Enrollment is limited.</td>
</tr>
<tr>
<td></td>
<td>1.5 ceu • 15 hours CE credit: BRN, LCSW/MFT and psychologists</td>
<td>Meets the requirement of training in assessment and treatment of chemical dependency for licensure and relicensure in California by the Board of Psychology or the Board of Behavioral Sciences</td>
</tr>
<tr>
<td>Public Health and Health Management</td>
<td></td>
<td>Explore current theories about the physical, mental, emotional, social and personality characteristics of adolescents. By examining research findings from growth studies in this and other cultures, you learn to identify the roles American adolescents play in the home, school, social realm and community.</td>
</tr>
<tr>
<td>General Psychology</td>
<td>X139.1 • 3 semester units in Psychology</td>
<td>Explore current theories about the physical, mental, emotional, social and personality characteristics of adolescents. By examining research findings from growth studies in this and other cultures, you learn to identify the roles American adolescents play in the home, school, social realm and community.</td>
</tr>
<tr>
<td></td>
<td>4.5 ceu • 45 hours CE credit: BRN</td>
<td>Explore current theories about the physical, mental, emotional, social and personality characteristics of adolescents. By examining research findings from growth studies in this and other cultures, you learn to identify the roles American adolescents play in the home, school, social realm and community.</td>
</tr>
</tbody>
</table>

**Important:** Special academic policies apply to XBW courses. See p. 224.

**Psychology of Communication**
X156.1 • 3 semester units in Behavioral Health and Science
4.5 ceu • 45 hours CE credit: BRN
Recipient of the Meritorious Award for the Best College-Level Distance Course from the University Continuing Education Association (UCEA)
Understand the processes of perception, cognition, motivation, emotion, learning, memory and creativity in combination with social roles, group affiliations and cultural backgrounds to explore how people communicate to themselves, to other individuals, within small groups, within large organizations, with mass communication and in cross-cultural communications.

**Prerequisite:** Lower-division coursework in general psychology

EDP 867572
Michael Swett, Ph.D.
Enroll anytime
Online, proctored final exam • $730
Online Certificate Program in Accounting

UC Berkeley Extension’s Certificate Program in Accounting is designed to provide you with a broad and thorough understanding of accounting principles and financial reporting practices, to keep you abreast of innovations in the field, and to enhance your proficiency in accounting-related functions such as financial analysis and data interpretation. This professional certificate employs materials and techniques that are consistent with modern principles and best practices, providing knowledge and skills that you can use immediately. It also offers the advantage of a curriculum that is overseen by an advisory board of business and education leaders; approved by the University of California, Berkeley, Haas School of Business; and taught by working professionals with many years of practical business experience.

Curriculum Requirements

The curriculum consists of 7 required courses (3 core courses and 4 specialization courses) for a total of 18–19 semester units (at least 270 hours of instruction).

Learn More and View the Brochure

extension.berkeley.edu/cert/account.html

Register using EDP 152074

See p. 53 for complete certificate details.

Business

ONLINE COURSE INFORMATION

(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Introduction to Financial Accounting

XB102A • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting

Important: Special academic policies apply to XBW courses. See p. 224.

Learn financial accounting fundamentals and how to identify, measure and report on financial effects of economic events on enterprises. Topics include accrual accounting concepts; transaction analysis, recording and processing (journals and ledgers); preparation, understanding and analysis of financial statements; accounting for sales and cost of sales; inventory valuation; depreciation of operational assets; and accounting for investments, liabilities and present value concepts.

EDP 897394
Joseph McPeak, M.S., M.B.A., CPA, Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $815

EDP 857409
Andrew Barnett, Ph.D., CPA, Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $815

Intermediate Financial Accounting I

X421.1 • 3 semester units in Business Administration

Build on the financial accounting concepts and principles covered in Introduction to Financial Accounting XB102A. Following an in-depth review of the accounting environment and the nature of accounting information, you study time value of money concepts and explore basic financial statements. You give detailed attention to how enterprises account for assets: cash, accounts receivable, inventories, property and equipment, intangible assets and long-term investments.

Prerequisite: Introduction to Financial Accounting XB102A or equivalent

EDP 843136
Michael Tydalska, M.A., CPA
Jan. 17–April 10
Online • $820

Intermediate Financial Accounting II

X421.2 • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting

Expand upon the financial accounting concepts and principles developed in Intermediate Financial Accounting I X421.1, and learn how enterprises account for liabilities and equity accounts, including current and noncurrent liabilities, leases, pensions, income taxes, contributed capital, retained earnings and stock options.

Prerequisites: Introduction to Financial Accounting XB102A or equivalent. This course typically follows Intermediate Financial Accounting I X421.1, but that course is not a prerequisite.

EDP 843144
Kelly Pope, Ph.D., CPA
Jan. 17–April 10
Online • $820

EDP 843151
Nancy Batch, M.S., M.B.A., CPA
Jan. 24–April 17
Online • $820

Advanced Financial Accounting

X421.3 • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting, Financial and Business Analysts Specialization

Get a comprehensive understanding of consolidated financial statements and how to prepare them. Focus on the accounting principles, methods and techniques that relate to particular types of business and nonprofit entities, including corporations, partnerships, government units, estates and trusts and nonprofit organizations. Limited time is devoted to exploring certain tax aspects of consolidated financial statements.

Prerequisite: Substantial accounting background

EDP 897728
Joseph McPeak, M.S., M.B.A., CPA, Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $770

Learn More and View the Brochure
extension.berkeley.edu/online

Register using EDP 152074

See p. 53 for complete certificate details.
Auditing

XBW128 • 4 semester units in Business Administration

Important: Special academic policies apply to XBW courses. See p. 224.

Examine the professional responsibilities of auditors, the design of audits, technology and sampling approaches, appropriate tests of internal controls, substantive tests and other responsibilities of certified public accountants (CPAs). You also prepare for the auditing section of the CPA exam and work as part of a team on an audit plan.

Prerequisites: Intermediate Financial Accounting I, X421.1 and Intermediate Financial Accounting II X421.2, equivalent experience or consent of instructor

EDP 897926
Andrew Barnett, Ph.D., CPA, Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $770

Cost Accounting

X419 • 2 semester units in Business Administration

A requirement in the Certificate Program in Accounting, Accounting for Controllers Specialization

Take on an intensive study covering basic cost accumulation systems and refinements used to determine costs of products or activities in various types of enterprises. Prepare to emphasize managerial cost analysis and management decision planning.

Prerequisites: Introduction to Financial Accounting XB102A and Managerial Accounting XB102B, or equivalent

EDP 897603
Joseph McPeak, M.S., M.B.A., CPA, Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $730

International Business Management

X495.1 • 2 semester units in Business Administration

An elective in the Professional Program in Biopharmaceutical Business

Examine successful international business strategies, and learn how to internationalize your business and your career. Learn the basics of marketing, economics, finance and business negotiation in an international context. The course uses an entrepreneurial perspective but prepares you for participation in larger international businesses.

EDP 857391
Christopher Lai, M.B.A., Ph.D.
Enroll anytime
Online • $715

Business Analysis

Business Analysis Essentials and Planning

X448.1 • 3 semester units in Business Administration

45 cdu: IIBA provider E234; IIBA Program Code: E234-001

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Learn business analysis fundamentals as well as the planning and monitoring knowledge areas. Discover how practitioners determine and plan which activities are necessary to complete a business analysis effort. Master essential analysis theories that govern the performance of all other business analysis and transformation tasks. Those who intend to sit for the CBAP® exam should also meet the IIBA® testing requirements. IIBA Program Code: E234-001.

EDP 843227
Ashley Wright, B.S., M.B.A.
Jan. 3–Feb. 28
Online • $995

EDP 843235
Ashley Wright, B.S., M.B.A.
March 1–April 26
Online • $995

Taxation for Corporations and Other Flow-Through Entities

X419.5 • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting, Accounting for Controllers Specialization

This course provides a general description of the major provisions of the tax laws for filing in calendar years 2010-2011. You study the taxation of corporations; “S” corporations; partnership taxation, income taxation of estates, trusts and gifts; and tax accounting methods and periods. You also review rules governing the formation, operation and disposition of partnerships and corporations.

EDP 857383
Joseph McPeak, M.S., M.B.A., CPA, Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $815

Communicating Across Cultures: Marketing and Sales Challenges Around the World

X495.7 • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Global transactions are becoming the norm in business, and marketing and sales professionals face a variety of communications challenges in adapting to the international marketplace. Examine the theories of specific culture-bridging tools and techniques needed by today's international sales and marketing practitioners.

EDP 897181
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $575

Financial Statement Analysis

X419.2 • 2 semester units in Business Administration

A requirement in the certificate programs in Finance, Corporate Finance Specialization, and in Accounting, Accounting for Financial and Business Analysts Specialization

This course focuses on the effective analysis of financial statements, integrating the concepts and principles you learned in previous accounting courses. You examine the analytical tools for assessing a company’s performance, the concept of quality of earnings, approaches to valuation and other issues.

Prerequisites: Introduction to Financial Accounting XB102A, access to Microsoft Excel and basic Excel skills

EDP 897074
Donald R. Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $715

Business Administration

Essentials of Business

X406.6 • 2 semester units in Business Administration

A requirement in the Certificate Program in Business Administration; an elective in the Professional Program in Biopharmaceutical Business

This course introduces you to the goals, processes and operations of business enterprises. The main focus is on the functions that a company must manage effectively to be successful. These include accounting, finance, human resource management, marketing, operations management and strategic planning. Attention is also given to the legal environment in which businesses operate and the importance of business ethics and corporate citizenship.

EDP 897991
Kevin M. Shea, M.B.A.
Enroll anytime
Online, proctored final exam • $715

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Online Certificate Program in Business Analysis

Business transformation and process adaptation are critical to the competitive survival of business enterprises. Business analysis plays a key role in ensuring that strategic plans for transformation are implemented efficiently. Learn how a business analyst communicates requirements from subject matter experts to technical teams to ensure that optimized solutions can be designed and implemented. The Certificate Program in Business Analysis turns your familiarity with business operations into expertise in business analysis so that you can move your company confidently to future success. UC Berkeley Extension offers this professional certificate online, giving you the flexibility to master these new skills at your own convenience.

Curriculum Requirements

The curriculum consists of 4 required courses for a total of 10 semester units (150 hours of instruction).

Required Courses

- Business Analysis Essentials and Planning X448.1 (offered this term)
- Elicitation, Requirements Management and Communication X448.2 (offered this term)
- Enterprise and Requirements Analysis X448.3 (offered this term)
- Solution Assessment and Validation, Underlying Competencies X448.4 (offered this term)

Learn More and View the Brochure

extension.berkeley.edu/cert/busanalysis.html

(510) 642-4231
business@unex.berkeley.edu

Register using EDP 312109

See p. 59 for complete certificate details.

Elicitation, Requirements Management and Communication

X448.2 • 2 semester units in Business Administration
30 cdu: IIBA provider E234; IIBA Program Code: E234-002

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Learn how to manage conflicts, issues and changes to ensure that stakeholders agree on the solution scope and the way requirements are communicated. Study the elicitation knowledge area. You also explore the requirements management and communication knowledge area, which describes the activities and considerations for managing and expressing requirements to a broad and diverse audience. Gain the training and knowledge necessary to become a Certified Business Analyst Professional (CBAP). You should be familiar with business operations, and those who intend to sit for the CBAP® exam should also meet IIBA® testing requirements. IIBA Program Code: E234-002.

EDP 843243
David Zhu, B.S., PMP, CISA
Jan. 3–Feb. 28
Online • $995

EDP 843250
David Zhu, B.S., PMP, CISA
March 1–April 26
Online • $995

Enterprise and Requirements Analysis

X448.3 • 3 semester units in Business Administration
45 cdu: IIBA provider E234; IIBA Program Code: E234-003

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Master the ability to identify a business need using enterprise and requirements analysis, which lets you refine and clarify the definition of that need and define a solution scope that the business can feasibly implement. Learn how enterprise analysis describes problem definition and analysis, business case development, feasibility studies and the definition of solution scope. Study how requirements analysis explains how business analysts prioritize stakeholder and solution requirements to better implement solutions. Gain the training and knowledge necessary to become a Certified Business Analyst Professional (CBAP®). Those who intend to sit for the CBAP® exam should also meet the IIBA® testing requirements. IIBA Program Code: E234-003.

EDP 843268
David Zhu, B.S., PMP, CISA
Jan. 3–Feb. 28
Online • $995

EDP 843276
David Zhu, B.S., PMP, CISA
March 1–April 26
Online • $995

Solution Assessment and Validation, Underlying Competencies

X448.4 • 2 semester units in Business Administration
30 cdu: IIBA provider E234; IIBA Program Code: E234-004

A requirement in the Certificate Program in Business Analysis; an elective in the Professional Program in Business Process Management

Learn to assess proposed solutions to determine which best fit the business need, as well as to identify gaps and shortcomings in solutions and determine necessary work-arounds or changes to the solution. Study how business analysts assess deployed solutions to see how well they met the original need of the sponsoring organizations. Examine underlying competencies such as behaviors, knowledge and other characteristics that support the effective performance of business analysis. Gain the training and knowledge necessary to become a Certified Business Analyst Professional (CBAP®). Those who intend to sit for the CBAP® exam should also meet the IIBA® testing requirements. IIBA Program Code: E234-004.

EDP 843284
Ashley Wright, B.S., M.B.A.
Jan. 3–Feb. 28
Online • $995

EDP 843292
Ashley Wright, B.S., M.B.A.
March 1–April 26
Online • $995

Business Communication

Business Writing Review

X455 • 1 semester unit in English

Your skill in crafting letters, emails, memos and reports determines how effectively you deliver your message to, or on behalf of, your organization. In this course, refresh and refine your business-writing skills by learning to edit your writing, identify your grammar and punctuation problems and organize your ideas for clarity. You review the basics of composing effective business letters, memos and reports, as well as how to find the style and format that fit your subject and audience.

EDP 877852
Margaret Steen, M.J., Extension Honored Instructor

Enroll anytime
Online • $550
Introduction to Macroeconomics
X3 • 3 semester units in Economics
An elective in the Certificate Program in Business Administration
Understand the concepts and tools used in macroeconomic analysis: the theory, measurement and determination of national income; business cycles; the multiplier; fiscal policy, budget deficits and the national debt; aggregate supply and aggregate demand; exchange rates and balance of payments accounts; and stabilization policy for unemployment and inflation.
EDP 877670
Larry O’Connell, M.A., M.S., M.B.A.
Enroll anytime
Online, proctored final exam • $715

Entrepreneurship and Small Business Management
Small Business Management
X105 • 3 semester units in Business Administration
Gain the skills and knowledge you need to start a small business. Learn to coordinate operations to increase efficiency. Discover what technologies can help your business compete in the marketplace. Finally, learn how to best represent your business to potential investors and bankers if you are looking to expand.
EDP 877068
Judith L. Forbes, M.B.A., Ph.D.
Enroll anytime
Online • $770

Finance
Basic Corporate Finance
X430.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Accounting, Accounting for Financial and Business Analysts Specialization; an elective in the Certificate Program in Finance
Get an introduction to the concepts and methods that financial managers use to make effective investing and financing decisions, and begin to explore the ways in which value is created and measured. You devote specific attention to the financial management context, the time value of money, risk and return, the cost of capital and an overview of financial statement analysis.
Prerequisites: One course in economics and one in financial accounting, or consent of instructor. Basic Financial Mathematics and Financial Calculators, or equivalent skills, is recommended.
EDP 843169
Brad Fox, M.B.A.
Jan. 17–April 10
Online • $735
EDP 843177
Fernando Garcia, M.B.A., J.D.
Jan. 24–April 17
Online • $735

Economics

Essentials of Economics
X402.8 • 2 semester units in Economics
A requirement in the Certificate Program in Business Administration
Get an overview of general economic issues, principles and concepts in both microeconomics and macroeconomics. Topics include understanding how the economy works, making better business decisions and comprehending the powerful lessons of the economic approach. Enrollment is limited.
EDP 897694
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $745

Economic Indicators: Making Sense of Market Data
X408.4 • 2 semester units in Business Administration
Recipient of the Distinguished Course Award for excellence in distance learning from the University Continuing Education Association (UCEA)
Focus on key economic indicators that are monitored closely by financial analysts, economists and governments around the world. Examine the business cycle to place each indicator in a context that allows you to understand seemingly contradictory market reactions to newly released indicators. Upon completion, gain the ability to critically analyze news and data from financial and economic news sources, as well as assess what impact a market reaction to a newly released indicator has on a particular situation.
EDP 897041
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $835

Introduction to Microeconomics
X2 • 3 semester units in Economics
An elective in the Certificate Program in Business Administration
Study how markets work, and gain a real understanding of the role of economics in business, public and private decision making. Learn ways to think about how humans allocate resources, including markets and prices, consumer and producer behavior and risk and cost measurement. Use this knowledge for further study in economics, or apply it in your everyday business dealings to make more effective decisions.
EDP 877050
Edward T. Derbin, M.A., M.B.A.
Enroll anytime
Online, proctored final exam • $715
Hands-on Intermediate Corporate Finance  
X444.1 • 2 semester units in Business Administration  
A requirement in the Certificate Program in Finance  
A continuation of Basic Corporate Finance X430.1, this course rounds out the comprehensive overview of corporate finance topics and examines the concepts, techniques and tools that financial managers use in their attempts to make effective investing, financing and working capital management decisions. You devote specific attention to advanced capital budgeting topics, financing decisions, working capital management and multinational finance.  
Prerequisites: Basic Corporate Finance X430.1. You should also be proficient with computer spreadsheets and basic financial mathematics and financial calculators.  
EDP 897611  
Lawrence Cox, B.S., M.B.A.  
Enroll anytime  
Online, proctored final exam • $715

Hands-on Corporate Financial Analysis and Modeling  
X435.6 • 1 semester unit in Business Administration  
A requirement in the Certificate Program in Finance  
This hands-on computer course provides the skills to apply the theories, concepts and tools covered in Basic Corporate Finance X430.1 and Intermediate Corporate Finance X444.1 to developing spreadsheet knowledge that you can use for effective financial analysis and decision making. Topics include developing spreadsheet skills for financial statement analysis and forecasting, stock and bond valuation, target capital structure estimation and capital budgeting.  
Note: The online section requires access to Microsoft Excel 2003 or later.  
Prerequisites: Basic Corporate Finance X430.1, completion of or concurrent enrollment in Intermediate Corporate Finance X444.1 and basic proficiency with computer spreadsheets  
EDP 897470  
Catherine Pinkas, M.B.A., PMP  
Enroll anytime  
Online, proctored final exam • $575

Advanced Corporate Finance  
X431.5 • 2 semester units in Business Administration  
A requirement in the Certificate Program in Finance, Corporate Finance Specialization  
Apply essential financial tools and techniques in a series of case studies selected to illustrate the analysis of critical corporate finance decisions. The cases deal with topics such as valuation, capital issues, dividend policy, mergers and acquisitions, derivative instruments and risk management and ethical issues. The case studies further examine the theoretical concepts and models of finance and how they apply to realistic situations.  
Prerequisites: Basic Corporate Finance X430.1 and Intermediate Corporate Finance X444.1. You should also be proficient with computer spreadsheets and financial calculators.  
EDP 897801  
Donald R. Byrne, M.B.A., Ph.D.  
Enroll anytime  
Online, proctored final exam • $715

Business Valuation  
X431.9 • 2 semester units in Business Administration  
A requirement in the Certificate Program in Finance, Corporate Finance Specialization, and in Accounting, Accounting for Financial and Business Analysts Specialization; an elective in the Professional Sequence in Personal Financial Planning  
Learn to apply financial and economic theory to investment, financing and dividend decisions in order to identify ways to maximize shareholder returns. Practical methods to determine costs of capital, total invested capital, free cash flow and economic profits are used in the valuation analysis for mergers and acquisitions, divestitures, capital budgeting, initial public offerings and private placements, leveraged buyouts, performance-based executive compensation, agency costs, control premiums and costs of marketability and real options.  
Prerequisites: Basic Corporate Finance X430.1, Introduction to Financial Accounting X8102A, Accounting for Managers X421.5 or consent of instructor and professional experience  
EDP 897975  
Donald R. Byrne, M.B.A., Ph.D.  
Enroll anytime  
Online, proctored final exam • $715

Options and Other Financial Derivatives  
X435.1 • 2 semester units in Business Administration  
A requirement in the Certificate Program in Finance, Investment Management Specialization  
Get a comprehensive understanding of how to analyze and use options and other related derivatives. Discuss case studies of real-life examples in class to demonstrate and evaluate equity, index options and flex options. Through class discussions, you learn about the tools and develop the skills necessary to evaluate and apply options and derivatives for income and investment hedging purposes, as well as income and speculation purposes. No prior knowledge of options and futures markets is assumed.  
Prerequisite: Basic Corporate Finance X430.1 or equivalent  
EDP 897124  
Richard Lehman, M.B.A.  
Enroll anytime  
Online, proctored final exam • $715

International Finance  
X430.8 • 2 semester units in Business Administration  
A requirement in the Certificate Program in Finance; an elective in the Certificate Program in Business Administration  
Understand international finance from both corporate and international banking viewpoints, as well as financial constraints on international business and differences between domestic and international environments. You examine the international monetary system, the differences between foreign trade and foreign investments, international sales terms, measurement and management of foreign-exchange exposure, international financial markets and banking, import/export financing, current-asset management and international taxation.  
Prerequisite: Basic Corporate Finance X430.1 or equivalent  
EDP 897629  
Grace Kalil, M.B.A.  
Enroll anytime  
Online, proctored final exam • $715

Fundamentals of Risk Management  
X436.5 • 2 semester units in Business Administration  
A requirement in the Certificate Program in Finance; an elective in the Professional Sequence in Personal Financial Planning  
Learn the fundamentals of financial risk management as it is practiced by corporate treasury staffs and investment managers. You focus on current theory, best practices and financial products that can be used for risk mitigation.  
EDP 843185  
Lawrence Cox, M.B.A.  
Jan. 17–April 10  
Online • $725
Human Resources

Essentials of Human Resources
X450.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management

Explore the six core areas of human resources: management practices; selection and placement; training and development; compensation and benefits; employee and labor relations; and health, safety and security. Learn how these areas function within an organization, as well as how they relate to each other. You also investigate the growing multitude of rules, regulations and laws that affect the California employer and the role of the human resources professional in an organizational setting.

EDP 843300
Catherine McKnight, M.A.
Enroll anytime
Online • $75

Employee Benefit Plans
X450 • 2 semester units in Business Administration
An elective in the Certificate Program in Human Resource Management

Study the most common types of discretionary benefits, and learn how they are selected and administered. The instructor outlines legal requirements, administrative problems and available options, as well as government-mandated plans such as workers’ compensation and Social Security. You examine important policy issues on sick leave, vacation, jury duty and leaves of absence and learn how they are related to organizational culture and policy. You also pay special attention to the effects of tax reform in benefits planning.

EDP 897157
Richard K. Takahashi, M.B.A.
Enroll anytime
Online • $685

Law

Principles of Business Law
X410.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Accounting, Accounting for Controllers Specialization

People who want to be successful in business or real estate need to know how to deal with legal issues and when to refer questions to an attorney. Learn to identify the issues and know when you have a legal problem—and, if so, what it is. Survey California law to better understand its jurisdiction and procedures under its court system. You also study basic principles of the laws of contracts, agency, partnership, corporations and limited liability companies, as well as employment and intellectual property.

EDP 843201
Jason Lum, J.D.
Enroll anytime
Online • $735

Intellectual Property Law
X412 • 2 semester units in Business Administration
Examine patent, copyright, trademark and trade-secret law in the high-tech commercial sector. You pay special attention to the Internet, software licensing, recent technological developments and recent trends in the legislative and legal arenas. Anyone involved in the creation, acquisition, use, sale, marketing, licensing and ownership of intellectual property can benefit greatly from this course.

EDP 897066
Brien C. Walton, LL.M., J.D.
Enroll anytime
Online • $715

Marketing

Introduction to Marketing
X460.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing and in Business Administration; an elective in the Certificate Program in Leadership and Management and in the Specialized Program in Professional Writing

Learn key information regarding marketing concepts, terminology and practices that can increase your organization’s profitability. You study consumer, industrial and service marketing; market selection; product planning; pricing and distribution; and the integration of marketing with other business activities.

EDP 843318
Woody Alexander, M.B.A.
Jan. 17—April 10
Online • $735

Marketing Research: Concepts and Techniques
X460.6 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing and in the Professional Sequence in Marketing Metrics

Learn to conduct focus groups and surveys on the Internet and offline, design questionnaires, interpret data and present findings. Expect to place special emphasis on using market research to develop new products and improve service, as well as on how to target the most profitable customers.

EDP 843326
Nicki Shovar, Ph.D.
Jan. 17—April 10
Online • $725

Online Certificate Program in Marketing

With the Certificate Program in Marketing from UC Berkeley Extension, you gain crucial skills and a credential to advance your career. You’re ready to contribute more to your organization or take on a new professional role. You’re also equipped with in-depth knowledge of the latest marketing concepts and techniques in less time and at less cost than a master’s degree requires. Get an overview with courses on marketing research and planning, strategic marketing, and emerging trends in social media and other innovative technologies. Learn from some of the best in the business—leading professionals with the marketing acumen and teaching experience to provide both a theoretical foundation and practical training.

Curriculum Requirements
The curriculum consists of 4 required courses and 2 electives for a total of 12 semester units (180 hours of instruction).

Required Courses
• Introduction to Marketing X460.1 (offered every term and online)
• Marketing Research: Concepts and Techniques X460.6 (offered every term and online)
• Strategic Marketing X415 (offered every term and online)
• Strategic Marketing 2.0—Social Media and Other Innovative Technologies X464.5 (offered every term and online)

Electives
See extension.berkeley.edu/cert/market.html for a list of electives available this term.

Learn More and View the Brochure
extension.berkeley.edu/cert/market.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 152033
See p. 81 for complete certificate details.
Strategic Marketing
X415 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing
Learn to market new and existing products and services for growth and increased profitability. Also study how to use the latest and most sophisticated marketing strategies to create a sustainable competitive advantage. Topics include strategy formulation, linking strategy and tactics, brand positioning, relationship marketing, thriving in competitive markets and avoiding commoditization.
EDP 843219
Suzanne Powers, M.B.A.
Jan. 17–April 10
Online • $735

Strategic Marketing Planning
X411.3 • 2 semester units in Business Administration
An elective in the Certificate Program in Marketing
Learn how to develop and write a comprehensive marketing plan. Examine how marketing plans change with the life cycle or market conditions of a product or service. You develop a model marketing plan that includes an analysis of competition, pricing, promotion, distribution and the value proposition. Prepare to place special emphasis on adopting and maintaining a customer orientation when creating marketing plans.
EDP 897454
Woody Alexander, M.B.A.
Jan. 17–April 10
Online, proctored final exam • $715

Introduction to Advertising
X401.7 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Integrated Marketing Communications; an elective in the Certificate Program in Marketing
Learn the role of advertising in marketing plans. You also study different types of advertising and media selection; buyer behavior; ad creation; media planning; ways to measure effectiveness; and relations among the client, the agency and people in the media.
EDP 897447
Deborah Medsker, B.A.
Enroll anytime
Online, proctored final exam • $715

Introduction to Public Relations
X466 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing
Learn public relations strategies that you can implement quickly and inexpensively, including how to create public relations materials such as positioning statements and press releases. You also get hands-on experience solving problems, identifying solutions and understanding reporters’ interviewing styles.
EDP 897462
Larry Flegle, D.B.A., M.A., CSE, CEC, MAPPA, MPM, CIPM
Enroll anytime
Online, proctored final exam • $715

Strategic Marketing 2.0—Social Media and Other Innovative Technologies
X464.5 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing
Master the next generation of strategic marketing planning and tactics made possible by the latest media channels and technologies. Learn how to establish realistic business and performance goals and systematically evaluate new technologies, as well as evaluate in-market results against specific return-on-investment metrics. You also gain the ability to strategically plan and cost-efficiently execute new-channel programs in tandem with more conventional marketing approaches.
EDP 843334
Susan Gaide, M.B.A.
Jan. 17–April 10
Online • $725

Paralegal Studies

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/paralegal

Essential Paralegal Studies Part I: Foundational Skills
X418 • 2 semester units in Law
A requirement in the Paralegal Studies Program
Study the foundational paralegal qualities most sought by attorneys and law firms. Learn various aspects of paralegal skills, including legal terminology, court structure, legal ethics, evidence, investigation, interviewing, analysis and other areas relevant to becoming an excellent paralegal. Note: Online section must be completed within three months of enrollment date.
EDP 317073
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750
Paralegal California Procedures
X407 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Study California court rules and procedures, as well as how to properly access and cite those rules and procedures. Learn strategies to locate rules relevant to a variety of situations. Investigate documents and filing procedures in California so you are able to assist attorneys in identifying and applying trial court rules. You also learn about the ongoing educational requirements for paralegals in California. Note: Online section must be completed within two months of enrollment date.
EDP 317057
Julie Gore, J.D.
Enroll anytime
Online • $875

Paralegal Business Law
X404 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Gain an accessible and straightforward understanding of the law of business organizations. Study relevant examples from the day-to-day practices of business lawyers and their paralegals. You learn the four basic business organizations: sole proprietorships, partnerships, corporations and limited liability companies. Note: Online section must be completed within two months of enrollment date.
EDP 317024
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Intellectual Property Law
X409 • 1 semester unit in Law
An elective in the Paralegal Studies Program
Explore trademark, copyright and patent law as it relates to a paralegal’s role within intellectual property representation. By the end of the course, you gain the quantifiable skills in intellectual property law to function under an attorney’s supervision. Specifically, you learn terminology relevant to intellectual property law and can identify the elements of trademark procedures, including infringement. Learn to identify the elements of copyright procedures, including patent application, ownership, transfer and infringement. Note: Online section must be completed within two months of enrollment date.
EDP 317065
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Personal Financial Planning and Wealth Management
Survey of Personal Financial Planning
X433 • 2 semester units in Business Administration
2 CE units for life agents—LX
A requirement in the Professional Sequence in Personal Financial Planning
Learn to prepare a comprehensive financial plan for an individual client. Master the technical skills required in areas such as income tax, investments, insurance, employment benefits, estate planning and mathematical analysis. Learn how to provide comprehensive service and create an optimum client-practitioner relationship. Individuals who wish to learn about financial planning fundamentals for themselves can also benefit from this course, though it is geared toward those who are pursuing professional certification.
If you don’t have experience using financial calculators, we recommend that you take Basic Financial Mathematics and Financial Calculators before enrolling in this course.
EDP 897116
Christina Woo, M.B.A.
Enroll anytime
Online, proctored final exam • $730
Online Certificate Program in Project Management

The Certificate Program in Project Management gives you the skills you need to keep projects on task, on time, and on budget. The highly interactive curriculum builds from theories of project management to real-world practices applicable to all industries and fields, including marketing, financial services, business administration, information technologies, international trade, health sciences, government, construction, and more. You learn from highly qualified instructors with substantial project management experience. Moreover, all of our project management courses apply toward professional development units (PDU’s) for the Project Management Institute (PMI).

Curriculum Requirements

The curriculum consists of 6 required courses for a total of 14 semester units (210 hours of instruction).

Required Courses

We recommend taking these courses in the following sequence:

- Project Management X470 (offered every term and online)
- Project Procurement Management X474.3 (offered every term and online)
- Quality Management X470.9 (offered every term and online)
- Human Factors and Team Dynamics for Project Management X469.2 (offered every term and online)
- Project Risk Management X440.4 (offered every term and online)
- Project Planning and Control X471.9 (offered every term and online)

Learn More and View the Brochure

extension.berkeley.edu/cert/project.html
(510) 642-4231
business@unex.berkeley.edu

Register using EDP 152249

See p. 91 for complete certificate details.

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Project Management

**Project Management**

X470 • 2 semester units in Business Administration
30 pdu: PMI provider 1173


The online course is the recipient of the Outstanding Course Award from the University Continuing Education Association (UCEA).

Proper management plays a crucial role in executing and completing projects efficiently. Get a step-by-step introduction to the project management process, and review the differences between theory and practice. You’ll use the tools and knowledge you acquire to create your own project plan. This course is a prerequisite for all other Extension project management courses.

**EDP 843672**

Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 3–Feb. 28
Online • $735

**EDP 843680**

Edmond Matevosian, B.S., PE, PMP
Jan. 3–Feb. 28
Online • $735

**EDP 843698**

Mark Angel, B.S., M.B.A., PMP
Jan. 17–April 10
Online • $735

**EDP 843706**

Alex Brown, PMP, IPMA-C
March 1–April 26
Online • $735

**EDP 843714**

Mark Angel, B.S., M.B.A., PMP
March 1–April 26
Online • $735

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Project Procurement Management

**Project Procurement Management**

X474.3 • 2 semester units in Business Administration
30 pdu: PMI provider 1173

A requirement in the Certificate Program in Project Management; an elective in the Certificate Program in Construction Management

Procurement of products and services is an essential part of a project manager’s responsibilities. Learn the fundamentals of the procurement process, from developing procurement documents and specifications to evaluating vendor proposals, crafting appropriate contracts and overseeing successful execution of contracts. You also examine a variety of contractual arrangements and fee options.

**Prerequisite:** Project Management X470

**EDP 843813**

Timothy Donahue-Bombosch, Ph.D.
Jan. 3–Feb. 28
Online • $735

**EDP 843821**

Timothy Donahue-Bombosch, Ph.D.
Jan. 17–April 10
Online • $735

**EDP 843839**

Catherine Pinkas, M.B.A., PMP
March 1–April 26
Online • $735

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Quality Management

**Quality Management**

X470.9 • 2 semester units in Business Administration
30 pdu: PMI provider 1173

A requirement in the Certificate Program in Project Management

Get a comprehensive overview of quality management. Understand the philosophies and strategies of prominent quality authorities, and explore ways to implement a management improvement program effectively.

**Prerequisite:** Project Management X470

**EDP 843755**

Murray R. Millet, M.B.A., M.S.
Jan. 3–Feb. 28
Online • $735

**EDP 843763**

Mark Angel, B.S., M.B.A., PMP
Jan. 17–April 10
Online • $735

**EDP 843771**

Murray R. Millet, M.B.A., M.S.
March 1–April 26
Online • $735
Human Factors and Team Dynamics for Project Management

X469.2 • 3 semester units in Business Administration
45 pdu: PMI provider 1173

A requirement in the Certificate Program in Project Management and in the Professional Sequence in Project Human Resource Management

Learn the leadership and communication skills needed to promote and support quality management in your organization. Through team-based projects, you also learn how to master the most difficult aspects of quality management: creating, nurturing and sustaining an organizational climate based on best principles and practices. Discover how quality management ensures that concepts—such as teamwork, employee empowerment and continuous improvement—don’t degenerate into buzzwords that increase cynicism and decrease employees’ responsiveness to organizational goals.

Prerequisites: Project Management X470

EDP 843722
Alex Brown, PMP, IPMA-C
Jan. 3–Feb. 28
Online • $830

EDP 843730
Catherine McKnight, M.A.
Jan. 17–April 10
Online • $830

EDP 843748
Catherine McKnight, M.A.
March 1–April 26
Online • $830

Project Risk Management

X440.4 • 2 semester units in Business Administration
30 pdu: PMI provider 1173

A requirement in the Certificate Program in Project Management, an elective in the Certificate Program in Construction Management

Projects today are more time constrained, pose greater technical challenges and are less likely to have adequate resources than in the past. Specific techniques, however, can help you deal with project risk and recognize and manage potential problems. Learn practical methods for completing difficult projects, and explore how to apply these methods to your own projects.

Prerequisite: Project Management X470

EDP 843631
Madeleine Bronstone, MLHR, PMP
Jan. 3–Feb. 28
Online • $735

EDP 843649
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 17–April 10
Online • $735

EDP 843656
Madeleine Bronstone, MLHR, PMP
March 1–April 26
Online • $735

Project Planning and Control

X471.3 • 3 semester units in Business Administration
45 pdu: PMI provider 1173

A requirement in the Certificate Program in Project Management

A successful project manager relies on an effective management plan that provides a baseline for monitoring progress, identifying variances and taking timely action to mitigate the impact of problems. Learn how to create an effective plan and implement it through completion and evaluation. You also explore the tools and techniques you learned in Project Management X470 in greater detail.

Prerequisite: Project Management X470

EDP 843789
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 3–Feb. 28
Online • $820

EDP 843787
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 17–April 10
Online • $820

EDP 843805
Deann Smith, B.A., PMP, CKM
March 1–April 26
Online • $820

Real Estate

Principles of Real Estate

X406.8 • 3 semester units in Business Administration

This course is required for those preparing to take California real estate licensing examinations and is also appropriate for those preparing to purchase homes or other properties. You learn the basic laws and principles of California real estate and how to apply those principles to current real estate opportunities in your own community. You also gain the understanding, background research and terminology necessary for specialized courses. California law is emphasized, but many aspects are applicable to real estate interests in other states.

EDP 89033
Tom Gee, B.S.
Enroll anytime
Online, proctored final exam • $770

Exam Preparation

PMP/CAPM Exam Preparation

X459.3 • 3 semester units in Business Administration
45 pdu: PMI provider 1173

This 45-hour course prepares you for the Project Management Institute (PMI) Project Management Professional (PMP) and Certified Associate Project Manager (CAPM) examinations. In addition to in-depth coverage of PMI’s Project Management Body of Knowledge (PMBOK), you analyze sample exam questions, tips and tricks to help you pass each exam. Chat room interaction, teleconferences with the instructor, virtual desktop sharing (with audio) and threaded discussions allow you to experience the full multimedia of this course.

EDP 843664
Edmond Matevosian, B.S., PE, PMP
March 1–April 26
Online • $1,599
Online Post-Baccalaureate Certificate in Information Systems and Management (ISM)

Prepare yourself for a new career in the IT field by expanding your expertise and taking your skills to the next level. Our rigorous curriculum combines theory and practice to give you the balanced mix of skills and powerful tools you need to build a successful career in information management, systems analysis, computer programming or computer consulting. Upon successful completion of the Post-Baccalaureate Certificate in Information Systems and Management (ISM), you can define, manage, and execute a systems approach to the business environment; write computer programs; and design database systems. This professional certificate is based on a wide variety of core courses and electives.

Curriculum Requirements
The curriculum consists of 4–8 required courses (depending on specific courses taken) for a total of 10 semester units (150 hours of instruction). At least 6 of the 10 semester units required must come from the core courses list.

Prerequisites
You must hold a bachelor’s degree and submit a transcript to register for this certificate.

Learn More and View the Brochure
extension.berkeley.edu/cert/ism.html
(510) 642-4151
course@unex.berkeley.edu

Register using EDP 302894
See p. 103 for complete certificate details.

Computer Technology and Information Management

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Database Management

Concepts of Relational Database Management Systems
X408 • 3 semester units in EECS-DCS
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management
Study techniques for creating and using database applications in depth. You learn requirements analysis and specification; logical database design; normalization; database implementation; recovery, concurrency, integrity and security concerns; and database use. The course curriculum focuses mainly on the relational database model and SQL.
Prerequisite: A programming course in any language or equivalent experience
EDP 843110
Andrew J. Oppel, B.A.
Jan. 17–April 10
Online • $799

Information Systems and Management

Introduction to Information Systems Analysis and Design
X422 • 3 semester units in EECS-DCS
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management
This is the first course in a series covering information analysis and logical specification of the system development process in an organizational context. It emphasizes the interactive nature of the analysis and design process.
EDP 843128
Mark Angel, B.S., M.B.A., PMP
Jan. 17–April 10
Online • $820

Advanced Business Systems Analysis
X423 • 3 semester units in EECS-DCS
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management
Learn the practical application of structured analysis and design techniques. You build on the information covered in Introduction to Information Systems Analysis and Design X422 by going through an entire system design cycle as a case study.
Prerequisite: Introduction to Information Systems Analysis and Design X422 or equivalent
EDP 843193
Todd Landreneau, Ph.D.
Jan. 17–April 10
Online • $820

Open Source and Operating Systems

Using the UNIX Operating System
X415 • 3 semester units in EECS-DCS
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management
This comprehensive overview of the UNIX operating system introduces you to logging in, the visual editor, file management, text processing, email, the directory structure, UNIX handling of files and processes, basic shell utilities and writing shell scripts. (Using UNIX to write programs is not covered.) You learn a conceptual framework and a series of successful interactions with UNIX. Much of the course involves individualized, self-paced learning. Note: The course requires access to a UNIX system or a system capable of running the Linux operating system.
EDP 897264
James A. Connor, B.S., M.B.A.
Enroll anytime
Online, proctored final exam • $815

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
Programming Languages and Object-Oriented Programming

Introduction to Perl Programming
X416.7 • 1 semester unit in EECS
An elective in the Certificate Program in UNIX/Linux System Administration, in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Sequence in Database Management
Perl is widely used by UNIX and Windows programmers, system administrators and Web and database programmers. It is an easy-to-learn, extremely powerful extensible language with add-on modules for almost every kind of task imaginable. Perhaps its most powerful feature is that Perl programs run on any operating system with few, if any, changes needed. Learn to write, debug and understand more complicated Perl programs.
Prerequisites: Familiarity with UNIX or Windows and experience with a programming language
EDP 877886
Carl Limsico, B.A.
Enroll anytime
Online • $595

Python Programming
X442.3 • 1 semester unit in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Python, an open-source scripting language that allows rapid application development of both large and small software systems, is object oriented by design and provides an excellent platform for learning the basics of language programming. Learn this language, ideal for team projects, that provides access to databases, CGI programming, system administration and other useful services.
Although no previous programming experience is required, you must have access to a computer running Python or access to the Internet to allow you to download Python.
EDP 877951
Carl Limsico, B.A.
Enroll anytime
Online, proctored final exam • $595

PHP Programming for the Web
X400 • 1 semester unit in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Learn the fundamentals of PHP: Hypertext Preprocessor, how PHP functions in the Web’s client-server relationship and how it relates to standard HTML. Gain an understanding of one of the most common uses for PHP: handling the data created by an HTML form.
Prerequisites: You should have a hosted website with 10 MB of disk space, MySQL and PHP. In general, most Web hosts offer workable sites. Free PHP Web-hosting options are also available.
EDP 897405
Robert Adams Jr., M.S.C.S., M.S.E.E.
Enroll anytime
Online • $595

Introduction to C Language Programming
X24 • 2 semester units in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Learn the C programming language and fundamental programming concepts. Gain the knowledge to write simple C language applications, and undertake courses that assume some background in computer programming. You need access to any programming environment that allows you to write, edit, compile, link and debug a C program.
Familiarity with fundamental programming language concepts such as variables, data types and compiling source code is helpful.
EDP 867879
Robert Adams Jr., M.S.C.S., M.S.E.E.
Enroll anytime
Online • $595

C++ Programming I
X412.1 • 2 semester units in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Get a solid introduction to all the major features of ANSI standard C++, including the newer syntactic and semantic constructs, studying each concept through lucid, fluent examples. Prepare to learn all major features of C++, including objects, classes, pointers and single and multiple inheritance.
Prerequisites: Introduction to C Language Programming X24 or reasonable knowledge of the C programming language, including familiarity with C data types, structures and arrays; decision and looping constructs; use of pointers; and defining and invoking functions. Access to a C++ compiler is required.
EDP 877860
Robert Adams Jr., M.S.C.S., M.S.E.E.
Enroll anytime
Online, proctored final exam • $715

C# Programming I
X444.3 • 1 semester unit in EECS
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Get an introduction to C# development using Microsoft Visual Studio, with particular focus on C# syntax, logic constructs, application development, exception handling and the object-oriented nature of the language. You are also introduced to debugging C# applications, the Microsoft .NET Framework, aspects of the .NET object hierarchy and how to use C# in a .NET application environment.
Prerequisites: Understanding of C, C++, Java or Visual Basic and access to a computer running Windows NT/2000/XP/2003 and Visual Studio
EDP 857482
Laura Malave, M.S.
Enroll anytime
Online, proctored final exam • $595

Java: Discovering Its Power
X436.2 • 2 semester units in EECS
A requirement in the Professional Sequence in Java Programming, an elective in the Certificate Program in UNIX/Linux System Administration and in the Post-Baccalaureate Certificate in Information Systems and Management
Java’s platform independence (write once, run anywhere) allows the same code to run on Windows, Macintosh, UNIX, mobile phones and supercomputers. Java is popular for enterprise applications that run on Web servers. This high-level language enhances productivity and reduces bugs through automatic memory management and strong typing. Learning Java is easier than learning C or C++. Using the free Java Development Kit (JDK 6 SE), you learn practical fundamentals of the Java programming language, as well as basic object-oriented programming, so that you can write simple applications and take intermediate courses in Java.
Prerequisites: First Course in Java, C++ Programming I or equivalent and some experience with object-oriented design and techniques. Familiarity with building graphical user interfaces is helpful.
EDP 877910
Carl Limsico, B.A.
Enroll anytime
Online • $715
Professional Development for Educators

Developing Internet-Based Instruction

X311.6 • 3 semester units in Education

Gain the knowledge and skills necessary to produce online courses. You explore the theoretical foundations of Internet-based instruction and its practical applications, such as methods for student interaction, evaluation and functional design. By the end, you should know how to effectively use Internet-based instructional tools (such as hyperlinks, email, newsgroups, chat, evaluation forms, graphics and multimedia) to design, program and publish instructional modules on the Internet.

EDP 877779
Joe Volk, M.A.
Enroll anytime
Online • $715

Electrical Engineering

Fundamentals of Data Communications and Networking

X433 • 2 semester units in EECS

A core course in the Post-Baccalaureate Certificate in Information Systems and Management

Learn about data communications in this introductory course in networking technology. Gain a practical understanding of relevant terminology, concepts and other information necessary to make you literate in data communications. By the end of the course, you should be able to make intelligent decisions about the appropriate design, purchase, integration and use of data communications equipment and systems.

EDP 897983
Ching-Cheng Lee, Ph.D.
Enroll anytime
Online • $715

Semiconductor Devices for Integrated Circuit Design

X138 • 2 semester units in Electrical Engineering

A requirement in the Certificate Program in Integrated Circuit Design and Techniques

Get an in-depth, comprehensive understanding of semiconductor devices. Study a broad range of topics in bipolar junction transistor (BJT) and metal oxide semiconductor (MOS) technologies, with an emphasis on physical concepts, operation principles, second-order effects and modeling and simulation. Individual research projects cover real-world issues in advanced complementary metal oxide semiconductor (CMOS) modeling in the 90 nm or 65 nm scale and future trends in the statistical IC design in nanoelectronics.

EDP 307827
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Advanced Analog Microelectronics

X139 • 2 semester units in Electrical Engineering

A requirement in the Certificate Program in Integrated Circuit Design and Techniques

Integrated analog filters, oscillators and multivibrators are important building blocks in developing an analog module to implement many applications in signal processing or wireless communications. The scope of the individual research projects includes switched-capacitor circuits, continuous-time filters and voltage-controlled oscillators (VCOs) for phase-locked loop (PLL) applications. The instructor helps you choose a practical research topic that you can implement in real-world applications for frequency synthesizers or televisions.

EDP 307835
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Fundamentals of Analog Integrated Circuit Design Techniques

X140 • 2 semester units in Electrical Engineering

A requirement in the Certificate Program in Integrated Circuit Design and Techniques

Learn how to analyze, simulate and design a complementary metal oxide semiconductor (CMOS) analog integrated circuit. This course is ideal if you are a working professional with no strong foundation in analog design but an interest in either upgrading your knowledge and skills or redirecting your career development in the semiconductor market. Topics cover basic concepts, practices and design skills used for analog ICs. Lectures include basic current mirrors, high-performance current mirrors, single-stage CMOS amplifiers, differential amplifiers, output stages and short-circuit protection circuitry.

EDP 307843
Vincent Chang, Ph.D.
Enroll anytime
Online • $485

Advanced Design Techniques for Analog Integrated Circuits

X141 • 2 semester units in Electrical Engineering

A requirement in the Certificate Program in Integrated Circuit Design and Techniques

Advances in signal processing, analog-to-digital conversion and the continued scaling down of complementary metal oxide semiconductor (CMOS) nanotechnology have ushered in the era of analog IC design with multistandard challenges. Topics include stability of feedback, frequency compensation, multistage operational amplifiers (op-amps) and optimized CMOS op-amp designs. Work on a project that covers design of an advanced CMOS op-amp and of high-performance CMOS comparators for flash analog-to-digital converter (ADC) applications.

EDP 307850
Vincent Chang, Ph.D.
Enroll anytime
Online • $485
Online Certificate Program in Integrated Circuit Design and Techniques

The Online Certificate Program in Integrated Circuit Design and Techniques (ICDT) provides in-depth knowledge in an online format designed for working professionals. Develop an understanding of key concepts in state-of-the-art design, including semiconductor characteristics; semiconductor device modeling; and analog, digital, and mixed-signal integrated circuit (IC) design. When you choose UC Berkeley Extension for your professional education, you benefit from an association with a university known worldwide for engineering excellence. An advisory board consisting of UC Berkeley College of Engineering faculty and industry leaders of major semiconductor companies in the Asia-Pacific region and the United States ensures that the program is both academically strong and professionally relevant.

The certificate’s innovative approach to learning includes English and Mandarin sound tracks that accompany English course slides. If you speak Mandarin but have some proficiency in English, you can successfully complete individual courses or the entire professional certificate.

Curriculum Requirements

The curriculum consists of 4 required courses and 1–2 electives for a total of 10 semester units (150 hours of instruction).

Required Courses

• Semiconductor Devices for Integrated Circuit Design X138
• Advanced Analog Microelectronics X139
• Fundamentals of Analog Integrated Circuit Design Techniques X140
• Advanced Design Techniques for Analog Integrated Circuits X141

Electives

See extension.berkeley.edu/cert/icdesign.html for a list of electives available this term.

Learn More and View the Brochure

extension.berkeley.edu/cert/icdesign.html
(510) 642-4151
course@extension.berkeley.edu

Register using EDP 302861

See p. 133 for complete certificate details.
Humans, Languages and Personal Development

ONLINE COURSE INFORMATION
(510) 642-7243
online@unex.berkeley.edu
extension.berkeley.edu/online

The Development of World Civilization: The Neolithic Age to the Renaissance
X19 • 3 semester units in History
Get a comparative study of world civilizations from prehistoric times to the European Renaissance, focusing on spiritual, political, intellectual and artistic developments. Learn about ancient civilizations of Sumer, Egypt, Persia and Greece; the beliefs and social organizations of India, China and Japan; the rise and fall of imperial Rome and China; pre-Columbian America and early-African cultures; the Mongol conquest of Eurasia; medieval culture and the tension between East and West; and the shift toward modernity in the Renaissance.

EDP 867747
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

The Development of World Civilization: 1500 to the Present
X24 • 3 semester units in History
Engage in a comparative introduction to the major cultures of the world since 1500, focusing on social, political, intellectual and artistic developments and responses to the dynamics of modernity. Learn about the civilizations of the Western Hemisphere, Africa and the Middle East; the beliefs and social organization of India, China and Japan; European political and intellectual revolutions; the World Wars and the Cold War; anticolonialist movements; and today’s political, economic and environmental configurations across many regions.

EDP 867754
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

Introduction to the History of the United States: From Colonial Settlement to the Civil War
XBW7A • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 224.
Sharpen your understanding of the people, institutions and ideologies that shaped the formation of the United States. Topics include exploration, settlement, colonial culture, the wars of independence, the Constitution, the new democracy, early-American technology, expansionism, sectional conflict, the Civil War and Reconstruction. Gain practice in analytical methods that historians use to research facts and develop interpretations of events.

EDP 897835
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

Introduction to the History of the United States: From the Civil War to the Present
XBW7B • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 224.
Survey U.S. history from the 1870s to the new millennium, and increase your knowledge of events, institutions and prominent historic figures while developing skills in historical analysis and interpretation. Topics include the settlement of the West, industrial growth, progressivism, the emergence of a consumer culture, the causes and effects of the principal wars since the Civil War, affluence and scarcity since World War II, the cultural revolution of the 1960s, Watergate and the resurgence of conservatism.

EDP 897843
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

The Culture of India: Roots of Tradition and Change
X41 • 2 semester units in South and Southeast Asian Studies
Explore some of the fundamental facets of the history and culture of modern India. By studying the country’s political history, religious traditions and varied geography, you gain a framework for understanding Indian civilization and relating this knowledge to the political and social challenges in modern Indian society.

EDP 897348
Alice W. Clark, Ph.D.
Enroll anytime
Online, proctored final exam • $595

Design Techniques of High-Performance Data Converters
X237 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Completely updated to reflect the extraordinary advances in data converters, this course sets the professional learning standard in the IC design sphere. It is intended for practitioners who have experience in analog design and are interested in upgrading their skills in data converters. Topics include high-speed Nyquist-rate converters, oversampling, delta-sigma modulators and design examples through Simulink and HSPICE. Project options include 0.8 GS/s analog-to-digital converters (ADC) for 16 Gb/s Ethernet applications and delta-sigma ADC for TV, software radio and high-quality digital audio applications.

This course has restricted enrollment. Call (510) 642-4153 or (510) 642-4151 for more information.

EDP 307819
Vincent Chang, Ph.D.
Enroll anytime
Online • $245

Fundamentals of Modern Data Converter Design
X236 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques
Ever-increasing applications for signal processing, such as video and wireless communications, demand high-speed, high-resolution data converter techniques. This course builds a solid foundation and gives you the skills to diagnose and tackle real-world issues. Topics include data converter fundamentals, characterizations and performance limitations, Nyquist-rate D/A and A/D converters, successive-approximation register (SAR) converters and discrete time signal basics for understanding delta-sigma converters. Project options include medium-resolution, high-speed A/D converters pertaining to the IEEE 802.15 UWB standard and error correction and calibration techniques in the sub-100 nm mixed-signal ICs.

This course has restricted enrollment. Call (510) 642-4153 or (510) 642-4151 for more information.

EDP 307801
Vincent Chang, Ph.D.
Enroll anytime
Online • $245
History of Islam
X21 • 3 semester units in Near Eastern Studies
Recipient of the Distinguished Course Award from the University Continuing Education Association (UCEA)

Explore the rich and complex history of Islam from its birth to the present day. Gain a greater appreciation of the cultural, geographical and political diversity of the people who comprise the Islamic mosaic. You pay particular attention to the religious values of Islamic culture as exemplified by the life of the prophet Muhammad and as expressed in the Quran.

EDP 867788
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $715

Principles of Sociology: A Multicultural Perspective
X2 • 3 semester units in Sociology

Examine the basic topics, concepts and principles of sociology. Consider the influence of social phenomena on human behavior, using comparative multicultural and cross-cultural approaches drawing on current, relevant examples. Topics include social ranking and mobility, crime and deviance, poverty, racial and ethnic minority status, gender discrimination, aging as a social process, family, economic systems, political systems, religion, health care, education and types and theories of social change.

EDP 867796
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $760

Introduction to American Politics
XBW1 • 4 semester units in Political Science

Important: Special academic policies apply to XBW courses. See p. 224.

Explore the theoretical implications of democracy and justice in this in-depth look at the structure of the U.S. political system. Analyze the basic workings of the Constitution and the institutions of the federal government, including Congress, the presidency, the judiciary and governmental bureaucracy. Examine the system of electoral politics — including parties, interest groups, social movements, public opinion and participation — as well as several areas of public policy: defense, foreign policy, civil rights and liberties, social spending, welfare reform and the economy.

EDP 897850
Nina Clark, Ph.D.
Enroll anytime
Online, proctored final exam • $760

The History of the English Language
X102 • 4 semester units in English

Examine the grammatical and semantic structure of English as it has evolved over centuries, with attention to the nature and function of languages in general, illuminating the connections between language and other elements of culture. Topics include the origin and derivation of words; historical changes in sounds, forms and meaning; literary and philosophical influences on the language; and contributions from other languages and cultures.

Prerequisites: Access to the Oxford English Dictionary (most libraries now have the compact edition) and the Oxford Dictionary of English. Etymology is necessary. You can subscribe to the OED online at http://oxforddictionaries.com/subscribe. Access to a library is recommended.

EDP 857508
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $770

Mystery Fiction
X103.9 • 3 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing: recipient of the Helen Williams Award for Excellence in Collegiate Independent Study from the American Association of Collegiate Independent Study

Survey mystery fiction and its conventions, from the genre’s 19th-century origins to the classic Golden Age puzzle to the hard-boiled American female detective fiction of the 1990s. Understand the mystery novel’s status as a significant form of modern fiction, one that explores how human consciousness makes sense out of what might otherwise be viewed as random experience and meaningless violence.

EDP 867606
Mary Ann Koory, Ph.D., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $715

The English Novel
X125 • 4 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing

Survey the English novel by reading authors such as E.M. Forster, Anthony Trollope, Charles Dickens, Charlotte Brontë, George Eliot, Oscar Wilde, Thomas Hardy and Robert Louis Stevenson. Gain perspective on this literary form with emphasis on how moral, social, psychological, political and philosophical problems were perceived during the Victorian and Edwardian periods.

EDP 897520
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $770

American Fiction
X135A • 3 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing

Survey the major American novelists and short-story writers of the 19th and early 20th centuries, including Mark Twain, Edgar Allan Poe, Stephen Crane, Herman Melville, Edith Wharton, Nathaniel Hawthorne and Jack London. In addition to learning about various literary movements such as romanticism, realism and naturalism, you consider questions of aesthetics, morality, poverty, racism and gender and power.

EDP 867622
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $715

Shakespeare
XBW17 • 4 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing

Important: Special academic policies apply to XBW courses. See p. 224.

Study five of William Shakespeare’s plays (The Taming of the Shrew, Richard III, Othello, Macbeth and The Tempest) recognized as literature of immense cultural importance and popular entertainment. Gain an understanding and appreciation of Shakespearean language and literary forms as well as a critical awareness of the continuing reinterpretation of Shakespeare’s plots and characters.

EDP 897827
Mary Ann Koory, Ph.D., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $770

Philosophy and Religion

Comparative Philosophy
X11 • 3 semester units in Philosophy

Examine some fundamental philosophical questions from a variety of perspectives, including classical Western philosophy; Eastern and Western religious traditions; and specific cultural viewpoints, including feminist, Native American and African thought. The course is intended not as a survey of these various philosophical systems, but as an introduction to basic themes in ethics, epistemology and political and social philosophy. First, learn how these themes are defined in Western philosophy and then how they are approached in other systems of thought.

EDP 867523
Joseph Michael Fedel, M.A.
Enroll anytime
Online, proctored final exam • $715
History of Western Philosophy from the Pre-Socratic Period to the End of the Middle Ages
X20A  •  3 semester units in Philosophy

Get an introduction to major philosophical concerns and concepts in Western thought, beginning with early texts in which philosophy first becomes distinguishable from myth and concluding with the philosophical debates of medieval Christianity. Explore philosophical questions relating to politics, metaphysics, natural science, logic, ethics and aesthetics. The philosophers covered include Plato, Aristotle, St. Augustine and Thomas Aquinas.

EDP 867531
Joseph Michael Fedel, M.A.
Enroll anytime
Online, proctored final exam • $715

Views of the Absolute in World Religions
X10  •  3 semester units in Religious Studies

Religion has been a fundamental part of the social, cultural and political fabric of civilizations throughout history. Explore the important aspects of several important world religions, focusing on their definitions of the absolute (for example, God, Tao, the void) and how the individual relates to it. Diverse religions are covered, including Islam, Judaism, Christianity, Hinduism, Taoism, Buddhism and Native American traditions.

EDP 867549
Joseph Michael Fedel, M.A.
Enroll anytime
Online, proctored final exam • $730

Sciences, Biotechnology and Mathematics

ONLINE COURSE INFORMATION
(510) 642-7343
www.berkeley.edu
extension.berkeley.edu/online

Biology

Introductory Biology With Lab, Part A
X19A  •  5 semester units in Molecular and Cell Biology

How do cells convert nutrients into usable energy? What is the relationship among genes, chromosomes and DNA? Learn the answers to these and other questions while building a solid foundation in the fundamental concepts of molecular and cell biology, including cell structure and function, metabolism and genetics, as well as animal development, form and function. Put theory into practice with “home wet lab” and virtual experiments, and explore the relationship between biological issues and current topics in experimental research, biotechnology and medicine.

Familiarity with basic chemistry is recommended but not required.

EDP 897579
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online, proctored final exam • $830

Introductory Biology With Lab, Part B
X19B  •  5 semester units in Molecular and Cell Biology

What are the mechanisms of evolution? How do plants perform basic biological functions? How do organisms interact with each other and their environment? Discover the answers to these and other questions while gaining a solid foundation in macroscopic biological issues, including organismal diversity—with particular emphasis given to plants, evolution, evolutionary biology and ecology. Learn about biological diversity and ecological principles, including the effects of human activity on the environment. Put principles into action through “home wet lab” and virtual experiments.

Familiarity with basic chemistry is recommended but not required.

EDP 897587
Susan Parkinson, Ph.D.
Enroll anytime
Online, proctored final exam • $830

General Human Anatomy
X104  •  3 semester units in Integrative Biology

An elective in the Post-Baccalaureate Health Professions Program

Examine the correlations between the structures and functions of the body’s various systems in this intensive introductory course. Explore the functional anatomy of the human body through both gross and microscopic examination. Topics include the cardiovascular, respiratory, gastrointestinal, nervous and skeletal systems, with an introduction to biomechanical principles. Investigate disease pathologies affecting normal body function.

Prerequisite: One year of college-level general biology for majors

EDP 857524
James D. Smiley, B.A., D.C.
Enroll anytime
Online • $850

Introduction to Human Physiology
XB32  •  3 semester units in Molecular and Cell Biology
XBW32 for online section

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Important: Special academic policies apply to XB and XBW courses. See page 224 for details.

Understand the complexities of the cells, tissues and major organs and systems of the human body. Study a different system each week, concentrating on basic mechanisms underlying human life processes and important diseases affecting normal human function.

Prerequisite: One year of high school or college chemistry

EDP 897876
Keith Earnshaw, M.S., Ph.D.
Enroll anytime
Online, proctored final exam • $795

Neuroscience
X108  •  3 semester units in Molecular and Cell Biology

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Get an overview of the fundamental principles of the organization, function, and development of the human nervous system, including neural development and diseases of the nervous system. Examine experimental approaches from anatomy to molecular biology, and critically evaluate papers from the primary scientific literature.

Prerequisite: One year of college-level general biology for majors

EDP 843847
Natalia Caporale, Ph.D.
Jan. 17 – April 10
Online, proctored final exam • $850
### Introductory Biochemistry

X105  3 semester units in Molecular and Cell Biology

An elective in the Certificate Program in the Essentials of Green Chemistry

Understand the basic chemistry and overall structure of the most important biological macromolecules, including the study of enzyme catalysis; cellular architecture; intermediary metabolism; and special processes such as photosynthesis, biological oxidation and energy production. Explore the various ways that biological systems react to their environment.

**Prerequisites:** College-level courses in elementary chemistry and biology required. One or two semesters of organic chemistry is recommended.

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<th>EDP 857672</th>
<th>Nicli Ahuja, Ph.D.</th>
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### Principles and Techniques of Molecular Cell Biology

X121  3 semester units in Molecular and Cell Biology

45 hours CE credit: BRN provider 00226

Learn how cells function by exploring gene regulation and expression, cell regulation, genetic engineering, the Human Genome Project, the genetics of cancer, immune system diseases and DNA technology in forensics.

**Prerequisite:** One year of college-level general biology

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### Immunology

X110  3 semester units in Molecular and Cell Biology

45 hours CE credit: BRN provider 00226

An elective in the Post-Baccalaureate Health Professions Program in the Essentials of Green Chemistry

The immune system plays the crucial role of battling infection and cancer in the body. As a defense system, it must recognize and distinguish between what is foreign and what is self. Examine the basic principles of immunology, and study the tissues and cells that make up the immune system. Understand the structure and function of immunoglobulins, and investigate the nature of their interactions with antigens. Learn to discuss biotherapeutics, cancer and AIDS from an informed standpoint.

**Prerequisite:** One year of college-level general biology for majors

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<th>EDP 843508</th>
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<td>Online, proctored final exam • $795</td>
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### Genetics

X143  3 semester units in Molecular and Cell Biology

45 hours CE credit: BRN provider 00226

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Learn to integrate the most important concepts in classical and molecular genetics into an overall picture of what a gene is, how it functions, how it may be altered and how it is inherited. Study the molecular basis of gene function and mutation, Mendelian genetics, transmission systems, regulation of cellular processes, developmental genetics, cytoplasmic inheritance, population genetics and multifactorial inheritance. Learn about recent advances in biotechnology that have genetic implications, including the Human Genome Project and advances in genetic engineering technology.

**Prerequisite:** One year of college-level general biology for majors

<table>
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<tr>
<th>EDP 857698</th>
<th>Keith Earnshaw, M.S., Ph.D.</th>
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<td>Enroll anytime</td>
<td>Online • $795</td>
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### Marine Biology

X55  3 semester units in Integrative Biology

Examine the types of organisms that inhabit the marine environment and the types of habitats and ecological systems in seas and oceans. In this introductory course, you also consider human use of the marine environment and the resulting problems and issues, including pollution, habitat modification and exploitation of resources.

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<tr>
<th>EDP 877035</th>
<th>Stephen W. Shaner, Ph.D.</th>
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<td>Enroll anytime</td>
<td>Online, proctored final exam • $770</td>
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### Advanced Bioscience

### Current Topics in the Biosciences

X427  2 semester units in Molecular and Cell Biology

A requirement in the Professional Biomedical Sciences Program

Study current topics in the biosciences, including the areas of cell biology, molecular biology, neurobiology, genetics, developmental biology and virology, immunology and infectious disease. Learn to prepare and deliver a scientific presentation. This course is intended for advanced science students with some previous knowledge of cell biology, molecular biology and genetics. Both industry professionals and health professions students can benefit from this course.

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<tr>
<th>EDP 843458</th>
<th>Natalia Caporale, Ph.D.</th>
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<td>Jan. 17–April 10</td>
<td>Online • $575</td>
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### Epigenetics of Human Development and Disease

X423  3 semester units in Molecular and Cell Biology

An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program

Epigenetics is the study of heritable changes in gene expression that do not involve changes in the DNA sequence. Epigenetic mechanisms play important roles in development from a fertilized egg into a complex human being, as well as in aging and in various diseases (including cancer). Prepare to study topics such as DNA methylation, histone modification, RNAi, cancer epigenetics, stem cells and the environment (for example, nutrition and stress) as a potential modifier of the human epigenome.

Although there are no formal prerequisites to this course, some background in molecular biology and genetics is helpful.

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<tr>
<th>EDP 897777</th>
<th>Rebekah S. Marsh</th>
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<td>Enroll anytime</td>
<td>Online • $795</td>
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</table>
Online Certificate Program in the Essentials of Green Chemistry

Green chemistry enables scientists and engineers to design chemicals and materials with minimal generation and use of hazardous substances. Growing public concern about product safety, along with new chemical policies in the United States and the European Union, poses an imperative for decision makers in business, government and nongovernmental organizations (NGOs) to understand the business strategy and market drivers for green chemistry. In addition to new opportunities for growth and competitive advantage, businesses have new positions in green chemistry opening at points throughout the supply chain.

Curriculum Requirements
The curriculum consists of 5 required courses—Principles of Green Chemistry X413 and any 4 of the other 6 required courses (10 semester units)—and a varied number of elective courses for a minimum of 14 semester units (210 hours of instruction). Principles of Green Chemistry X413 does not need to be taken first.

Required Courses
- Principles of Green Chemistry X413 (offered this term)
- Decision Making and Comparative Risk Assessment X473 or Toxicology and Risk Assessment X408.2
- Green Chemistry and Chemicals Policy X400.8 (offered this term)
- Alternatives Assessment: Chemicals, Materials, Products and Processes X415 (offered this term)
- Business and Financial Planning for Green Chemistry Innovation X413.8 (offered this term)
- Current Topics in Green Chemistry X414

Learn More and View the Brochure
extension.berkeley.edu/cert/greenchem.html
letters@unex.berkeley.edu

Register using EDP 402421
See p. 167 for complete certificate details.

Chemistry

Introduction to Chemistry
X16 • 3 semester units in Chemistry
An elective in the Certificate Program in the Essentials of Green Chemistry
This nonlab course offers an introduction to basic principles in chemistry and demonstrates the role chemistry plays in various aspects of everyday lives.
Prerequisite: Although a background in chemistry is not necessary, students are required to have a basic knowledge of math, including algebra.

EDP 897645
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam • $770

Introductory Organic Chemistry
X18 • 3 semester units in Chemistry
An elective in the Certificate Program in the Essentials of Green Chemistry
Examine the compounds that comprise most living mass. Following an introduction to covalent bonding and isomerism, move into a detailed discussion of the molecular structures and properties of various classes of organic and other biologically important compounds.
Prerequisites: One course in introductory chemistry and knowledge of basic algebra

EDP 897652
Weiwei Gu, Ph.D.
Enroll anytime
Online • $770

Principles of Green Chemistry
X413 • 2 semester units in Chemistry
A requirement in the Certificate Program in the Essentials of Green Chemistry; an elective in the Post-Baccalaureate Health Professions Program and in the Professional Biomedical Sciences Program
Learn the core principles of green chemistry, and connect your knowledge of green chemistry to your own experiences through real-world examples and projects. Chemistry can greatly influence human health and the health of the environment. Green chemistry unleashes the creativity of scientists and engineers in designing and discovering the next generation of chemicals and materials so that they provide increased performance while protecting and enhancing human health and the environment.

EDP 843623
Instructor to be announced
Jan. 17–April 10
Online • $575

Green Chemistry and Chemicals Policy
X400.8 • 2 semester units in Public Health
A requirement in the Certificate Program in the Essentials of Green Chemistry
Learn the current and historical policy context of industrial chemical regulation, as well as the relevance of the concepts and application of green chemistry and green engineering in moving humans collectively toward a more sustainable economy and society. You also study the weaknesses of historical approaches to chemicals management in protecting public and environmental health, as well as the key challenges that remain in implementing comprehensive chemicals policy reform.

EDP 843490
Ann Blake, Ph.D.
Jan. 7–April 10
Online • $575

Business and Financial Planning for Green Chemistry Innovation
X413.8 • 2 semester units in Business Administration
A requirement in the Certificate Program in the Essentials of Green Chemistry
Green chemistry projects typically have clear, identifiable environmental benefits but ultimately need a well-articulated business case for widespread adoption. Get an introduction to the core principles of economics, finance and accounting to help you understand the steps necessary to bring green chemistry innovations to market. Explore other relevant topics in business administration and sustainability, including business models, ecological economics, entrepreneurship and service design.

EDP 843441
Jane Talkington, M.B.A.
Jan. 7–April 10
Online • $575

Physics

Concepts of Physics
X11 • 4 semester units in Physics
Gain an understanding of the principles of physics in the context of how everyday objects work. Intended for students majoring in the humanities and social sciences, as well as anyone with an interest in the subject, this course covers forces and motion, conservation laws, heat, fluids, vibrations and waves, electricity and magnetism and sound and light, with emphasis on applying the principles to everyday experience. Study the concepts of physics with a minimum of mathematics.

EDP 897660
Raja Almukahhal, Ph.D.
Enroll anytime
Online, proctored final exam • $770
Geology and Environmental Sciences

Contemporary Environmental Issues
X70 • 4 semester units in Environmental Science, Policy and Management
An elective in the Certificate Program in the Essentials of Green Chemistry
Gain an understanding of the physical, biological and ecological processes of the global ecosystem, as well as the human impact from cultural, social and economic influences that disrupt these processes. Acquire an understanding of the roles played by government, business, scientists, advocacy groups and individual citizens in shaping solutions to environmental problems and managing resources.

EDP 867929
Douglas Greenberg, Ph.D.
Enroll anytime
Online, proctored final exam • $770

American Environmental and Cultural History
XBW160AC • 4 semester units in Environmental Science, Policy and Management
An elective in the Certificate Program in the Essentials of Green Chemistry; winner of UC Berkeley’s Education Initiatives Award

Important: Special academic policies apply to XBW courses. See p. 224.

Explore the ways cultural groups have perceived, managed and conserved the American environment from colonial times to the present. Investigate how attitudes toward resource development and nature have shaped the environmental movement. This course satisfies the American Cultures breadth requirement for the UC Berkeley campus. For more information regarding the breadth requirement, please visit http://americancultures.berkeley.edu.

EDP 897868
Douglas Greenberg, Ph.D.
Enroll anytime
Online, proctored final exam • $770

Clinical and Regulatory Sciences

Introduction to Clinical Research: Clinical Trial Phases and Design
X400.2 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management; an elective in the Professional Program in Quality and Compliance for Biotechnology

Review the drug development process, principles of good clinical practice, clinical trial phases and design, principal players in clinical research, regulatory strategies and medical terminology.

EDP 843540
Michael Dubinsky, B.S.
Jan. 3–Feb. 28
Online • $1,895

EDP 843557
Michael Dubinsky, B.S.
March 1–April 26
Online • $1,895

Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities
X400.3 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management; an elective in the Professional Program in Quality and Compliance for Biotechnology

Learn the procedures inherent to planning clinical trials, including protocol development, case report form design, institutional review board (IRB) submission, site selection, prestudy visits and more.

Prerequisite: Successful completion of Introduction to Clinical Research: Clinical Trial Phases and Design X400.2

EDP 843565
Karen Henry, M.P.H.
Jan. 3–Feb. 28
Online • $1,895

EDP 843573
Karen Henry, M.P.H.
March 1–April 26
Online • $1,895

Clinical and Regulatory Sciences

Introduction to Clinical Research: Clinical Trial Phases and Design
X400.2 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management; an elective in the Professional Program in Quality and Compliance for Biotechnology

Review the drug development process, principles of good clinical practice, clinical trial phases and design, principal players in clinical research, regulatory strategies and medical terminology.

EDP 843540
Michael Dubinsky, B.S.
Jan. 3–Feb. 28
Online • $1,895

EDP 843557
Michael Dubinsky, B.S.
March 1–April 26
Online • $1,895

Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities
X400.3 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management; an elective in the Professional Program in Quality and Compliance for Biotechnology

Learn the procedures inherent to planning clinical trials, including protocol development, case report form design, institutional review board (IRB) submission, site selection, prestudy visits and more.

Prerequisite: Successful completion of Introduction to Clinical Research: Clinical Trial Phases and Design X400.2

EDP 843565
Karen Henry, M.P.H.
Jan. 3–Feb. 28
Online • $1,895

EDP 843573
Karen Henry, M.P.H.
March 1–April 26
Online • $1,895
Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting

X400.4 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management
Get a thorough look at the role of clinical trial monitors. Understand the various aspects of study monitoring, such as data review, safety reporting and drug accountability. Study global drug development and subject recruitment and retention, topics that are crucial to meeting study timelines.

Prerequisites: Introduction to Clinical Research: Clinical Trial Phases and Design X400.2 and Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities X400.3

EDP 843581
David R. Leonard, Ph.D.
Jan. 3–Feb. 28
Online • $1,895

EDP 843599
David R. Leonard, Ph.D.
March 1–April 26
Online • $1,895

Clinical Trial: Data Analysis, Regulatory Audits, Vendor Selection and Project Management

X400.5 • 3 semester units in Public Health
45 hours CE Credit: BRN provider 00226
A requirement in the Certificate Program in Clinical Research Conduct and Management
Learn the clinical study report and other procedures at study close-out to prepare yourself for regulatory audits and inspections. Get an overview of project management and vendor selection in clinical research.

Prerequisites: Introduction to Clinical Research: Clinical Trial Phases and Design X400.2, Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities X400.3, and Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting X400.4

EDP 843607
Ken Sansone, B.S., CCRA
Jan. 3–Feb. 28
Online • $1,895

EDP 843615
Daniel Redline, B.A.
March 1–April 26
Online • $1,895

Mathematics and Statistics

Calculus X1A

X1A • 4 semester units in Mathematics
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program
In this introduction to differential and integral calculus, examine the key concepts of limit, derivative and continuity, as well as the main applications of derivatives in graphing functions and optimizing functions. Then explore the fundamental theorem of calculus, which leads to the concept of integration and one of its main applications in calculating volumes through solids of revolution.

Prerequisite: Three-and-one-half years of high school mathematics, including trigonometry and analytic geometry

EDP 857722
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $790

EDP 867820
Merlin Miller, M.A.
Enroll anytime
Online, proctored final exam • $785

EDP 857441
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $785

Calculus X1B

X1B • 4 semester units in Mathematics
This continuation of Calculus X1A includes techniques and applications of integration, infinite sequences and series, first-order ordinary differential equations, exact equations, second-order ordinary differential equations, oscillation and damping and series solutions of ordinary differential equations.

Prerequisite: Calculus X1A or equivalent

EDP 857706
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $790

EDP 857714
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $790

Precalculus

X9 • 2 semester units in Mathematics
Gain exposure to concepts in basic and advanced algebra and some trigonometry. Study topics such as logarithms, solving or graphing linear equations and factoring a polynomial. This class goes into these topics at a more advanced level than a beginning or intermediate algebra class does. You gain a good foundation for study in future calculus classes. Note: An integral component of this course is the interactive website MyMathLab. For complete system requirements, go to www.mymathlab.com/system.html.

Prerequisites: Two years of high school algebra, or the equivalent of a beginning and an intermediate algebra class and one year of high school geometry or its equivalent

EDP 857656
Flor Feldman, M.Sc.
Enroll anytime
Online • $720

Introduction to Statistics

X82 • 4 semester units in Statistics
X82W2 for online sections
An elective in the Certificate Program in the Essentials of Green Chemistry and in the Post-Baccalaureate Health Professions Program
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program.
Important: Special academic policies apply to XB and XBW courses. See p. 22M.

Learn basic concepts of probability and statistical inference, focusing on an intuitive approach to understanding concepts and methodologies. Get an introduction to statistical and critical thinking, including descriptive statistics, probability, sampling distributions, interval estimation, hypothesis testing and regression. Note: If you want to complete Haas M.B.A. prerequisites, you must be in the online course for three months before you can take the final exam.

The online course is the recipient of the Helen Williams Award for Excellence in Collegiate Independent Study from the American Association for Collegiate Independent Study (AACIS).

Prerequisites: Two years of high school algebra. A recent course in college algebra is recommended. Note: An accelerated online section will be offered in the spring and summer semesters.

EDP 857615
G. James Pan, Ph.D.
Enroll anytime
Online, proctored final exam • $785

EDP 857623
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $785

EDP 857631
Dieter Jurkat, M.S., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $785
Writing, Editing and Technical Communication

ONLINE COURSE INFORMATION
(510) 642-7343
online@unex.berkeley.edu
extension.berkeley.edu/online

Editing

Grammar, Mechanics and Usage for Editors
X445 • 2 semester units in English
A requirement in the Professional Sequence in Editing

Editors must have a strong command of English grammar, syntax and mechanics to edit the work of others clearly, confidently and correctly. Gain a practical understanding of grammar and the logic governing syntax and punctuation use. Learn to analyze grammar and syntax, understand sentence structure, transition from one idea to another and choose the right words to convey meaning, among other topics. Homework exercises, frequent quizzes and a multidraft editing assignment help build your expertise. Enrollment is limited.

Prerequisite: You must be proficient in English and have a solid grasp of English grammar.

EDP 843342
Linda R. Thompson, M.A.
Jan. 17–April 10
Online • $595

EDP 843359
Leda Cirilo, Ph.D.
Jan. 24–April 17
Online • $595

EDP 843367
Barbara Magalnick, M.S.
Jan. 24–April 17
Online • $595

Editorial Workshop I: Introduction to Copyediting
X405 • 2 semester units in Journalism
A requirement in the Professional Sequence in Editing

Get an overview of the editorial process in this beginning copyediting course, including the use of style manuals and reference books, creation of style sheets and methods of querying authors and project editors. Learn how to edit using conventional marks and symbols; apply the appropriate level of copyediting; eliminate bias; query permissions; ensure consistency; typecode a manuscript; and copyedit and insert figures, tables and artwork. Enrollment is limited.

Prerequisite: Grammar, Mechanics and Usage for Editors X445

EDP 843375
Leda Cirilo, Ph.D.
Jan. 17–April 10
Online • $599

EDP 843383
John Curley, B.A.
Jan. 24–April 17
Online • $599

EDP 843391
Gail Hynes Shea, B.A.
Jan. 24–April 17
Online • $599

Editorial Workshop II: Intermediate Copyediting
X415 • 2 semester units in Journalism
A requirement in the Professional Sequence in Editing

Study more complex aspects of copyediting and the fine points of editorial style that editors of book-length manuscripts must master. Practice working within the three levels of copyediting—light, medium and heavy—and learn how to edit using different style manuals. You also get additional practice working with codes and type specifications, photos and artwork, tables and references and footnotes. Frequent editing assignments are required.

Prerequisite: Editorial Workshop I: Introduction to Copyediting X405

EDP 843409
Linda R. Thompson, M.A.
Jan. 17–April 10
Online • $599

Online Professional Sequence in Editing

Offering proficiency in copyediting, line editing, and developmental editing, the Professional Sequence in Editing is the ideal editorial training if you have a passion for fine-tuning the written word. Whether you want to develop an editing career, rise to a management position in publishing or master the editorial components of a related profession, the program can help turn your editorial sensibilities into marketable skills.

Curriculum Requirements
The curriculum consists of 4 required courses for a total of 8 semester units (120 hours of instruction).

Required Courses
You must take these courses in the following sequence:

• Grammar, Mechanics, and Usage for Editors X445 (offered every term and online)
• Editorial Workshop I: Introduction to Copyediting X405 (offered alternating terms and online)
• Editorial Workshop II: Intermediate Copyediting X415 (offered alternating terms and online)
• Advanced Editorial Workshop: Substantive Editing X425* (offered every term and online)

*A course from the Professional Sequence in Technical Communication of equivalent length and unit value may be substituted for Advanced Editorial Workshop: Substantive Editing X425.

Learn More and View the Brochure
extension.berkeley.edu/spos/edit.html
(510) 642-6362
letters@unex.berkeley.edu

Register using EDP 022343

See p. 185 for complete program details.
Online Post-Baccalaureate Certificate Program in Writing

For aspiring writers serious about their craft, the UC Berkeley Extension Post-Baccalaureate Certificate Program in Writing is ideal. Formalize your training and prepare for graduate study in writing with this professional certificate—the only one of its kind in the Bay Area. Build your writing portfolio, and gain a credential that shows your commitment. Join a community of writers who share your dedication and help you develop as a writer. Discover what it takes to be published. Be inspired as you read exemplary works of literature. And learn from respected instructors who can help you stand out from the competition for a coveted place in an M.F.A. writing program.

Curriculum Requirements
The curriculum consists of 7 courses for a minimum of 14 semester units (210 hours of instruction), which includes 2 required courses and 5 restricted electives selected from two categories: literature (2 workshops) and writing (3 workshops).

Required Courses
• The Craft of Writing X421 (offered every term and online)
• Writing Skills Workshop X13 (offered every term and online)

Literature and Writing Workshop Electives
For a complete list of electives available this term, please visit extension.berkeley.edu/cert/writing.html.

Learn More and View the Brochure
extension.berkeley.edu/cert/writing.html
(510) 642-6362
letters@unex.berkeley.edu

Register using EDP 022466
See p. 189 for complete certificate details.

Advanced Editorial Workshop: Substantive Editing
X425 • 2 semester units in Journalism
A requirement in the Professional Sequence in Editing

Develop your skills in applying the principles of effective writing to the editing of nonfiction book manuscripts. Examine two phases of substantive editing—line editing and developmental editing—and learn the art of proposing editorial changes other than those required to correct errors or to achieve a consistent editorial style. Learn how to edit for clarity and concision, how to identify problems of cohesion and coherence (logic) and how to refine and invigorate an author’s style.

Prerequisites: Editorial Workshop II: Intermediate Copyediting X415

EDP 843417
Instructor to be announced
Jan. 17–April 10
Online • $599

Indexing: Theory and Application
X477 • 3 semester units in Journalism
Recipient of the 2005 Distance Learning “Community of Practice” Course Award from the University Continuing Education Association (UCEA)

A good index greatly enhances the usability and value of a book, yet few writers and editors know how to construct this vital part of a nonfiction publication. Learn the fundamentals of writing, editing and delivering back-of-book indexes to publishing clients. You also learn the basic format, guidelines and term-selection approaches of embedded and Web indexing, using three major indexing software programs to complete several of your assignments.

Prerequisites: Strong language, reading, computer and Internet skills. A PC running the Windows OS is highly recommended. See Web for details.

This course has six rotating sections with varying instructors: Sylvia Coates, Heather Ebbs, Lucie Haskins, Fred Leise, Max McMaster and Jan C. Wright.

For information about available sections, visit extension.berkeley.edu/catalog/course394.html.

Technical Communication

Technical Communication II
X466 • 2 semester units in Journalism
A requirement in the Professional Sequence in Technical Communication

Build on the skills you developed in Technical Communication I X465, and hone your ability to define the audience and purpose of a document to present the information in an optimal form. Improve your technical writing style and technique while creating writing samples that include a variety of document types for both paper and online presentation. Review technical communication tools and technology, as well as current Web content and formatting languages.

Prerequisite: Technical Communication I X465 or Technical Writing X412 or equivalent
EDP 877803
John Tabor, B.A.
Enroll anytime
Online, proctored final exam • $550

Technical Writing

X412 • 3 semester units in English
May be substituted for Technical Communication I X465 in the Professional Sequence in Technical Communication

Develop your ability to organize and craft information for manuals, journal articles, reports and other technical publications. Learn document design and production principles, computerized interactive documentation, the use of desktop publishing and the publication-to-print process.

EDP 877845
John Tabor, B.A.
Enroll anytime
Online • $770

Writing

The Craft of Writing
X421 • 2 semester units in English
A requirement in the Post-Baccalaureate Certificate Program in Writing

As a creative writing student, you need to become comfortable with elements of the craft, whether they are fine-tuning an image in a poem or introducing a character in the beginning of a short story. Gain practical exposure to the uses, demands and possibilities of craft in fiction, poetry and nonfiction in this course. Enrollment is limited to 18.

EDP 843425
David Rompf, J.D.
Jan. 17–April 10
Online • $555
Exploring Your Creative Writing Potential
X70 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Learn to assess your potential, identify your strengths and develop valuable writing techniques in this course for beginning writers. Class exercises and weekly writing assignments help you discover your talents in a variety of forms: short fictional scenes, short stories, poetry and journalistic writing. The supportive atmosphere helps you see how others respond to your writing.
EDP 867689
Mimi Albert, M.F.A.
Enroll anytime
Online • $550

Introduction to Writing Fiction
X464 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Learn the basic concepts and techniques of writing fiction, with the aim of heightening your sense of language and developing your ability to solve problems of structure, characterization, viewpoint, story line, imagery, dialogue and believability. The instructor evaluates your manuscripts and allows time for classroom discussion. Enrollment is limited.
EDP 897371
Mimi Albert, M.F.A.
Enroll anytime
Online • $550

Developing the Novel I
X125.1 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Explore the craft of longer fiction and how to meet its creative challenges. Each session includes a lecture on craft, supported by discussion of assigned readings and exercises to unlock the potential of your ideas. Learn how to develop characters, language, voice, pace, tone, theme and setting, and participate in a group critique of student work. Enrollment is limited to 18.
EDP 867614
Mimi Albert, M.F.A.
Enroll anytime
Online • $550

Writing Skills Workshop
X13 • 2 semester units in English
A requirement in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing
Good writing isn’t fussy. It’s clear, concise and grammatically correct—no matter the audience or purpose. In this class, you draft, write and revise your own work; read literary essays as examples of effective syntax and coherent structure; share work in a supportive, focused workshop environment; and review common grammar pitfalls. This course is designed both for students in the certificate program and for those wishing to hone their skills for any writing need.
Prerequisite: You must be proficient in English and have a solid grasp of English grammar.
EDP 843433
Margaret Steen, M.J., Extension Honored Instructor
Jan. 17–April 10
Online • $555

Creative Nonfiction Workshop
X140 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Learn to apply the techniques of storytelling to nonfiction prose pieces, including personal essays, features, commentaries, reviews, reports, journal entries and memoirs. Together, the instructor and other participants form your audience, offering support and critical feedback about your pieces. Weekly class discussions and writing assignments focus on story principles—such as plot, tension, scene and dialogue—that increase the readability of your work and form your material into publishable pieces.
EDP 867630
Arlene Plevin, M.F.A., Ph.D.
Enroll anytime
Online • $550

Writing the Feature Story
X419 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing
Learn how to find, research and write articles for print or online publications, and discover how freelancers write stories that sell. With the instructor’s help, you come up with a nonfiction story idea, do the reporting and interviewing to gather details and quotes, write and revise the article and submit it to an editor for possible publication. Class participation supplements lectures and writing exercises.
EDP 897488
Margaret Steen, M.J., Extension Honored Instructor
Enroll anytime
Online • $550

Introductory Composition
X2A • 3 semester units in English
Learn how to compose well-crafted college-level essays by exploring each step in the writing process. In various writing assignments, you gain practice with descriptive, narrative and other forms of expository writing.
EDP 867648
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $715

Composition and Literature
X2B • 3 semester units in English
Learn the critical-thinking skills that teach you to write about literature with thoughtful analysis, evaluation and enjoyment of representative literary forms such as short stories, poems, plays and novels.
Introductory Composition X2A is not a prerequisite for this online course, X2B.
EDP 867655
Gary Tombleson, Ph.D.
Enroll anytime
Online, proctored final exam • $715
When to Enroll
Enrollment for the spring 2012 term opens Dec. 5. Enrollments are processed in the order received, so we recommend that you enroll early to ensure a place. Payment is due at the time of enrollment.

Enrolling at the First Class Meeting
Enrollments are accepted on a first-come, first-served basis. Once the maximum classroom capacity is reached, we are required to close enrollment for the course. Please note that some courses are cancelled due to low enrollment. If space is available, you may attend the first class before enrolling. If the minimum enrollment is not met, courses may be cancelled before the first meeting.

To ensure a seat in the class, you are encouraged to enroll as early as possible prior to the first class meeting. We cannot guarantee that course materials, texts or classroom space will be immediately available if you do not enroll in advance.

For course status information, including availability of space, call (510) 642-4111.

Enrolling in an Online Course
For courses with published start and end dates, you must enroll prior to the start date. These courses must be completed within the specific dates posted in the course section information.

Many online courses are self-paced, which means you may enroll at any time and progress at your own pace. You must allocate a minimum of one month per semester unit to complete a course; for courses of 3 and 4 semester units, you must remain in the course for a minimum of three months. You have a maximum of six months to complete any self-paced course from the date of enrollment unless otherwise noted in the course description. Submit no more than one assignment per week to the instructor, and wait until this assignment has been returned before submitting the next one. If you are unable to complete your course work and do not officially withdraw from the online course, you will receive a grade of “F.”

If the self-paced course is marked temporarily closed, you can be automatically notified when enrollment reopens. To initiate this, find the course description online at extension.berkeley.edu/catalog, click on the Notify Me button in the course section block and provide your contact information. You will be notified by email when the course becomes available again.

Note: As a condition of enrollment and to ensure successful completion of an online course, Extension courses require you to participate in chat rooms and message boards specific to the course. The email address and online identity you use when entering chats, or as you post on message boards, will be visible to all other participants. By enrolling in an Extension online course, you authorize the disclosure of your email addresses and online identities for this purpose and other Extension communication.

Paying Enrollment Fees
You are not officially enrolled until fees are paid in full; partial payments cannot be accepted. All fees were accurate as of print publication time. All fees are subject to change without notice. For the most current information, call (510) 642-4111 or visit extension.berkeley.edu.

If a course has six or more classroom meetings, and if space permits, you may attend the first class meeting of a course. You must formally enroll in the course, however, and pay fees before the second course meeting.

If a course has five or fewer classroom meetings, you must formally enroll in the course and pay all fees by the last business day before the course start date.

Methods of Payment Include the Following:
• Check (with imprinted address and telephone number) made payable to UC Regents. A $25 charge is assessed for each returned check.
• Credit card: Visa, MasterCard, American Express or Diners Club. If you pay by credit card and the charge is declined, you will lose your space in the course.
• Neither cash nor checks are accepted by mail or in person at the Belmont Center.
• Purchase order: An enrollment form (see inside back cover of this catalog) must accompany your request. To enroll with a purchase order, including vocational rehabilitation or employer tuition voucher, please fax the completed enrollment form with the purchase order from a sponsoring company or organization to (510) 642-3910. Extension cannot accept purchase order enrollments by phone. For additional questions regarding purchase order processing, please email unex_ar@unex.berkeley.edu.
• AmeriCorps/National Service Trust funds: Transfer the course fee amount to UC Berkeley, and attach a printout of your homepage showing this transfer to your enrollment form when enrolling by mail or in person.

A hold may be placed on your student records and transcripts requests until all outstanding debts to the University are paid in full.

Enrollment Confirmation
Extension will mail you an enrollment confirmation within 10 business days of the receipt of payment. Instructions for accessing your online classroom are sent to the email address(es) you provide.

Not receiving an enrollment confirmation before your classroom course begins is not justification for seeking a refund.
Waitlist for Classroom Courses

Your name will be added to the waitlist if your requested course section is full. You will be notified if space becomes available. If we do not hear from you within 24 hours of notification, the space will be offered to the next person on the waitlist. If you are waitlisted, you should not attend the first class meeting unless you are specifically advised to do so by Student Administrative Services. Student Administrative Services maintains the waitlist; instructors cannot approve enrollments from the waitlist.

Transfers

Note: Different add/drop policies and deadlines apply to UC Berkeley-equivalent courses. UC Berkeley-equivalent courses are denoted by the prefix XB or XBW in course number; refer to p. 224 or extension.berkeley.edu/info/enrollment.html#xb. If the drop deadline for your existing class falls before the transfer deadline outlined below, you must make your transfer request by the drop deadline of your existing class.

Refer to extension.berkeley.edu/info/concurrent.html#schedule for information on add/drop deadlines and procedures specific to concurrent enrollment classes.

To change sections or to enroll in a different course, you must request a transfer to the new section or course within the timelines listed below. Request a transfer by calling (510) 642-4111 during business hours.

All transfer requests are subject to a nonrefundable transfer processing fee of $35 per class unless specified otherwise in the course description, and must be made within the transfer policy timelines. Transfer requests that are a result of a course cancellation are not subject to the transfer processing fee.

Transfers for Classroom and Hybrid Courses

• Between courses with fewer than six meetings: Transfer requests must be made one business day before the course start date of the original course, provided the enrollment limit of the course you are transferring to has not been reached.
• Between courses with six or more meetings each: Transfer requests must be made one business day before the second course meeting of both courses, provided enrollment limit of the course you are transferring to has not been reached.

Transfers for Online Courses

For fixed-date online courses, you can request transfers up to five business days after the course start date. For example, if the course starts on a Thursday, you must request your transfer by the close of business on the following Thursday (Pacific time). As another example, if your Welcome Letter is emailed on a Thursday, you must request a transfer by the close of business on the following Thursday (Pacific time). As another example, if the Welcome Letter was emailed on Jan. 18, you must request a transfer by the close of business on Jan. 25 (Pacific time).

All transfer requests are subject to a nonrefundable $35 transfer processing fee. Transfer requests that are a result of course cancellations are not subject to the fee.

Approvals for transfers will be based on course and space availability and the scheduled course start date, as applicable. Any difference in course fees will be assessed and due at the time of the transfer. If you have any questions regarding the transfer policy, please call (510) 642-4111.

Special requirements and deadlines apply to UC Berkeley-equivalent (XB and XBW) courses. For further information refer to p. 224 or extension.berkeley.edu/info/enrollment.html#xb.

Refunds

Note: Different add/drop policies and deadlines apply to UC Berkeley-equivalent courses. UC Berkeley-equivalent courses are denoted by the prefix XB or XBW in course number; refer to p. 224 or extension.berkeley.edu/info/enrollment.html#xb. If the drop deadline for your existing class falls before the transfer deadline outlined below, you must make your transfer request by the drop deadline of your existing class.

Refer to extension.berkeley.edu/info/concurrent.html#schedule for information on drop/refund deadlines and procedures specific to concurrent enrollment classes. There is a nonrefundable refund processing fee of $50 per class.

Request a refund by calling (510) 642-4111 during business hours or by emailing your request to refund@unex.berkeley.edu within the timelines listed below.

All refund requests are subject to a nonrefundable refund processing fee of $50 per class unless specified otherwise in the course description, and must be made within the refund policy timelines. Refund requests that are a result of a course cancellation are not subject to the refund processing fee.

If it is necessary for UC Berkeley Extension to cancel a course, your full course fee will be refunded. We do not reimburse travel or accommodation costs or any expense other than the full course fee in the event of course cancellation. We do not reimburse textbook fees. Please use Specialty Books to ensure the ability to return a book if your class should cancel.

Refunds for Classroom and Hybrid Courses

If you enroll in a course and then cannot attend, you may request a refund within the following timelines.

• Courses with fewer than six meetings: You must make your refund request no later than one business day prior to the first course meeting.
• Courses with six or more meetings: You must make your refund request no later than one business day prior to the second course meeting.

Refunds for Online Courses

For fixed-date online courses, you can request refunds up to five business days after the course start date. For
example, if the course starts on a Thursday, you must request your refund by the close of business on the following Thursday (Pacific time). As another example, if the course starts on Jan. 18, you must request your refund by the close of business on Jan. 25 (Pacific time).

For self-paced online courses, you can request refunds up to five business days after your Welcome Letter has been emailed. For example, if your Welcome Letter is emailed on a Thursday, you must request a refund by the close of business on the following Thursday (Pacific time). As another example, if the Welcome Letter was emailed on Jan. 18, you must request a refund by the close of business on Jan. 25 (Pacific time).

To Request a Refund
You can request a refund in person at any of our Extension centers or by calling (510) 642-4111. You may also write to the Registrar’s Office, UC Berkeley Extension, Suite 110, 1995 University Ave., Berkeley, CA 94704-7000, or fax a request to (510) 642-0374. You can also email your request to refund@unex.berkeley.edu. Include your name, the name and EDP number of your course, your reason for requesting a refund and your daytime phone number in case of questions. Failure to include all necessary information may delay processing.

Cancellation of Courses and Schedule Changes
Extension cancels courses only when absolutely necessary, but we must reserve the right to do so, as well as to reschedule courses and change instructors. UC Berkeley Extension receives no state or University funding and is self-supporting from course fees. If a course is canceled, you may either request a transfer to another course or you will automatically receive a full refund, usually within four weeks.

Course Credit and Grades

Academic Standards
All university-level academic credit courses numbered X, XB1–99 and XBW1–99 and the Extension instructors who teach them, are reviewed and approved by the appropriate academic department on the UC Berkeley campus and by the Committee on Courses of Instruction (COCI) of the UC Berkeley Academic Senate. The UC Berkeley Academic Senate delegates authority to the Dean of UC Berkeley Extension to approve professional, post-graduate credit courses that are numbered X300–499 and all noncredit courses. This academic supervision by University faculty is assurance of excellence in course content and quality of instruction.

Academic Credit
UC Berkeley Extension does not grant degrees, but many Extension courses carry academic credit that may be applied toward a degree, professional licensing or other professional requirements or completion of an Extension professional certificate or specialized program of study.

Application of Credit Toward UC Degrees
In certain cases, credit earned in UC Berkeley Extension undergraduate-level courses (those numbered 1–99) may be applied toward subject requirements for bachelor’s degrees by students admitted to the University of California. You should inquire at the Office of Undergraduate Admissions of each University of California campus for information regarding admission and the specific requirements of its schools and colleges.

UC Berkeley’s Office of Undergraduate Admissions is located at 103 Sproul Hall. Contact them online at http://students.berkeley.edu/admissions/index.asp.

Credit for courses in the X300 and X400 series may be acceptable toward the B.A., B.S., teaching credential and postgraduate programs within the limitations prescribed by the various University of California colleges and schools. The University of California campuses use the same procedures to evaluate and determine the suitability of Extension credit courses to fulfill subject requirements as they do for credits gained at other regionally accredited institutions. If accepted, grade points for courses taken at UC Berkeley Extension are not counted toward fulfilling requirements for the degree (see exceptions below for UC Berkeley-matriculated students).

Applying credit for UC Berkeley Extension courses (X200–299 or XB200–299) toward a graduate degree, including concurrent enrollment courses, is subject to the approval of the respective campus Graduate Council. For details, see grad.berkeley.edu/admissions/admin_require.shtml#B. If you have already been admitted to the University of California—including students on leave—you must have prior written approval from the dean of your school, college or academic advisor in order to apply credit earned at UC Berkeley Extension toward graduate degree requirements. If you are admitted for a future term to the University of California campus, you should check with a college advisor prior to enrolling at UC Berkeley Extension to ensure your coursework will not create any unintended consequences.

Credit for X300–399 series courses is not acceptable toward a graduate degree.

Note to UC Berkeley–matriculated students: As a condition of enrollment in Berkeley-equivalent (XB and XBW) courses, if you are a UC Berkeley–matriculated undergraduate student (except those in dismissal status and those who have already completed a UC Berkeley undergraduate program) you will automatically have all concurrent enrollment and Fall Program for Freshmen coursework included with grade points on your Berkeley campus transcript as stipulated by UC Berkeley Academic Senate regulation A208. All other coursework will only appear on a student’s UC Berkeley Extension transcript.

Application of Credit Toward Degrees at Other Institutions
Other institutions may accept UC Berkeley Extension credit toward an undergraduate degree, but acceptance is always determined by the institution to which the student is applying. Policies regarding the acceptance of Extension credit toward graduate degrees vary widely among institutions and individual programs. Check with your institution and adviser before enrolling in an Extension course.

Application of Credit or Noncredit CEUs Toward Licensing and Other Requirements
When courses in this catalog have been approved by government agencies, professional associations and other authorities as meeting their educational criteria, a statement to this effect appears in the section of this catalog in which the courses are listed. In other cases, it is best to check with the appropriate organization before enrolling to ensure that the course is acceptable.

This Course Is Under Review for Credit Approval
This designation appears for new courses that are still undergoing review for academic credit approval at the time of catalog publication. For current information about the academic credit approval status of these courses, please see updated information on the Web.

Instructor Approval Pending
This designation appears before an instructor’s name if the campus department has not yet approved the instructor. Each time an instructor teaches a new course, approval needs to be obtained. Therefore, this designation may appear before the names of longtime, highly experienced instructors, as well as those new to UC Berkeley Extension.

Credit Courses
If a course is given for credit, the amount of credit offered and the UC Berkeley academic department in which credit may be granted are shown in parentheses after the course number. Credit is in semester units. For courses carrying academic or professional-level credit, the University’s standard formula for one unit of credit is 15 hours of instructional time, plus two hours of study time for each hour of instruction. Thus, a one-unit course is 15 hours of instruction and 30 hours of study outside of class, for a total of 45 hours of course effort. Some courses, such as studios or labs, will require more instructional time and less study time. The title of each credit course in the catalog is followed by a course number with a letter prefix and sometimes a letter suffix: for example, Analytic Geometry and Calculus, XB101A.

X Prefix
The course number prefix X indicates a course that originates at UC Berkeley Extension.

XB and XBW Prefixes
The course number prefix XB indicates an Extension course that is equivalent to the Berkeley campus course with the same content, title, number and credit value offered to UC Berkeley students. Note that UC Berkeley courses taken through concurrent enrollment are labeled XB. The course number prefix XBW indicates an XB course that is offered either fully or predominantly online. Special regulations and deadlines apply to XB and XBW courses. For further information, visit extension.berkeley.edu/info/enrollment.html#xb. For information about UC Berkeley prefixes and suffixes, visit academic-senate.berkeley.edu/committees/coci/handbook2#2-2-5.

Course Numbers
The course number indicates the level of instruction as detailed below:

X, XB1–99, XBW1–99: Lower-division credit courses at the level of the first two years of college

X, XB100–199, or XBW100–199: Upper-division credit courses at the level of the second two years of college
X, XB200–299, or XBW200–299: Graduate-level credit courses that are ordinarily open only to students who have completed at least 18 upper-division units basic to the subject matter of the course.

X300–399: Professional credit courses in education for teachers and school administrators.

X400–499: Professional, postgraduate credit courses in a variety of fields (other than education) such as the arts, behavioral and health sciences, biological and physical sciences, business and management, computer technology, information systems, engineering, landscape architecture, writing and publishing and so forth.

Letter Suffixes

The course number suffix, usually a letter A, B or C following the number, shows that the course is part of a series. The A portion is prerequisite to the B portion, and so on, unless the course description states otherwise or the student has the instructor's or academic department's permission to enroll.

Noncredit Courses

You may take any credit course on a not-for-credit basis. If you opt to change from credit to not-for-credit basis you must do this before the last class meeting, the final online enrollment period, or by the deadlines established for XB and XWB courses.

Continuing Education Units

Continuing education units (CEUs) are a nationally recognized means of recording noncredit study. They are accepted by many employers and relicensure agencies as evidence of a student's serious commitment to career advancement and the maintenance of professional competence. The letters ceu and a number following a course title identify a noncredit course in which you can earn continuing education units. One CEU is awarded for 10 instructional hours.

Courses Numbered 800–899

While not offering credit, these professional courses may be taken for a letter grade or for CEUs. Extension does not award both a grade and CEUs for the same course.

Unnumbered Courses

Unnumbered courses that carry no academic credit, grades or CEU values will not be recorded on your transcript. Unnumbered courses that carry CEU values will be recorded on your transcript. Most unnumbered noncredit courses are related to personal enrichment topics.

Grades

If you enroll for credit, you must meet the attendance, participation and course requirements set by the instructor. An official grade report will be mailed to you via the U.S. Mail. If you have any questions, you should write or call the Registrar, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000; (510) 642-4172; or email registrar@uxex.berkeley.edu.

We assume that if you enroll for credit you want a letter grade, but in some courses you may ask for a passed/not passed grade instead. If so, you must tell the instructor before the final meeting or by the grade-option change deadline if you are enrolled in a UC Berkeley–equivalent course. If you plan to apply that credit toward a degree or professional certificate, you should first make sure that a passed/not passed grade will be accepted; we cannot change it to a letter grade after recording it.

Letter Grades

A—Excellent
B—Good
C—Fair
D—Barely passing
F—Failure

A plus or minus may be recorded.

Passed/Not Passed Grades

P—Passed (equivalent to a C-minus or higher)
NP—Not passed (lower than C-minus)

Other Letter Designations

W—Withdrawn without academic penalty. Prior to the last class meeting, complete and submit a petition to withdraw, located at extension.berkeley.edu/info/petition_to_withdraw.pdf. Special drop and withdrawal deadlines apply to XB and XWB courses. Visit extension.berkeley.edu/info/concurrent.html#schedule for details.

NC—Not for credit. Signifies attendance but not completion of credit requirements.

I—Incomplete. If left unresolved, an Incomplete grade (I) in any course becomes part of your permanent academic record.

An “I” designation will be issued only if:
1. You present extenuating circumstances to your instructor(s) for not completing the course by the final class meeting date or by the online course end date.
2. You have completed 75 percent of the assignments (or projects) at least three weeks prior to the final class meeting or online course end date.
3. You have made prior written arrangements with the instructor(s) for not completing the course by the final class meeting date or by the online course end date.
4. You complete the petition form located at extension.berkeley.edu/info/petition_for_incomplete.pdf, as documentation of your written arrangement with the instructor(s) and give it to your instructor(s) by the final class meeting date or by the online course end date. If you are an online student, you can forward the completed petition form to your instructor(s) for online courses by either printing and faxing it to them or emailing it to them as an attachment.
5. Online Students Only: Please note that once enrollment expires or a grade of I or NC is recorded, you will no longer have access to your online classroom and the message board. You must coordinate with your instructor to copy or print out any information from the online classroom or the message board that you will need for reference as you continue with your coursework beyond your enrollment period. Call the Online department for more information at (510) 642-7343 or visit extension.berkeley.edu/info/grades.html.

Grade Points and Averages

The University's scale of grade points is A = 4, B = 3, C = 2, D = 1, F = 0. Grades with a plus sign (such as B+) carry 3/10 point more per unit; minus grades (such as A-) carry 3/10 point less. (An A+ counts as 4.0.) Grade point averages are computed on the basis of grades and number of units.

Final Grade Reviews and Appeals

All student grades except “Incomplete” are final when submitted by the instructor to UC Berkeley Extension at the end of the course. An instructor may request a change of grade when a computational or procedural error occurred in the original assignment of a grade, but a grade may not be changed or revised as a result of re-evaluation of student work, student re-examination or the submission of additional student work after the end of the course.

UC Berkeley Extension considers grades to be a matter of academic judgment on the part of the instructor. You may only challenge your grade and request a final grade review in certain circumstances. Grounds for requesting a grade review at the end of the course include:

1. Application of nonacademic criteria—such as consideration of race, politics, religion, gender—not directly reflective of performance related to course requirements;
2. Sexual harassment, or;
3. Clerical or procedural error in the calculation of the student’s final grade.

You should first consult your instructor if you have a question about your final grade. If the matter is not resolved at the instructor level, you should write to your program director within 30 days after receiving your final grade report to request a final grade review. Within your final grade request, please state which of the above three criteria comprises the grounds for the request. The program director conducts the grade review and informs you of his or her decision—including any remedies, if applicable—within 30 days of receiving the request for review.

If, and only if, the above procedures have failed to resolve the matter, you may appeal the program director's decision by submitting a letter addressed to the Dean's Office, UC Berkeley Extension, 1995 University Avenue, Suite 110, Berkeley, CA 94704-7000. This written request for appeal must be initiated within 30 days after receiving the decision from the program director. The dean's designee reviews the request for appeal, conducts an investigation and makes a decision—including any remedies, if applicable—within 30 days of receiving the request for appeal. The dean's designee makes the final decision for unresolved grade appeals for all students enrolled in UC Berkeley Extension courses and programs.

In extenuating circumstances, the above timelines may be extended.

Transcripts and Records

We maintain permanent academic records for UC Berkeley Extension students who have completed credit courses and noncredit courses numbered 800–899, and...
for students who sign the official final roster to record their noncredit continuing education unit (CEU) study.

Requesting a Transcript

Using the Web
You can order transcripts through TranscriptsPlus. Details are available at extension.berkeley.edu/info/grades.html#transcript.

Standard Request
Our Records Office provides transcripts for a fee of $15 per transcript. Your transcripts will be mailed via first class U.S.P.S. mail within 10–15 business days of receipt of payment.

Mail
Complete the online Transcript Request form, print it and mail it with payment to UC Berkeley Extension, Registrar’s Office – Department B, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000. Make checks payable to UC Regents. You may also pay with MasterCard, VISA, Discover, Diner’s Club or American Express. Please provide account number and expiration date.

Sign the Request
No request will be honored without the signature of the student whose record is being requested. Electronic signatures cannot be accepted.

In Person
To request a transcript for same-day pickup, go to the Student Administrative Services Office at 1995 University Ave., Ste. 110, Berkeley, CA, between 8:30 am and 3 pm, Monday–Friday. The cost is the price of each transcript requested plus a $15 surcharge per order.

Next Business Day Service
Your transcripts will be mailed via first class U.S.P.S. mail the next business day after receipt of payment. The cost is the price of each transcript requested plus a $15 surcharge per order.

Partial Transcripts
No partial transcripts are issued. UC Berkeley Extension does not issue in-progress transcripts. You may use either the Enrollment Confirmation or request a Statement of payment online at extension.berkeley.edu/cert/cert.pdf. Mail it as indicated and complete the Registration Form at extension.berkeley.edu/info/register.html. Find the professional certificate or specialized program of study, and click on the title to access the registration form.

Some certificates and specialized programs of study before you begin your third course. Registration Procedures
You should register for certificates and specialized programs of study before you begin your third course. To register for the certificate or program, please print out and complete the Registration Form at extension.berkeley.edu/cert/cert.pdf. Mail it as indicated and include the registration fee. You can also complete the form and submit payment online at extension.berkeley.edu/cert/register.html. Find the professional certificate or specialized program of study, and click on the title to access the registration form.

Substitutions, Waivers and Transfer Credit
You must contact the program director prior to beginning the professional certificate to request a course substitution, waiver or transfer credit. You must include detailed information about the professional certificate credit course requirement that you are requesting to substitute or waive, and detailed information about the credit course or transfer credit that you request to serve as a substitution. Requests for course substitutions, waivers and transfer credit must be approved in advance by the program director and department director. There may be a fee to waive or substitute courses.

As a general rule, substitutions, waivers and transfer credit are not permitted for courses in specialized programs of study. Contact the program director for further information.

Transfer Credit
1. For transfer credit, you must provide the program director with your official transcript from a regionally accredited university or college, and the course description for the course you wish to transfer.

2. Transfer credit will only be accepted if:
   • You completed all coursework to be transferred prior to beginning the professional certificate at UC Berkeley Extension.
   • You transfer coursework does not exceed one-fourth of the total number of semester units/hours required for the professional certificate.
   • You have obtained a “B” or better grade in all transfer coursework.
   • You completed all transfer coursework at a regionally accredited university or college.
   • You completed all transfer coursework within five years of beginning your professional certificate at UC Berkeley Extension.

3. Accepted transfer credit within the UC system will be calculated into your professional certificate GPA.

4. Accepted transfer credit from institutions outside of the UC system will not be calculated into your professional certificate GPA.

5. After you have started your professional certificate, no transfer credit will be allowed into the certificate, and you must complete the remainder of your requirements at UC Berkeley Extension.
Conversion of Semester and Quarter Units

Semester-unit equivalents in quarter units:

<table>
<thead>
<tr>
<th>Semester units</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter units</td>
<td>1½</td>
<td>3</td>
<td>4½</td>
<td>6</td>
</tr>
</tbody>
</table>

Online Professional Certificates and Specialized Programs of Study

Several professional certificates and specialized programs of study are offered online. For more information, visit extension.berkeley.edu, or call the department offering the program. Please note that veterans’ benefits do not apply to all online courses and curricula.

Obtaining the Certificate or Award of Completion

When you have satisfied your certificate or program course requirements, you should notify your academic department to receive the certificate or Award of Completion.

Transcript Notation

Completion of the professional certificate is noted on your permanent record (transcript).

Financial Assistance

You must be enrolled in a professional certificate to be certified for financial assistance. Financial assistance is not available to international students. Extension programs are not eligible for federally sponsored financial assistance (Title IV). Extension is not approved to complete loan deferments for federally sponsored financial assistance (Title IV) loans.

Select a Lender to Apply for Alternative Loans

You are free to borrow from any lender of your choosing. We encourage you to review the lender terms and conditions and carefully consider the benefits and repayment information before choosing a lender. Visit extension.berkeley.edu/info/certprog.html#finassist to find a list of lenders.

Loans will be certified for a maximum of the total amount of course fees and $150 per course for textbooks. In order for the loan to be certified, please provide your class list with your proposed classes. You must maintain satisfactory academic progress in your professional certificate in order to remain eligible for financial assistance.

Your student loan must be certified by Extension and approved by the bank at least four weeks prior to your first class meeting. You must pick up your check from our main office in Berkeley, Monday–Friday, 8:30 am–4 pm, except holidays. Payee’s valid photo ID is required for check release. Before the current term’s check can be released, you must demonstrate your intent to enroll by paying for at least one class during the current term.

Email finasst@unex.berkeley.edu for more information.

Satisfactory Academic Progress

For financial assistance purposes, satisfactory academic progress is defined as a minimum half-time course load of successfully completed coursework as defined by the professional certificate for a minimum of two terms per calendar year. You are required to maintain satisfactory academic progress for loan eligibility.

Veterans’ Educational Benefits

Currently, UC Berkeley Extension certifies Veterans Administration benefits only for students eligible for Vocational Rehabilitation (Chapter 13) under the Veterans Administration Benefits program. No other veterans’ benefits can be certified.

The Registrar’s Office will certify student enrollment for benefits purposes upon completion of the course(s). Please call (510) 642-4172 for course information.

If you are eligible to be reimbursed for online courses under the Defense Activity for Non-Traditional Education Support (DANTES), you should contact your military education officer.

Cal-Vet Fee Waiver

UC Berkeley Extension fees are not eligible for waiver under the benefits provided through Cal-Vet nor for veterans’ dependents under the California Education Code.

Verification of Enrollment

Submit loan deferment forms, insurance forms and other such documents to the Registrar’s Office, Attn: Records, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000. Verification of student record information for Employment and Background reviews will require a fee and a signed release form from you. Please include a transcript request form (located at extension.berkeley.edu/info/transcript.pdf) along with other necessary forms and allow 15 business days for processing. You can find fee information on the transcript request form.

UC Berkeley Extension is not approved to complete loan deferments for federally sponsored financial assistance (Title IV).

Full- and Half-Time Study

For financial assistance purposes, UC Berkeley Extension defines full- and half-time study as follows:

<table>
<thead>
<tr>
<th>Student category*</th>
<th>Course type</th>
<th>Full time</th>
<th>Half time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Program for Freshmen and Concurrent Enrollment</td>
<td>Courses numbered 1–199 (undergraduate-level courses)</td>
<td>12 semester units</td>
<td>8.0–11.9 semester units</td>
</tr>
<tr>
<td></td>
<td>Courses numbered 200–299 (graduate-level courses taken through concurrent enrollment)</td>
<td>12 semester units</td>
<td>8.0–11.9 semester units</td>
</tr>
<tr>
<td>Post-graduate certificate enrollees</td>
<td>Courses numbered 300–399 (professional courses in education)</td>
<td>8 semester units</td>
<td>8.0–7.9 semester units</td>
</tr>
<tr>
<td></td>
<td>Courses numbered 400–499 (professional courses in subjects other than education)</td>
<td>8 semester units</td>
<td>8.0–7.9 semester units</td>
</tr>
</tbody>
</table>

*Full- and half-time study is defined either by student category or by course.

Important: The definition of full-time study differs for international students. International students with a Form I-20 that was issued by UC Berkeley Extension must be enrolled full time and must file a study list every term. For international students in concurrent enrollment, the full-time load is dependent on the load requirements of the sponsoring department.

Concurrent Enrollment

UC Berkeley campus courses are open to the public on a space-available basis through Extension’s Concurrent Enrollment program. You should contact your academic adviser or articulation officer about transfer credit before enrolling to confirm that Concurrent Enrollment works for your goals. Note: This program is for fall and spring terms only. For Summer Sessions, please refer to summer.berkeley.edu.

To be approved for Concurrent Enrollment, you must meet all course prerequisites; transcripts or other documentation may be required before the application can be approved. The course instructor, department chair and, in some cases, the dean of the school or college must approve your concurrent enrollment application. You are considered an Extension student when you enrol through Concurrent Enrollment; thus, Extension maintains the transcript of record. Being approved for Concurrent Enrollment does not constitute admission to UC Berkeley as a registered student.

Note: Academic Senate regulation A208 requires that UC Berkeley–equivalent coursework and grade points undertaken through Extension by UC Berkeley–matriculated undergraduates be included on the Berkeley transcript.

Concurrent Enrollment fees and deadlines for application, add/drop, payment, refund request and change of grading option are listed on the Web at extension.berkeley.edu/info/concurrent.html. Late applications are not accepted. There are no withdrawals from Concurrent Enrollment.

For frequently asked questions about Concurrent Enrollment, please visit the website at extension.berkeley.edu/info/concurrent.html#faq, or contact us at concurrent@unex.berkeley.edu.

Policies and General Information

Holidays

Our administrative offices will be closed on:

<table>
<thead>
<tr>
<th>Holiday</th>
<th>Date</th>
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<tbody>
<tr>
<td>Winter Break</td>
<td>Dec. 26–30</td>
</tr>
<tr>
<td>Martin Luther King Jr.</td>
<td>Jan. 16</td>
</tr>
<tr>
<td>Presidents’ Day</td>
<td>Feb. 20</td>
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<tr>
<td>Cesar Chavez Day</td>
<td>March 30</td>
</tr>
<tr>
<td>Memorial Day</td>
<td>May 28</td>
</tr>
</tbody>
</table>

Please call (510) 643-2843 or email finasst@unex.berkeley.edu for information regarding full- and half-time study.
Mailing List and Address Change

When you enroll or inquire about Extension courses, your name is placed on our mailing list and you automatically receive a catalog each term for the next two years. UC Berkeley Extension never sells its mailing list, but if you would like to be removed from the list, you should clip the mailing label and send it to UC Berkeley Extension, CMS Dept., 1995 University Ave., Berkeley, CA 94704-7000.

If you have moved since you last enrolled with Extension, you should submit a Change of Permanent Student Information form, so that we may update your permanent student record. The form is available online at extension.berkeley.edu/info/change.pdf and at UC Berkeley Extension centers, or you may have it mailed to you by calling (510) 642-4111. Important: The completed form must include your signature.

Disabled Student Services

UC Berkeley Extension makes arrangements to ensure access to our courses to everyone, including individuals with limited mobility, impaired hearing or vision or learning disabilities.

If you have special needs, you should notify Extension at least three weeks before the beginning date of the course. Call (510) 643-5732; fax (510) 642-0374; write to Registrar, Attn.: Special Needs, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000; or email info@unex.berkeley.edu.

Most courses meet in barrier-free buildings. With at least three weeks’ advance notice we can make arrangements for access at other locations, as well as provide American Sign Language interpreters, note takers or other forms of assistance.

For more information this process, please refer to extension.berkeley.edu/info/geninfo.html#disabled.

Library Use

Extension students can use the libraries on the UC Berkeley campus. To apply for borrower’s privileges at the circulation department of the Doe Library, bring your enrollment confirmation and a valid California driver’s license. You are eligible for a reduced fee of $25 for six months, payable with a money order or check imprinted with your name and address (cash cannot be accepted).

Textbooks

Textbook information is available on the course pages of the UC Berkeley Extension website. You may purchase textbooks from any source. However, you should note the ISBN when making purchases, as publishers frequently update editions. UC Berkeley Extension’s preferred online bookstore is located at specialty-books.com/cgi-bin/ic/unex. Specialty Books uses Extension’s class and book lists to ensure you receive the correct books for your class. If the course is cancelled, Specialty Books will allow book(s) to be returned. Other bookstores may not be so accommodating.

Proctored Final Exam Fee

The fee for taking a proctored exam at the Golden Bear Center is $150. There is no proctoring fee to take a final exam at our facility for students enrolled in UC Berkeley Extension online courses.

Taxpayer Relief Act of 1997

You may be eligible for tax credits through the Taxpayer Relief Act of 1997. To determine eligibility, please contact the IRS, a tax consultant or an accountant. UC Berkeley reports information to the IRS on all eligible students enrolled for the tax year. Your Social Security number is required to report this information. For additional information, please refer to the UC Berkeley website at studentbilling.berkeley.edu/taxpayer.htm. To access your 1098-T online, please refer to www.1098t.com, or call 1-877-467-3821.

Classroom Rental

UC Berkeley Extension classrooms may be rented for meetings and training sessions on a space-available basis. Please inquire via email to: rentals@unex.berkeley.edu.

Nondiscrimination Policy

The University of California, in accordance with applicable federal and state law and the University's policies, does not discriminate on the basis of race, color, national origin, religion, sex (including sexual harassment), gender identity, pregnancy/childbirth and medical conditions related thereto, disability, age, medical condition (cancer-related), ancestry, marital status, citizenship, sexual orientation or status as a Vietnam-era veteran or special disabled veteran. This nondiscrimination policy covers student admission, access and treatment in University programs and activities. It also covers faculty (Senate and non-Senate) and staff in their employment. For additional information please refer to extension.berkeley.edu/info/policies.html#nondiscrimination.

Sexual Harassment

Sexual harassment is prohibited both by law and by University of California policy. Sexual harassment is a form of illegal sex discrimination. Unwelcome sexual advances, requests for sexual favors and other verbal or physical contact of a sexual nature constitute sexual harassment when: 1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s educational status or employment; 2) such conduct has the purpose or effect of unreasonably interfering with an individual’s educational or work performance or creating an intimidating, hostile or offensive educational or working environment; 3) submission to or rejection of such conduct is used as the basis for employment or academic decisions affecting the individual. For additional information, please refer to extension.berkeley.edu/info/policies.html#sexualharass.

Student Conduct

UC Berkeley Extension, as a unit of the University of California at Berkeley, is a continuing education community committed to maintaining an environment that encourages personal, professional and intellectual growth. It is a community with high standards and high expectations for those who choose to become a part of it. This behavior includes abiding by the established rules of conduct intended to foster behaviors that are consistent with a civil, educational setting. Members of the UC Berkeley Extension community are expected to comply with all laws, University policies and campus regulations, conducting themselves in ways that support a learning environment. In this context, instructors are guided by UC Berkeley Extension’s instructor conduct policies, and students by the UC Berkeley Extension Code of Student Conduct. The full code is available on the Web at extension.berkeley.edu/info/policies.html#conduct.

Academic Integrity

Academic misconduct is any action or attempted action that may result in creating an unfair academic advantage for yourself or other members of the academic community. This misconduct includes a wide variety of behaviors such as cheating, plagiarism, altering academic departments or transcripts, gaining access to materials before they are intended to be available and helping a friend to gain an unfair academic advantage.

For more information, visit extension.berkeley.edu/info/policies.html#integrity.

Safety and Security

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires that institutions of higher education make information regarding crime statistics and campus security available to students. Copies of this information may be obtained at the UC Berkeley Extension Registrar’s Office, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000, or by emailing registrar@unex.berkeley.edu. You can also access the report online at police.berkeley.edu/clery/csainfo.html or visit police.berkeley.edu for this and other safety information.

Classroom Recording

With the prior permission of the instructor and the consent of other students in attendance, you may make an audio recording of the lecture or class presentations only for the purposes of individual or group study with other students enrolled in the same class. You must obtain prior permission from the instructor each time you wish to make a recording. The instructor must assure that each student attending the class on that occasion is aware of the recording and has agreed to be recorded. Student-initiated video recording and student use of any other electronic means of capturing or transmitting class presentations or lectures for note-taking or for commercial purposes is not permitted in Extension classes. For further information visit extension.berkeley.edu/info/policies.html#recording.

Comments and Feedback

Please email customer service comments and feedback to registrar@unex.berkeley.edu.
Location Information

Berkeley: Golden Bear Center
1995 University Ave., Berkeley, CA 94704 (510) 642-4111
Office hours: Monday–Friday, 8:30 am–5 pm, except holidays (see p. 227).

Access to Classroom Facilities
For main offices, second-floor classrooms and enrollment/information desk: UC Berkeley Extension, Golden Bear Center, 1995 University Ave., see map below. If you are taking evening or weekend classes, you should use the far right elevator to access classrooms on the second floor.

Access for Students With Disabilities
See Disabled Student Services, p. 228, for information about the accessibility of UC Berkeley Extension courses.

Public Transportation
For questions about public transit, call BART information at (510) 465-2278 or AC Transit information at (510) 891-4700 or 511.

Within the East Bay: Several AC Transit routes serve downtown Berkeley from various points throughout the East Bay. The Downtown Berkeley BART station is one block west of campus.

From San Francisco and Southern Alameda County: Take a Richmond-bound BART train to the Downtown Berkeley station, located one block from campus at Center St. and Shattuck Avenue. Or take AC Transit route F from the San Francisco Transbay Terminal (First Street and Mission Street) to downtown Berkeley.

Public Transportation to the Campus
For questions about public transit, call BART information at (510) 465-2278 or AC Transit information at (510) 891-4700 or 511.

Within the East Bay: Several AC Transit routes serve the Berkeley campus from various points throughout the East Bay. The Downtown Berkeley BART station is one block west of campus.

From San Francisco and Southern Alameda County: Take a Richmond-bound BART train to the Downtown Berkeley station, located one block from campus at Center St. and Shattuck Avenue. Or take AC Transit route F from the San Francisco Transbay Terminal (First Street and Mission Street) to downtown Berkeley.

UC Berkeley Campus
Class meetings on the Berkeley campus normally begin 10 minutes after the time printed.

Auto Access
From San Francisco, Marin, Alameda, San Mateo and Western Contra Costa Counties: Take I-80 to the University Avenue exit. The building is on the left-hand side of the street between Bonita and Milvia.

From Central Contra Costa County: Take Hwy 24 to the Telegraph Avenue exit. Take Telegraph to Bancroft. Turn left on Bancroft. Go to Shattuck. Turn right on Shattuck. Go to University and turn left. The building is on the corner of University and Milvia.

Parking
Berkeley: Golden Bear Center: 1995 University Ave.: You have access to the parking garage at UC Berkeley Extension, 1995 University Ave., evenings until 30 minutes after the last class ends and on Saturdays when classes are in session. The garage is closed on Sundays. Street parking is also available.

BearPass, the student Class Pass or an emeriti ID card; it is free with a BearTransit Shuttle Pass, the faculty/staff Bear Pass, the student Class Pass or an emeriti ID card; is free with a BearTransit Shuttle Pass, the faculty/staff Bear Pass, the student Class Pass or an emeriti ID card; it is $1 without a pass.

Campus Night Safety and Services
The Night Safety Shuttle is a shuttle bus that travels short distances to and from the campus at night. For information, call (510) 642-WALK (642-9255) or visit pt.berkeley.edu/around/transit/routes.

A nighttime walk map, available on request, shows the most frequented and well-lit walk routes through campus. Plan to walk through campus using these routes. Walk accompanied by an escort or friend at all times. To request the nighttime walk map, call (510) 642-4111 or pick up a copy at the UC Berkeley Extension registration desk.

BearWALK (Night Safety Escort) Service is available on campus seven nights a week. To obtain an escort, stop one of the Community Service Officers, or call (510) 642-WALK (642-9255). Community Service Officers are uniformed, radio-equipped student employees of the UC Police Department. You may see them patrolling the night walk routes.

Parking on and near the Campus
Parking and Transportation (P&T) office: 2150 Kittredge Street (at Fulton), (510) 643-7701.

Office hours: Monday–Friday, 7:30 am–4 pm.

Parking information is current as of publication of this catalog; please call P&T for current information, or check the website at pt.berkeley.edu.
GENERAL INFORMATION

UC BERKELEY CAMPUS MAP
Campus parking map: For a parking map of campus, please visit http://pt.berkeley.edu/park. Central Campus lots are marked accordingly or with a “C.” Lots adjacent to campus are marked for “Faculty/Staff” or “Student” permit types.

Park in well-lit areas as close to the destination as possible. Call the BearWALK (Night Safety Escort) Service (510) 642-WALK (642-9255).

Parking hours for Extension students: Weekday evenings (Monday–Friday, 5 pm–2 am); weekends (Saturday, 7 am–midnight; Sunday, 1–10 pm). There is no daytime weekday parking on campus for Extension students except at the Student Union garage.

Martin Luther King Jr. Student Union Garage: Located under the Student Union on Bancroft Way (see map, p. 230). Hours are Monday–Saturday, 7 am–12 am; Sunday, 1–9 pm.

Night/weekend permit: You may purchase a Night/Weekend permit hang tag. Display of the Night/Weekend permit allows you to park in campus lots after 5 pm with the additional purchase of a daily ticket at the student affiliate rate. Purchase this permit at the East or West Gate prior to the class or stop by the parking office during the day.

Purchasing tickets: Buy a ticket from the machine at Cross Campus Road or at the North Gate entrance, or pay attendant at the West or East Gates. Ask attendant for directions to the parking area nearest the class. UC Berkeley Extension cannot reimburse you for parking fees or violations under any circumstances.

Parking restrictions: Parking is not allowed in the following areas: reserved spaces, lots posted with signs stating “Warning: Restricted to Central Campus Permit Holders,” colored curbs and unmarked areas. During special events, increased fees and/or special permits may be required or parking may be restricted or suspended.

Public parking: Public parking is available in municipal lots and garages around the campus. For maps and current information, please refer to http://pt.berkeley.edu/park.

Access for Students With Disabilities

For information about wheelchair-accessible campus buildings, call the Disabled Students Program, (510) 642-0518 or visit www.dsp.berkeley.edu. See p. 228 for information about the accessibility of UC Berkeley Extension courses. See also the information under Campus Night Safety on p. 229.

Belmont: Belmont Center
1301 Shoreway Rd., Suite 400
Belmont, CA 94002
(650) 594-9623

Office hours: Open when classes are in session and some additional weekday hours. Please call ahead if visiting outside of class times.

Access to Classroom Facilities

All classes are held on the fourth floor. Use the bank of elevators located off the main atrium.

Auto Access

From U.S. 101 southbound: Take the Ralston Avenue exit, turn left on Ralston and continue on Marine Parkway. Turn right on Shoreway Road.

From U.S. 101 northbound: Take the Redwood Shores Parkway exit, then merge onto Holly Street Turn left at Shoreway Road.

Parking

Parking is free at the Belmont Center.

Public Transportation

For CalTrain schedule information, call (800) 660-4287, visit www.caltrain.com, or write CalTrain, 1250 San Carlos Ave., San Carlos, CA 94070. For SamTrans information, call (800) 660-4287 or visit www.samtrans.com.

Access for Students With Disabilities

See Disabled Student Services, p. 228, for information about the accessibility of UC Berkeley Extension courses.
San Francisco: Downtown Center  
425 Market St., 8th Floor  
San Francisco, CA 94105  
(415) 284-1060

Office hours: Monday–Friday, 8 am–5 pm. The center is open later on weekday evenings and Saturdays when classes are in session, or when labs are open.

Computer Training Facility Open Lab hours are Monday–Thursday, 12–10 pm; closed Friday; open Saturday, 10 am–5 pm. The Open Lab is for Extension students enrolled in classes with an Open Lab component.

Access to Classroom Facilities
While the physical address is 425 Market Street, 8th Floor, the entrance is on Fremont Street. Please bring a valid photo ID to show at the security desk. Once inside the building, take the elevator on the far left (labeled Floors 3–15) and get off on the 8th floor. Room numbers are provided in course descriptions and on the schedules posted at the center.

Access for Students With Disabilities
See Disabled Student Services, p. 228, for information about the accessibility of UC Berkeley Extension courses.

Auto Access
From U.S. 101 northbound: Take U.S. 101 north to I-80 east. Take the Fourth Street exit. Freeway exits onto Bryant Street. Follow Bryant to Third Street. Make a left on Third. Go to Folsom Street. Make a right on Folsom. Go to Fremont Street. Make a right on Fremont. The parking garage is located on Fremont Street before reaching the entrance to the building.

From the North Bay: Take U.S. 101 to Van Ness Avenue. Travel south on Van Ness to Eddy Street. Turn left on Eddy. Go eight blocks to Fifth Street. Turn right on Fifth, cross Market Street and go to Folsom Street. Turn left on Folsom and go two blocks to Third Street. Turn left on Third. The center is on the right-hand side just past Mission Street. Drive a half block past the center and turn right on Stevenson to access Hearst Parking Center.

From the East Bay: Take I-80 west to the Fifth Street exit. Bear right on Fifth and follow it to Folsom Street. Turn right on Folsom and go two blocks to Third Street. Turn left on Third. The center is on the right-hand side just past Mission Street. Drive a half block past the center and turn right on Stevenson to access Hearst Parking Center.

Parking
There are public parking garages near the building. Discount parking (validation required) is available to Extension students Monday–Friday after 3 pm and Saturdays at the Hearst Parking Center. From Third Street at Mission, drive a half block north past the center and turn right on Stevenson to access Hearst Parking Center.

Public Transportation
Within San Francisco: Muni lines on Market Street include the 6-Parnassus, F-Market, 9-San Bruno, 21-Hayes, 66-Quintara and 71-Noriega. The Montgomery BART and Muni metro station is located on Market Street between Second and Third.

For schedule and connections, as well as information about Muni service to other classroom facilities, call Muni, (415) 701-2311 or 311 (in San Francisco).

San Francisco: Art and Design Center
95 Third St.  
San Francisco, CA 94103  
(415) 284-1081

Office hours: Monday–Friday, 8:30 am–5 pm. The center is open later on weekday evenings and on weekends, when classes are in session or when labs are open.

Computer Training Facility Open Lab hours are Monday–Thursday, 12 pm–10 pm; closed Friday; open Saturday–Sunday, 10 am–5 pm. The Open Lab is for Extension students enrolled in courses with an Open Lab component.

Access for Students With Disabilities
See Disabled Student Services, p. 228, for information about the accessibility of UC Berkeley Extension courses.

Auto Access
From U.S. 101 north: Take I-80 east to the Fourth Street exit. Freeway exits onto Bryant Street. Follow Bryant to Third Street, then turn left on Third. The center is on the right-hand side just past Mission Street. Drive a half block past the center and turn right on Stevenson to access Hearst Parking Center.

From the North Bay: Take U.S. 101 to Van Ness Avenue. Travel south on Van Ness to Eddy Street. Turn left on Eddy. Go eight blocks to Fifth Street. Turn right on Fifth, cross Market Street and go to Folsom Street. Turn left on Folsom and go two blocks to Third Street. Turn left on Third. The center is on the right-hand side just past Mission Street. Drive a half block past the center and turn right on Stevenson to access Hearst Parking Center.

Public Transportation
Within San Francisco: Muni lines on Market Street include the 6-Parnassus, F-Market, 9-San Bruno, 21-Hayes, 66-Quintara and 71-Noriega. The Montgomery BART and Muni metro station is located on Market Street between Second and Third.

For schedule and connections, as well as information about Muni service to other classroom facilities, call Muni, (415) 701-2311 or 311 (in San Francisco).

From the East Bay: Obtain information from BART at (510) 465-2278 or AC Transit at (510) 891-4700 or 511.

From the Peninsula: Obtain information from SamTrans, (800) 660-4287. From Marin County: Obtain information from Golden Gate Transit, (415) 455-2000 or 511.
A

Thomas Abate, M.A., explores the new realities of publishing in his blog, MiniMediaGuy. Abate is the former owner of a typesetting and publishing company. He has taught feature writing for UC Berkeley Extension and was a journalism instructor at College of the Redwoods.

Zuleica Acker, M.A., became a teacher trainer for the Cambridge Certificate in Teaching English to Speakers of Other Languages (CELTA) after teaching in Spain, Ecuador and Oxford. Most recently she has been teaching immigrants at Laney College, Oakland College and City College San Francisco.

Robert Adams Jr., M.S.C.S., M.S.E.E., is currently employed by Northrop Grumman in Baltimore, where he has worked since 1979 on numerous defense-related programs. Independently, he does Web programming and consulting and has taught for UC Berkeley Extension for more than 10 years. He has experience in various languages, including C, C++ and C#, Perl, PHP and JavaScript.

Shalini Agrawal, M.Arch., is the principal of a design consulting business in the Bay Area and has worked as an architect in New York and Chicago. She has taught design classes at Chicago’s Columbia College and cofounded a nonprofit organization that partners architects, artists and designers with community groups to implement changes in their environment.

Erick Ahrens, M.B.A., B.S., is senior business analyst at UCSF, leading development of business intelligence (BI) and data mart. He taught application service provider (ASP) design and development at UC Berkeley Extension, and business analysis and database at University of Phoenix. His research interest is Software as a Service (SaaS) for automated compliance with environmental regulations at Instiva.

Nidhi Ahuja, Ph.D., is an instructor at Merritt College where she teaches biological sciences. She completed her postdoctoral studies at UCSF. Her research focuses on bacterial pathogens.

Ali Aiyed, B.S., M.A., Ph.D., PMP, is an information technology manager with Bayer Corp. in Berkeley. Aiyed’s expertise is in large and complex IT infrastructure projects focusing on acquisition and divestiture projects and communications in the global environment and across cultures.

Mimi Albert, M.F.A., is a novelist, writer of short fiction and nonfiction, book reviewer and teacher of creative writing. She has published two novels, The Second Story Man (Fiction Collective, 1975) and Skirts (Baskerville Publishers, 1994). Both her novels and short fiction have won numerous honors. She has taught creative writing at UC Berkeley Extension for nearly 10 years.

Thomas Albert, Ph.D., is an advisory technical writer at Accelrys, a software company that provides informatic tools for research in chemistry and biology. He holds a UC Berkeley Extension certificate in computer information systems.

Woody Alexander, M.B.A., has administered sales, marketing, distribution and management responsibilities on regional, national and international levels. He has expertise in developing sales and marketing management plans; recruiting, hiring, training and directing employees; sales forecasting; budgeting; accounting and financial and compensation planning; order development; and implementing systems and procedures.

Shafinaz Ali, Ph.D., has taught introductory physics and conceptual physics at University of Delaware. Her research interests include the study of cosmic microwave background radiation and cryogenic radiation detectors.

Caryl Allen, M.S., PMP, is a project management consultant and trainer specializing in practical management processes for software projects. Allen has more than 20 years of experience with both the technical and management aspects of software projects. Her training and consulting assignments have covered topics that include software development methodologies and strategic and tactical planning.

Cheryl Alley, M.A., CAPM, has extensive experience as a business manager, which grounds her facilitation in real-life corporate experience. Her expertise includes consultant, coach and facilitator in leadership development, professional and personal growth, effectiveness, project management and transition.

Raja Almukahhal, Ph.D., has worked as a college professor, research analyst, a high school teacher, department chairman, a content writer and reviewer, author, planetarium director, business education consultant and an entrepreneur. He has published books on physics and astronomy and is now working on a book in applied calculus.

Ed Alter, B.A., is a trainer and founding partner at Speechskills, LLC. He spent 10 years as a company member of BATS Improv in San Francisco and four years as executive director of the organization. He founded SNAP! Labels and sold it to Adobe Systems in 2002. Alter has received national awards for public speaking and presentation.

Donna Altes, B.A., teaches language arts, ESL and life skills for adolescents. She has also taught the CLAD/CTEL course to teachers, consulted with districts on how to teach their students who are acquiring a second language and worked for an ELD publisher for more than 10 years. Altes has made learning relevant and inspiring for students and teachers for more than four decades.

Yvette Alva-Campbell, Ph.D., obtained her doctorate in ecology and evolutionary biology at UC Santa Cruz. Her research combines population genetics, ecology and geology in order to understand the underlying evolutionary mechanisms responsible for dispersal among marine fish that reside in the Tropical Eastern and Tropical Western Atlantic.

Rebecca Anderson, M.E.H.S., LEED AP, is an environmental specialist at UC Berkeley, specializing in air and water protection as well as sustainability for the built environment.

Mark Angel, B.S., M.B.A., PMP, has more than 30 years of experience in the IT, telecommunications, city government, aerospace, airline and banking sectors. He is a senior program manager in the telecommunications industry. His expertise includes project management, systems analysis and system implementation.

Miguel Angeles, M.D., is an instructor at Merritt College and Ohlone College, where he has taught anatomy and physiology. His background as a medical doctor and specialist in obstetrics and gynecology gives his classes a practical approach and use of clinical situations to understand the functioning of the human body.

Dominic Angerame, M.F.A., director of Canyon Cinema, is an independent filmmaker whose more than 35 films have won awards in numerous film festivals and been featured at the Whitney Biennial (2006). He has been nominated for a Rockefeller Foundation Grant, participated in an exhibition held at the Fondation Cartier in Paris and had a retrospective at the Havana Film Festival in 2006.
INSTRUCTOR BIOGRAPHIES

Richard P. Arzaga, B.S., CCIM, CFP®, is the founder and CEO of Cornerstone Wealth Management. In 2008, he was recognized by UC Berkeley as the Instructor of the Year for Personal Financial Planning. He is also one of only four advisors in the past 25 years to receive the Charles L. Herrington Distinguished Advisor Award, and ranks among Worth magazine’s Best 250 Wealth Advisors in the Nation. Arzaga’s education includes graduate studies in management at Northwestern University and a certificate in Personal Financial Planning from UC Berkeley Extension.

Elie Asmar, M.S.E., PMP, CKM, Extension Honored Instructor, is cofounder and president of Interpro.com, a project knowledge management corporation. He leads teams in developing and implementing strategic initiatives for global organizations in the semiconductor, information technology and biotechnology industries. Asmar has experience in executive and engineering management training.

Charles L. Athey III, M.S., is a computer scientist at Lawrence Livermore National Laboratory with more than 30 years of experience. He has developed systems and network software for UNIX and large-scale systems, managed system administration on terascale UNIX systems and currently handles computer security incidents, mitigation and analysis.

Kathleen Azevedo, R.N., MSN, has taught anatomy and physiology to students primarily interested in pursuing health careers. As a nurse for 30 years, she appreciates the importance of a solid introduction to human anatomy. Azevedo incorporates her experience as a clinical and school nurse in her teaching.

Mark Balabanis, Ph.D., is in private practice in Oakland, Calif., and specializes in cognitive behavioral therapy for adults with mood, anxiety, post-traumatic stress (PTSD) and substance-use disorders. He also worked at the Veterans Affairs medical centers in San Francisco and Pittsburgh, treating veterans with substance-use disorders and co-occurring PTSD.

Robin Ball, Ph.D., has taught neuroscience and physiology courses at UC Berkeley and UC Berkeley Extension. Her research focuses on understanding the cellular pathways that regulate synaptic growth and plasticity.

Rajeev Banerjee, M.S., Ph.D., is a tenured faculty member at Laney College, Oakland. Banerjee has more than 15 years of research experience in biological sciences and during his extended stay at UCLA was actively involved in training undergraduate students in molecular biology research techniques. His research interests are focused on exploring the replication and transcriptional regulation of positive strand RNA viruses, including the hepatitis C virus.

Rekha Bansal, J.D., is a senior counsel at Amgen. She has been practicing U.S. patent law for more than 15 years; her area of expertise is patent preparation and prosecution. She counsels life-sciences clients regarding intellectual property issues, particularly as they arise during the drug discovery and development process. Prior to earning her J.D., she worked as a synthetic organic chemist for eight years at Syntex and Roche.

Andrew Barnett, Ph.D., CPA, Extension Honored Instructor, is professor emeritus and former director of the School of Accountancy at San Diego State University. He was on the faculty of Virginia Tech and Arizona State University, and visiting professor at UC San Diego and the University of Adelaide (Australia). He was a member of the American Institute of CPAs’ (AICPA) Board of Examiners and Accounting and Review Services Committee.

Julie Barron, B.F.A., is a commercial interior designer with more than 25 years of experience in space planning, project management, construction administration and environmental consulting. A graduate of the California College of the Arts, she is the principal and owner of MJB Design Associates.

Nancy Batch, M.S., M.B.A., CPA, has been teaching courses in tax and accounting since 2003. She has worked in the accounting field for more than 15 years, including five years in public accounting and several years in controllerships.

Mark Baumeister, Ph.D., works as a biochemist in the medical diagnostics industry. Previously, he taught undergraduates at the University of Pennsylvania.

Lisa Bausell, M.B.A., PMP, has more than 20 years of IT project experience on business, infrastructure and disaster recovery projects. Her experience includes responsibility for both a corporate project management office and an IT vendor management office.

David Beasley, B.S., is cofounder of a Silicon Valley direct marketing agency, Beasley Direct Marketing, Inc., www.BeasleyDirect.com that has managed direct mail and online programs for hundreds of companies. The agency is a recipient of multiple marketing honors. Beasley speaks at Direct Marketing Association and business association chapter events, and other online industry events.

Laurie Beasley, B.S., is cofounder and president of Beasley Direct Marketing, Inc. www .BeasleyDirect.com, a Silicon Valley direct marketing agency that has managed online and direct mail programs for hundreds of companies. Beasley serves as president of the Direct Marketing Association of Northern California. She is an instructor in direct and interactive marketing at UC Santa Cruz Extension.

Jeff Belkora, Ph.D., is the director of decision services and an assistant professor of surgery in the Institute for Health Policy Studies at UCSF. He designs, implements and evaluates strategies to promote patient participation in medical decision making.

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Mark Gaydos, M.B.A., has more than 20 years of high-tech marketing experience, ranging from roles in large companies, such as Oracle and SAP, to four successful start-ups. Currently he is the vice president of marketing at Alert Food Safety, a leader in real-time food safety enforce- ment solutions. In 1997 Gaydos founded this course to teach students real-world marketing methods. He is the author of Marketing in the Time of Cholera (Mark Gaydos, 2009).

Kelly Gearhart, B.A., LEED AP, is a principal with Triple Green Building Group, LLC. Gearhart has consulted with hundreds of clients on commercial and residential green building strategies. She teaches LEED and green building courses, facilitates green building charrettes, administers LEED projects domestically and internationally, presents at conferences and serves on USGBC boards and councils.

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Samuel Gillette, Ph.D., has taught general and organic chemistry classes at UC Berkeley and UC San Diego. He has more than 10 years of experience working as a chemist in both biotech and biopharmaceuticals. His interest in chemistry has led him to discover new biologically active compounds in several therapeutic areas.

Allison Gilmore, B.A., is director of the Doctoral Program in Business at Emory University’s Goizueta Business School. She is a sought after instructor, trainer and keynote speaker in the field of spontaneous and intuitive leadership. Through her company, DuMore Improv, she has taught improv to a variety of people to become better communicators, team members and leaders.

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Concetta Gomez, Ph.D., has extensive teaching experience at the undergraduate level. Gomez was the director of Wisconsin Emerging Scholars program and was granted the Honored Instructor award there in 2008. She is a member of the Mathematical Association of America, the American Mathematical Society and the Society for the Advancement of Chicanos and Native Americans in Science.

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Julie Goren, J.D., is a 1987 graduate of Loyola Law School. She practiced law at various firms, including Gibson, Dunn & Crutcher and Buchalter, Nemer, Fields & Younger focusing on Chapter 11 reorganization and business litigation. She wrote and published Litigation by the Numbers, Fourth Edition (Lawdable Press, 2004) and coauthored and published Litigation by the Numbers® Substantive Companion, the two required textbooks for the Paralegal California Procedures online and classroom courses.

Kathryn A. Gorges, M.A., M.B.A., is a social marketing expert and strategic marketing consultant at Marketing Possibility. She creates integrated online marketing strategies for organizations, leveraging the vision and value at the heart of the business into quality customer relationships. Prior to establishing her consultancy, she led high-tech marketing and sales programs at IBM, Stratus, Tandem and Amdahl.

Douglas Greenberg, Ph.D., has taught environmental studies, urban studies, geography and geology at the University of San Francisco, San Francisco State University, UC Berkeley and UC Berkeley Extension. He has researched the environmental impacts of urban expansion and studies how human activities have affected natural landscapes, past and present.

Christopher Greene, B.A., is a well-regarded wine importer in the Bay Area and has been a guest lecturer in UC Berkeley Extension courses. He makes regular trips to Europe to select wines for his business. He is a certified sommelier through the Court of Master Sommeliers.

Roger Greene, Ph.D., has focused his interests on the area of self-report measures of personality for a number of years. He is currently working on a number of issues with the Minnesota Multiphasic Personality Inventory (MMPI-2), such as how to match a specific MMPI-2 to prototypic profiles, the nature of the critical items, the stability of specific profiles and whether MMPI-2 codetypes are taxonic or dimensional. He has written a number of books and articles on the MMPI and MMPI-2.

Bernard Griego, M.P.H., is the associate director for the Center of Public Health Practice and Field Supervisor for Health and Social Behavior, Environmental Health Sciences and Maternal and Child Health at UC Berkeley.

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Rachael Hagner, M.Arch., AIA, IIDA, has worked as an architect and interior designer for commercial, hospitality and residential clients. She is a licensed architect in California and Hawaii and is the program director for the Certificate Program in Interior Design and Interior Architecture at UC Berkeley Extension.

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Laird Harrison, B.A., has written about health and medicine for Time, People, Health, Reader’s Digest, CNN.com, MSNBC and many other national publications, for physicians as well as the general public. He is a former editor at WebMD. In addition to teaching adult education courses, he provides private consultation to writers.

Lucie Haskins, M.B.A., has been a freelance indexer since 2008, after a long career in the computer industry. She specializes in indexing computer, business and math books but finds great enjoyment in indexing the occasional travel book or memoir. She has written articles and lectured in various arenas on embedded indexing.

Doug Hawley, M.B.A., Extension Honored Instructor, is northwestern regional manager for ESCO Electronics Corp. He has managed operations, finance and marketing for companies including Ford Motor Co., Scott Paper, Wells Fargo and Emerson Electric and for the U.S. Navy. He serves on the Governor’s Task Force on Quality Government.

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Brice Hobbs, M.A., was a Fulbright scholar in 2003–2004. While on the program, he created a documentary film on Russian and American marine biologists on the island of Sakhalin.

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Catherine Hollis, Ph.D., teaches in UC Berkeley Extension’s Fall Program for Freshmen. She has published articles on Djuana Barnes, Jean Rhys and Virginia Woolf, as well as a monograph, Leslie Stephen as Mountaineer (Cecil Woolf, 2010).

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Debra Levi Holtz, M.S.J., is a freelance feature writer and communications consultant. She is the author of Of Unknown Origin: A Memoir (Council Oak, 2001).

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Michael Hsieh, Ph.D., developed and teaches the smart grid curriculum for UC Berkeley Extension. Previously, he worked at Sun Microsystems Inc. for almost 20 years, where he designed and delivered Sun workstations and servers for cloud computing, as well as UltraSPARC microprocessor chips. Prior to Sun, Hsieh was a lead engineer at Intel and Ford, designing multiple microcontroller chips for controlling the embedded systems, such as modern day smart grids and Internet of things.

Sandra Hsu, M.A., is a professor of biology at Skyline College in San Bruno, Calif. She has taught physiology, anatomy, microbiology, human biology and biology at Skyline College, University of San Francisco and University of Hawaii. She is the coauthor of Laboratory Manual for Human Biology (Benjamin Cummings/ Pearson Education, 2001).

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James A. Jacobs, M.A., P.G., C.H.G., is a hydrogeologist for Environmental Bio-Systems. He has more than 20 years of environmental remediation experience and is a Fulbright Scholar in environmental sciences and engineering. Since 2002, he has been an elected official at a wastewater treatment district and a community services district.

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Kayvon Jalali, Ph.D., has worked in the agrochemical, pharmaceutical and biotech areas of the industry. Jalali has been teaching online chemistry courses at UC Berkeley Extension since 1996.

Alka Jarvis, M.B.A., has authored five books in software quality. She is the chair of the technical group representing U.S. interests in ISO 9000 standards and is a certified lead auditor of quality systems with RAB-QSA. Jarvis is an adjunct professor at Santa Clara University and recipient of Silicon Valley’s Corporate Woman of the Year Award.
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Miriam Karel, M.S.L.S., draws on 10 years of experience designing practical strategies that address profound change in organizations. She is trained in The Natural Step, Integral Theory and systems thinking. She assists her clients in setting up green teams, developing sustainability programs, leadership trainings and acquiring green certification.

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Vesta Kirby, M.F.A., is an artist and consultant for color and materials. She has taught at the San Francisco Art Institute, the College of San Mateo and the Academy of Art University. She has designed corporate interior projects in San Francisco, New York, Paris, Bern and Tokyo. Her artwork includes acrylic, oil and watercolor painting; mixed media; and drawing.

Teddy Kisch, B.A., M.Sc., is a project manager at Energy Solutions, a consulting firm specializing in energy efficiency, renewables and water efficiency. His work experience includes emerging technologies assessments, energy efficiency program design and implementation and the development of codes and standards. Kisch has worked on a variety of energy and resource projects both in the United States and in the developing world, including Papua New Guinea, Sudan and Bangladesh.
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Mary Ann Koory, Ph.D., Extension Honored Instructor, takes inspiration from diverse cultural influences such as the musical Hamlet episode of Gilligan’s Island and Conan Doyle’s The Adventures of Sherlock Holmes. Her Mystery Fiction and Shakespeare courses have won the Helen Williams Award for Excellence in Collegiate Independent Study.

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Emmanuelle Namont Kouznetsov, M.F.A., is an artist, commercial photographer and curator. After a career in finance, Kouznetsov turned to photography. Her photography and sculpture work has been shown throughout the United States.

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Cary Lai, Ph.D., is a senior scientist at the biotech company LakePharma, where he investigates new technology to optimize protein production from cell culture. Formerly, he worked in the molecular biology department at Genentech.

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Michael Lamb, M.L.A., is a registered landscape architect with more than 20 years of experience in both the private and public sectors. He is the historic landscape architect with the Presidio Trust, working to identify, retain and preserve the cultural landscape of the Presidio of San Francisco, a National Historic Landmark District.

Maria Landoni works for a multidisciplinary West Coast firm as an urban and landscape designer, with a diverse range of experience in the areas of urban design, transit-oriented and streetscape design, general plans and specific plans.

Todd Landreneau, Ph.D., is employed as a practice specialist in Kaiser Foundation Health Plan and Hospitals–Regional Offices. His practice areas include project management, business systems analysis, risk analysis and compliance coordination. In the past 10 years, he has performed strategic assessments that are vital to internal health care operations.

Pamela Lanza, M.F.A., has taught at New Mexico State University in Las Cruces, the San Francisco School of Art, ASUC Berkeley Art Studio and San Francisco Art Institute Extension. Her work has been exhibited in galleries and universities nationwide.

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Anna Lee, M.B.A., is a former CPA and CFO with extensive experience in real estate investment and financial consulting. She provides expert advice to her clients such as commercial lenders, real estate attorneys and developers in the areas of discounted cash flows, budgeting, project costing, valuation, risk and return and financial management.

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Danny F. Lee, M.B.A., B.S., retired in 2004 from an executive vice president position at America California Bank. Prior to retirement, he had more than 40 years of working experience in the accounting, banking and finance arena. He has taught for UC Berkeley Extension for more than 15 years. He took a sabbatical in order to teach business courses, in English, at the International Business School of Beijing Language and Cultural University for three semesters before returning in 2009 to teach Introduction to Financial Accounting for Extension.

David Lee, B.S., CSW, is a certified sommelier and owner of WineSkool, a wine education company focusing on wine appreciation and restaurant consulting. He was a faculty member of the California Culinary Academy in San Francisco instructing both back-of-house culinary students and front-of-house hospitality students in wine-region knowledge in a restaurant setting. He also has practical experience working on wine production teams for commercial wineries.

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INSTRUCTOR BIOGRAPHIES

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Ken Sansone, B.S., CCRA, has more than 30 years of accumulated research experience, including nearly 20 years in various roles directly related to domestic and international clinical development and approximately 12 years in preclinical and nonclinical development. After working in the pharmaceutical, medical device and biopharma worlds, for the past 5 years he has been consulting in various areas of the clinical research.

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Aliye Sarmasik, Ph.D., is a scientist in oncology, specializing in detection and characterization of cancer stem cells. She has extensive experience in stem cells, cell signaling, regulation of gene expression and genetic manipulations.

Derek Satre, Ph.D., is a clinical psychologist in the Department of Psychiatry at UCSF and is also affiliated with the Kaiser Permanente Division of Research. His areas of expertise include chemical dependency, treatment of affective disorders and cognitive behavioral psychotherapy.

David Schlocker, M.B.A., SPHR, GPHR, has more than 25 years of progressive human resources experience, specializing in global human resources, strategic planning, organizational development and executive coaching. He is vice president of human resources for CSE Insurance Group.


James Schweppe, Ph.D., is an adjunct chemistry instructor at Cañada College and Cal State University, East Bay, and teaches a range of courses from introductory chemistry to graduate-level biochemistry. Schweppe was previously a visiting professor of chemistry at Marlboro College in Vermont and a postdoctoral scholar at UC Santa Cruz.

Arthur Kane Scott, M.A., is an author who teaches at several California colleges and universities. He brings a global perspective to his history classes, which cover a wide range of cultures: Asian, Russian, U.S., Western and Islamic. His approach emphasizes the psychological, cultural and artistic expressions of particular peoples and eras.

Tony Scuder, Psy.D., D.Min., CACC, CCS, is a clinical psychologist for San Quentin State Prison and has taught at the college level for many years. He also holds a doctoral degree in ministry with specialization in marriage and family therapy and is a hachidan (eighth-degree black belt) in judo.

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**Daniel N. Weiner**, Ph.D., is a clinical partner at the San Francisco Bay Area Center for Cognitive Therapy. He has served as a clinical assistant professor in the Department of Psychiatry and Human Behavior at Brown University School of Medicine. He is the author of several publications and book chapters.

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David Zhu, B.S., PMP, CISA, CBAP, is a senior program manager at Yahoo! Inc. As a career-long business consultant, Zhu has provided business analysis services and delivered solutions to top organizations including Intel, Disney, Sony, Medtronics and Volkswagen.

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What Students Say About UC Berkeley Extension

Helping people is really what Mike Hadley wants out of his career. After spending 20 successful years in business, Hadley is following his true passion: to become an orthopedic surgeon. The Purdue University graduate—who also holds a master’s degree in business from the University of California, Berkeley—recounts the steps along this new path: selling his restaurant-management firm, registering for the program, volunteering at hospitals, shadowing an orthopedic surgeon and prepping for the MCAT. Thanks to program director Dr. Patrick Brown, Hadley is confident in his decision to pursue the Post-Baccalaureate Health Professions Program. “Dr. Brown laid out the path,” he says. “And when I saw that there was structure to it, that I could put a time line to it, I dived right in.”

A former senior account executive at Ogilvy Public Relations, Maayan McDonald recognizes that loving your job doesn’t necessarily mean having a fulfilling career—not when her real passion is for animals. “The human-animal bond is something I’d like to be around everyday and for the rest of my life,” she says.

A graduate of the University of Arizona, McDonald is using the Post-Baccalaureate Health Professions Program to bridge the gap between her journalism degree and veterinary school. The program is helping her prepare for the GRE and apply to the University of California, Davis. “I liked the fact that I could have advising when I wanted,” McDonald says. “Dr. Alexandra Tan is willing to do additional research, and she has the inside track to what’s going on at every single school.”

Jon Zaid is on the path to become an emergency room (ER) doctor—after an initial career false start. A graduate of George Washington University with a degree in biology, Zaid recounts his time at Fox Chase Cancer Center in Philadelphia as a lab technician, which he now knows is not his calling: “I was so isolated. I would see these cells every day, and in the end, I was talking to them,” he says with a laugh.

A certified emergency medical technician, Zaid is drawn to the human connection in emergency medicine, which is driving his goal to attend medical school. The Post-Baccalaureate Health Professionals Program is paving the way for him, with guidance from advisers Dr. Alexandra Tan and Dr. Patrick Brown. “Their main focus is to get you into whatever school you want,” Zaid says. “That’s really special about Extension.”
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ENROLL BY MAIL  Mail this entire page to: Dept. B, UC Berkeley Extension,
                  1995 University Ave., Suite 110, Berkeley, CA 94704-7000

PLEASE PRINT  For my permanent student record, the address below is my □ home □ business.
□ This is an updated address.  □ I am enrolling in an online course.

□ Mr.  □ Ms.
Name

Company/agency
(For business address only)

Address

Daytime phone*

Fax

Email*

Title/occupation

Social Security number†

Courses:  The course EDP number is essential for processing your enrollment. You’ll find it at the end of the course description. You may copy this form as needed.

Note:  Students with special needs, please call (510) 643-5732 or email info@unex.berkeley.edu at least three weeks prior to your class.

Important:  Additional academic policies and deadlines apply to XB and XBW courses. See p. 224.

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<th>Course Title and Number</th>
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Total Payment $  

For refund policy, see p. 223.

□ Check enclosed (Make check payable to UC Regents.)
□ Purchase order attached (See p. 222.)
□ Visa  □ MasterCard  □ American Express  □ Diners Club

Credit card holder's billing information if different from student information above.

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† UC Berkeley Extension will use the contact information you provide to notify you of changes in your class schedule and other Extension information. If you are enrolling in online courses, such courses require your participation in chat rooms and message boards specific to the course. The email address and/or online identity you use when entering chat rooms or posting on message boards will be visible to all other participants. By enrolling in an Extension online course, you authorize the disclosure of your email address and/or online identity for this purpose.

† The University is required by federal law to report your Social Security number and other pertinent information to the Internal Revenue Service pursuant to the reporting requirements imposed by the Taxpayer Relief Act of 1997. Social Security number disclosure is mandatory. This notification is provided to you as required by the Federal Privacy Act of 1974.

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