Welcome From the Dean

Join Our Community

UC Berkeley Extension free information sessions and open houses offer an easy way for you to learn about the benefits of continuing education. These lively events feature instructors, students and staff members who share their Extension experiences with you. If you can't make it in person, join an online information session to learn more about our certificates and programs. See a list of all upcoming sessions on the inside front cover to the left of this page or visit extension.berkeley.edu/infosessions.

Another way to find out more about our learning community is to attend one of our free public events. Throughout the year, Extension features lectures and discussions on a variety of topics. For example, as the Affordable Care Act moves from politics to policy, you can uncover the facts at an informative evening event (see p. 47). View the complete list of free events on p. 6, and look for expanded event descriptions throughout the catalog. I will be giving a public talk on Cal Day, April 12, at UC Berkeley. There, I'll be discussing the opportunities and challenges of online education at Berkeley in the 21st century. I'd love to see you there, both at my talk and at the many activities that enliven the campus. Read more at calday.berkeley.edu.

Our commitment to supporting intellectually curious adults reaches beyond our information sessions and events. At UC Berkeley Extension, we are always looking for ways to expand the resources available to students and alumni. Our new Student Affairs and Career Services office works in conjunction with the academic departments to help current and prospective students identify the paths for their professional goals, prepare for potential job searches and connect with Extension alumni. We're holding a free event on Jan. 9 to help introduce these new resources to our students. Find out more on p. 6.

Our greatest avenue for public outreach is, of course, our website. We've had the opportunity to talk to many of you as you've navigated the redesigned site, created your new student accounts and enrolled in courses. It’s been a pleasure receiving your feedback and finding out more about why Extension is your choice for personal and professional development.

Diana Wu, Ed.D.
Dean, UC Berkeley Extension
Thanks to the Certificate Program in Clinical Research Conduct and Management, \textbf{Marcella Fassò} is easily transitioning from a profession in immunology research to a new position in clinical development and research. Citing the outsourcing of most of her former employer’s clinical research, Fassò recalls not having the opportunity to gain exposure to the field while at that company. She is pleased to now have that theoretical and practical knowledge, necessary for her new career path, through the certificate’s curriculum.

A graduate of the certificate (with distinction), Fassò is now a clinical scientist at Genentech. She credits her certificate with making the crucial difference in securing an interview and ultimately getting the position. Fassò says, “I’m so thankful for this program.”

She is also quick to laud her instructors—in particular, lead instructor Marianna Lenoci. “Marianna was very encouraging and supportive,” Fassò says. “She was a wonderful resource, especially when it came to discussing potential career paths and facilitating connections with professionals in the field.”
ENROLL TODAY!

ONLINE extension.berkeley.edu
BY PHONE (510) 642-4111 with your credit card
BY MAIL Fill out the enrollment form on the inside back cover of this catalog.

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 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

#### 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 Financial Planning and Analysis
- Certificate Program in Leadership and Management
- Certificate Program in Marketing
- Certificate Program in Paralegal Studies

#### Construction and Environmental Management
- Certificate Program in Construction Management
- Certificate Program in HVAC
- Professional Program in Leadership in Sustainability and Environmental Management
- Professional Program in Responsible Global Change Management
- Professional Sequence in Facilities Management
- Professional Series in Smart Grid Technology

#### Education
- Certificate Program in Teaching Chinese as a Heritage/Foreign Language
- Certificate Program in Teaching English as a Second Language
- CLAD Through CTEL
- Designated Subjects Adult Education Teaching Credential
- Designated Subjects Career Technical Education Teaching Credential
- Professional Program in Adult Education
- Professional Program in Career Technical Education
- Professional Program in College Admission Counseling
- Professional Program in English Learner Pedagogy
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.

### Sciences, Mathematics and Biotechnology
- Certificate Program in Clinical Research Conduct and Management
- Clinical Laboratory Scientist Preparatory Program
- Post-Baccalaureate Health Professions Program
- Professional Advanced Biosciences Program
- Professional Program in Life Sciences Business
- Professional Program in Project Management in the Life Science Industries
- Professional Program in Quality and Compliance for Biotechnology
- Professional Program in Regulatory Affairs

### Technology and Information Management
- Certificate Program in Integrated Circuit Design and Techniques
- Microsoft Access Series
- Post-Baccalaureate Certificate in Information Systems and Management (ISM)
- Professional Program in Quantitative Analysis
- Professional Sequence in Business Intelligence and SAS Analytics Software
- Professional Program in Data Administration and Management
- Professional Series in Virtual and Cloud Computing

### Writing, Editing and Technical Communication
- Post-Baccalaureate Certificate Program in Writing
- Professional Sequence in Editing
- Professional Sequence in Technical Communication
- Specialized Program in Professional Writing
FREE EVENTS at Extension

You’re invited to attend any or all of our spring events 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.

UNEX 1212
Get an orientation to the benefits of continuing education, and gain an understanding of the specific opportunities that exist at UC Berkeley Extension. Learn to think strategically about your academic experience, and get expert advice from a career services specialist, including the importance of joining professional societies, tips on how best to use social media, and best practices for a successful job search. You also hear from Extension students about their specific experiences, how they navigated the process and created their own career paths. An expert in social media joins the discussion to explain the best way to leverage your online profile.

Meaghan DeRespini, M.A.
1 meeting
Thursday, 6–8 pm
Jan. 9
Berkeley: Golden Bear Center • FREE

LASER: Leonardo Art Science Evening Rendezvous
UNEX 1089
The LASER series, chaired by cultural historian Piero Scaruffi, is a local forum for art and science projects that are creative, original and interdisciplinary in nature. Each evening program features four artists, scientists, philosophers, historians, inventors and scholars who are working on projects that expand existing paradigms. The LASER series is produced in collaboration with the Minerva Foundation.

Tuesday and Wednesday, 6:30–8:30 pm
Feb. 11 and April 2
Berkeley Campus: 240 Mulford Hall • FREE
See p. 133 for complete description.

Health Care Reform Update: Progress and Challenges
UNEX 1210
The Affordable Care Act (ACA) federal health reform law was passed years ago. What has the ACA accomplished, what progress has been made and what health reform challenges lay ahead? This public lecture provides an overview of what every health professional and consumer needs to know.

Friday, 4:30–6 pm
April 4
Berkeley: Golden Bear Center • FREE
See p. 47 for complete description.

PRESIDENCY PANEL
Obama in the World: The President and Foreign Policy
UNEX 1211
Examine the ongoing presidency and all of its facets in this lively panel discussion, geared towards current policies and global issues.

Monday, 7:30–9 pm
April 7
Berkeley Campus: Wheeler Hall • FREE
See p. 134 for complete description.

Cal Day 2014
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 12, 9 am–4 pm
Berkeley Campus • FREE

Opportunities and Challenges of Online Education in the 21st Century
Learn about the latest on the expanding role of online higher education for students at UC Berkeley and across the nation. Hear about what we are doing and how we are doing it here at Berkeley and see a demonstration of the some of newest online education tools.

Diana Wu, Ed.D., director of Berkeley Resource Center for Online Education (BRCOE) and dean of UC Berkeley Extension
Saturday, April 12
Event to be scheduled; see website for specific time and location
Berkeley Campus • FREE

17th-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.

Meeting to be scheduled; see website for date, time and location
San Francisco • FREE

Meeting to be scheduled; see website for date, time and location
Oakland • FREE
**LIBRARY EXHIBITS**

**The Rise of Islam Through Its Golden Age**  
Bernice Layne Brown Gallery, Doe Library  
Through Feb. 28  
lib.berkeley.edu

This exhibit displays items from the University Library collections to illustrate segments of Islamic history. One focus will be Baghdad, which became the center of power during the Islamic Golden Age and the intellectual center for literature, art, architecture, science, mathematics, philosophy, medicine and education.

**Comics, Cartoons and Funny Papers: The Rube Goldberg, Phil Frank and Gus Arriola Archives**  
Bancroft Library Gallery  
Through Feb. 28  
lib.berkeley.edu

Along with work by Rube Goldberg, Phil Frank and Gus Arriola, this exhibit includes comics by underground artist Dan O’Neill, creator of Odd Bodkins, and Lou Grant, editorial cartoonist for the *Oakland Tribune* from 1954 to 1986. The display highlights the topical and the timeless nature of the cartoon, one of the oldest known forms of visual art.

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*LUNCH POEMS*  
Morrison Library  
First Thursday of the month, 12:10–1 pm  
lunchpoems.berkeley.edu

Feb. 6, 2014  
**Linda Gregerson** teaches at the University of Michigan and has authored five books of poetry and two of literary criticism. Rosanna Warren has described her work as “tender and harrowing … severely precise and floodlit with compassion.”

March 6, 2014  
**Leonore Wilson** is Poet Laureate of Napa Valley and author of *Western Solstice*. She lives on her family’s old cattle ranch in Napa Valley and has taught creative writing at universities and colleges in the San Francisco Bay Area.

April 3, 2014  
Poet, translator and essayist **Rowan Ricardo Phillips** teaches at Stony Brook University. He was honored with the 2013 PEN America Award; the judges described his work as “sweetly Whitmanesque or gravely meditative or lushly lyrical. He is a poet capable of voices—plural.”

May 1, 2014  
One of the year’s liveliest events, this reading features student winners of selected prizes. Lunch Poems volunteers and representatives from student publications.

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All events are free and open to the public. To learn about more prose and poetry readings at the Library, write to email@library.berkeley.edu.
When helping companies in the restaurant and food and beverage industries create their brands, Tim Haggerty finds the greatest enjoyment in creating visual branding concepts, from logos to physical spaces. Despite a natural talent for visualization, Haggerty knows that with structured, formalized training, he can better serve his clients. Since enrolling in his first UC Berkeley Extension course, Haggerty is gaining the skills and confidence to do just that.

“When I signed up for Color Theory and Application for Interiors, I was immediately hooked,” he says. “I loved the class and the instructor. I decided to take more classes and kept piling them on. Now, I’m in the Certificate Program in Interior Design and Interior Architecture full-time. I’ve been able to take what I learned in each class and implement in my job the next day.”

While many of his fellow students are transitioning into interior design or interior architecture careers, Haggerty views the coursework as an enhancement to his marketing career. “I’m finding I enjoy the interiors work a lot, and I’m getting more work for that than the branding,” he explains. “I really enjoy working in the physical space and starting with an empty box or vanilla shell and customizing it for the clients.”
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. 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.

NEW COURSES
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**Free Information Sessions**

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 Interior Design and Interior Architecture**
- **Sec. 002**
  - San Francisco: Art and Design Center
  - Thursday, Jan. 27, 6:30–8 pm
- **Sec. 003**
  - San Francisco: Art and Design Center
  - Tuesday, May 13, 6:30–8 pm

**Certificate Program in Landscape Architecture and Professional Sequence in Cultural Landscape Preservation and Management**
- **Sec. 002**
  - San Francisco: Art and Design Center
  - Tuesday, Jan. 14, 6:30–8 pm
- **Sec. 003**
  - San Francisco: Art and Design Center
  - Thursday, May 15, 6:30–8 pm

**Post-Baccalaureate Certificate in Visual Arts**
- **Sec. 001**
  - San Francisco: Art and Design Center
  - Wednesday, Jan. 29, 6:30–8 pm

**Professional Sequence in Graphic Design**
- **Sec. 002**
  - San Francisco: Art and Design Center
  - Monday, Jan. 13, 6:30–8 pm

**Specialized Programs in Drawing and in Painting**
- **Sec. 001**
  - San Francisco: Art and Design Center
  - Wednesday, Jan. 22, 6:30–8 pm

**Specialized Program in Digital Photography**
- **Sec. 001**
  - San Francisco: Art and Design Center
  - Monday, Jan. 27, 6:30–8 pm

**Visual Arts**

**COURSE INFORMATION**
(415) 284-1041
visualarts@unex.berkeley.edu
extension.berkeley.edu/art

**ONLINE COURSE INFORMATION**
(510) 643-4957
extension.berkeley.edu/online

**FREE INFORMATION SESSION**

**Post-Baccalaureate Certificate in Visual Arts**

**UNEX 1215**
Learn more about this rigorous post-baccalaureate curriculum designed to take your existing art practice to the next level and help you prepare for application to M.F.A. programs. For certificate details, see p. 15 or visit extension.berkeley.edu/cert/visualarts.html.

**Sec. 001**
1 meeting
Wednesday, 6:30–8 pm
Jan. 29
San Francisco: Art and Design Center • FREE

**FREE INFORMATION SESSION**

**Specialized Program in Digital Photography**

**UNEX 1216**
This foundation-level program explores the essentials of digital imaging and helps develop your understanding of the aesthetics and pictorial strategies of photography. Come to the information session to learn more about the program, meet instructors and ask questions. For program details, see p. 14 or visit extension.berkeley.edu/spos/digitalphoto.html.

**Sec. 001**
1 meeting
Monday, 6:30–8 pm
Jan. 27
San Francisco: Art and Design Center • FREE

**FREE INFORMATION SESSION**

**Specialized Programs in Drawing and in Painting**

**UNEX 1217**
These foundation-level programs introduce you to the essential methods and techniques of painting and drawing, and help you develop your understanding of line, form, color and composition. Come to the information session to learn more about the programs, meet instructors and ask questions. For program details, see pp. 11 and 13 or visit extension.berkeley.edu/spos/drawing.html and extension.berkeley.edu/spos/painting.html.

**Sec. 001**
1 meeting
Wednesday, 6:30–8 pm
Jan. 22
San Francisco: Art and Design Center • FREE

**Art History and Museum Studies**

**NEW THIS TERM**

**Art and Technology; Considering Histories and Theories**

**HISTART X445.2 • 2 semester units in History of Art**
An elective in the Post-Baccalaureate Certificate in Visual Arts

Explore the contemporary history of art and technology, focusing on its evolution from a tool for the realization of static art forms (perspective, camera obscura and photography) to a primary medium of expression and social engagement in the 21st century through digital media, virtual reality, participatory art forms and the Web. Examine the artistic contributions to technological developments throughout history—particularly since the 1960s—to enrich your understanding of how contemporary artists use technologies as a medium, and the social and political implications inherent in their uses.

**Sec. 001**
Terri Cohn, M.A.
10 meetings
Wednesdays, 6:30–9:30 pm
April 2–May 28 (also field trip scheduled for Saturday, May 10, 10 am–1 pm)
San Francisco: Art and Design Center • $455

**History of Photography: A Dynamic Study and Practice**

**ARCH 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. Classroom discussion topics include concepts of portraiture, depictions of nature, relationship to time, creation of narrative, conceptual practice and social reporting.

**Sec. 001**
Emmanuelle Namont Kouznetsov, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–March 12
San Francisco: Art and Design Center • $455
Contemporary Art: History and Theory

HISTART X442 • 2 semester units in History of Art
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.

Sec. 001
Terri Cohn, M.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 22–March 26 (also field trip scheduled for Saturday, Feb. 15, 10 am–1 pm; no meeting on Feb. 5)
San Francisco: Art and Design Center • $455

Film History: 1880s to 1940s

FILM X401.1 • 2 semester units in Film and Media
An elective in the Post-Baccalaureate Certificate in Visual Arts

Get an overview of the early history of film, and learn to analyze movies from a variety of political, social, technological and aesthetic factors. Through readings, online discussions threads and watching an array of movies, you gain an understanding of how this art form grew from invention to innovation. Watch and critique classics such as Birth of a Nation, Greed and Un Chien Andalou. Discover little-known pioneering films including Man With a Movie Camera, Notes on the Port of St. Francis and Ghosts Before Breakfast.

Sec. 001
Dominic Angerame, M.F.A.
Enroll anytime
Online • $575

Drawing

Drawing Fundamentals
ART X405 • 2 semester units in Art Practice
A requirement in the Specialized Program in Drawing
Develop observational abilities and rendering skills in this introduction to the fine art of drawing. Learn 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. 003
Sheila Ghidini, M.F.A.
12 meetings
Thursdays, 6:30–9:30 pm
Feb. 13–May 1
San Francisco: Art and Design Center • $455

Drawing Intermediate
ART X406 • 2 semester units in Art Practice
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. You start by drawing almost exclusively from 3-D objects to hone representational skills and challenge your creativity. 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 ART X405 or consent of instructor

Sec. 001
Christian Fagerlund, M.F.A.
12 meetings
Tuesdays, 6:30–9:30 pm
Feb. 23–April 29
San Francisco: Art and Design Center • $455

Perspective Drawing for Artists
ART X406.6 • 1 semester unit in Art Practice
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing

Appropriate for artists at all levels, this course teaches you to use perspective to depict spatial and volumetric depth in your paintings and drawings. Beginning with simple line sketches and building skills in more complex tonal drawings, you learn to create a sense of the third dimension with the figure, still life and landscape as your subject. You examine one- and two-point perspective methods and learn to add reality with shades and shadows from a chosen light source. In the last part of the course, you apply the skills you have learned to an individual project.

Prerequisite: Drawing Fundamentals ART X405 or consent of instructor

Sec. 002
Christian Fagerlund, M.F.A.
5 meetings
Sundays, 10 am–1 pm
Feb. 23–March 23
San Francisco: Art and Design Center • $325
COURSES AVAILABLE THROUGHOUT THE YEAR
UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.
Painting Workshop
ART X470 • 2 semester units in Art Practice

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

By focusing on personal expression, this intermediate-to-advanced-level 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 ART X410 or consent of instructor

Sec. 004
Eva Bovenzi, M.F.A.
5 meetings
Monday–Friday, 9:15 am–4:30 pm
Jan. 13–17
San Francisco: Art and Design Center • $455

Sec. 005
Larry Robinson, M.F.A.
12 meetings
Mondays, 7–10 pm
Feb. 10–May 12 (no meetings on Feb. 17 and April 14)
Berkeley Campus: 375 Kroeber Hall • $455

Approaches to Abstraction in Painting
ART X412.1 • 2 semester units in Art Practice

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

Understand the many options possible for making an abstract painting. Explore a variety of approaches, such as improvisational abstraction, geometric abstraction, process-based painting and abstraction based on mark making. The instructor offers demonstrations of painting techniques and image-illustrated lectures on the history of abstract painting and its current trends. Group discussions and critiques help familiarize you with the vocabulary and concepts involved in analyzing and evaluating abstraction.

Prerequisite: Painting Fundamentals ART X410 or consent of instructor

Sec. 001
Francesca Pastine, M.F.A.
10 meetings
Thursdays, 1:30–4:30 pm
Feb. 13–April 17
San Francisco: Art and Design Center • $455

Watercolor Fundamentals
ART X414 • 2 semester units in Art Practice

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

This thorough exploration of watercolor painting offers instruction and opportunities for practice in basic wet and dry techniques, washes, blends and use of transparency. Explore and practice with a variety of special techniques for solving texture and masking problems. Experienced students concentrate on composition, technical skills, paint consistency and color development.

Sec. 001
Glenn Hirsch, M.F.A.
12 meetings
Tuesdays, 6:30–9:30 pm
Feb. 11–April 29
San Francisco: Art and Design Center • $455

Contemporary Painting With Water-Based Media
ART X414.3 • 2 semester units in Art Practice

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

Get an introduction to the process and techniques of traditional watercolor painting and water media as a component to mixed-media works. Engage in a laboratory of contemporary practice using water-based media such as paint, gouache and ink. Through directed experimentation, you learn to develop a unique visual language using this luminous and spontaneous medium. You also gain expertise by examining methods of critical analysis, color literacy and contemporary painting issues.

Prerequisite: Painting Fundamentals ART X410 or consent of instructor

Sec. 001
Francesca Pastine, M.F.A.
10 meetings
Thursdays, 1:30–4:30 pm
Feb. 13–April 17
San Francisco: Art and Design Center • $455

Specialized Program in Painting

After centuries of experimentation, painting still provides an avenue of discovery for 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 enable you to expand your range of skills, experiment with new approaches and develop your artistic hand.

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

Required Courses
• Painting Fundamentals ART X410 (offered this term)
• Color Theory for the Visual Arts ART X403 (offered this term)
• Painting Intermediate ART 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
Contemporary Realism: Painting Techniques of the Masters

ART X421.1 • 2 semester units in Art Practice
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Painting

Explore the concepts and techniques of realism in contemporary painting using modern methods and materials, as well as the traditional techniques of Renaissance masters. Illustrated lectures introduce you to the works of traditional and contemporary artists who display mastery in the use of realism. Lecture demonstrations expose you to materials and techniques, and course projects develop your ability to compose a convincing 3-D space on a 2-D surface while engaging both modern and traditional approaches to painting realistically.

Prerequisite: Painting Fundamentals ART X410 or consent of instructor

Sec. 001
Donald Bradford, M.F.A.,
Extension Honored Instructor
12 meetings
Tuesdays, 6:30–9:30 pm
Feb. 11–April 29
San Francisco: Downtown Center • $455

Digital Photography Intermediate

ARCH 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 additional skills and terminology, including RAW, file workflow, color management and how to prepare files for output. Develop your conceptual skills, and participate in lectures, critiques, lab work and field trips that enhance your knowledge.

Prerequisite: Digital Photography Fundamentals ARCH X405 or consent of instructor

Sec. 003
Emmanuelle Namont Kouznetsov, M.F.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 9–March 13
San Francisco: Art and Design Center • $455

Digital Photography in Practice and Context

ARCH X405.7 • 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 to develop conceptual ideas, critique the work of peers and locate your work in the context of broader photographic practice, both contemporary and historical. In addition to lectures and lab time, the course includes two shooting field trips and a series of project-based assignments.

Prerequisite: Digital Photography Fundamentals ARCH X405 or consent of instructor

Sec. 002
Emmanuelle Namont Kouznetsov, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 19–May 21
San Francisco: Art and Design Center • $455

Photography, Film and Video

Digital Photography Fundamentals

ARCH 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 photography and photographic terminology. Understand image-editing software and digital effects. Receive one-on-one time with the instructor to better understand your particular digital camera. Note: A digital SLR camera with interchangeable lenses and raw-capture capability is recommended.

Sec. 004
David Papas
10 meetings
Saturdays, 10 am–1 pm
March 22–May 17 (one field trip to be scheduled)
San Francisco: Art and Design Center • $455

The Art of Film

FILM X20 • 3 semester units in Film Studies

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, the history and uses of sound, editing, performance, directing, narrative style and screening. You are responsible for renting and viewing films as part of this course.

Sec. 001
L. Thomas Pollard, Ph.D.
Enroll anytime
Online • $715
The Post-Baccalaureate Certificate in Visual Arts provides a critical bridge between talent and skill. This exciting curriculum includes expert instruction and rigorous studio experience to help you take your creative ideas to the next level in a supportive atmosphere. It includes theory and critique seminars designed to develop creative and conceptual thinking; visual art history courses that integrate issues of contemporary art within a historical context; and electives chosen in a wide array of studio courses. The combination of the studio practice with the conceptual and historical framework enables you to develop a portfolio of work for application to a Master of Fine Arts program. All courses are approved by UC Berkeley and take place in the heart of San Francisco’s Yerba Buena arts district. This certificate can be completed on a part-time or full-time basis.

**Curriculum Requirements**

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

**Electives**

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

Looking back on the Post-Baccalaureate Certificate in Visual Arts, graduate **Lina Janusas** recalls the strength of the curriculum’s structure, in that it nurtures students’ artistic and intellectual sides: “To accomplish your dreams, you have to invest in them, and coming to a program like this is the first step.”

**Prepare for Graduate School**

- Rigorous studio practice
- Conceptual and historical framework
- Portfolio development

**Pursue Your Passion**

- Drawing
- Film
- Painting
- Photography
- Printmaking
- Video

**Learn More and View the Brochure**

extension.berkeley.edu/cert/visualarts.html

(415) 284-1041

visualarts@unex.berkeley.edu
**History of Photography: A Dynamic Study and Practice**

ARCH X405.8 • 2 semester units in Architecture

Survey the history of photography to learn how to incorporate the techniques and ideas developed by major photographers into your work.

*For course schedule, see p. 10.*

**Film History: 1880s to 1940s**

FILM X401.1 • 2 semester units in Film and Media

Get an overview of the early history of film, and learn to analyze movies from a variety of political, social, technological and aesthetic factors.

*For course schedule, see p. 11.*

**Photoshop I**

DESIGN X462 • 2 semester units in Design

Learn the fundamental concepts of Photoshop: layers, painting tools, blending modes, tonal correction and retouching, and sharpening images.

*For course schedule, see p. 18.*

**Landscape and Horticultural Photography**

LD ARCH X430 • 2 semester units in Landscape Architecture

Build on your basic photographic skills, and learn the art of plant, garden and landscape photography for personal or professional use.

*For course schedule, see p. 27.*

**The Image of Text and Sound**

ART X440.2 • 2 semester units in Art Practice

An elective in the Post-Baccalaureate Certificate in Visual Arts

Explore the juxtaposition of image, text and sound. Investigate the poetics of visual art and language, text off of the page and interdisciplinary practices. Through course projects, you focus on integrating form and concept; combining visual art with language; and experimenting with content, materials and techniques. Image and audio-based lectures, discussions, demonstrations, critiques and research inform the development of your projects and studio practices.

*Prerequisite:* Drawing Fundamentals ART X405 or consent of instructor

*Sec. 001*  
Michelle Wilson, M.F.A.  
12 meetings  
Wednesdays, 6:30–9:30 pm  
Feb. 12–April 30  
San Francisco: Art and Design Center • $455

**Woodblock Printmaking**

ART X417.4 • 2 semester units in Art Practice

An elective in the Post-Baccalaureate Certificate in Visual Arts

Woodblock printing is a powerful, graphic art form with a long history and varying global techniques. Get an introduction to the essential tools and techniques of woodblock printmaking and a history of the medium of relief. Learn how to print a single-color image, how to translate a drawn image into a carved one, how to ink a block and print it both using a press and by hand, and how to incorporate printing images into artist books. Nontoxic methods are emphasized, as well as techniques for printing at home away from a press.

*Prerequisite:* Drawing Fundamentals ART X405 or consent of instructor

*Sec. 001*  
Ray Beldner, M.F.A.  
10 meetings  
Mondays, 6:30–9:30 pm  
Feb. 24–April 28  
San Francisco: Art and Design Center • $495

**Post-Baccalaureate Mentorship**

ART X495.5 • 1–2 semester units in Art Practice

An elective in the Post-Baccalaureate Certificate in Visual Arts

Develop a cohesive body of work that demonstrates your approach to art making; gain a skill level appropriate for potential application to graduate programs; and practice the presentation of 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 Program in Visual Arts

*Sec. 003*  
Various instructors  
Meetings scheduled in consultation with instructors  
San Francisco: Art and Design Center  
$325 or $495 depending on credits chosen

**Portfolio Review**

ART 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 ART X495.1

*Sec. 002*  
Various instructors  
1 meeting  
Friday, 1:30–4:30 pm  
Feb. 7  
San Francisco: Art and Design Center • $375
Graphic and Interactive Design

Course Information
(415) 284-1041
designarts@unex.berkeley.edu
extension.berkeley.edu/art

Online Course Information
(510) 643-4957
extension.berkeley.edu/online

Free Information Session
Professional Sequence in Graphic Design
UNEX 1068

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.

Sec. 002
1 meeting
Monday, 6:30–8 pm
Jan. 13
San Francisco: Art and Design Center * FREE

Studio, History and Theory Courses

Graphic Design Studio I
DESIGN X401.2 • 3 semester units in Design
A requirement in the Professional Sequence in Graphic Design
Through a series of challenging foundation projects, gain an understanding of the basic principles and elements of graphic design. Lectures and critiques address graphic-design-related skills, portfolio requirements and professional opportunities. Guest speakers provide a first-hand look at the imagination and skills applied in graphic design. This introductory course is essential if you are interested in entering the field or beginning the Professional Sequence in Graphic Design.

Sec. 007
Dona Turner, B.F.A.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–April 29
San Francisco: Art and Design Center • $700

Sec. 008
Ivan Trujillo, M.F.A.
15 meetings
Thursdays, 1:30–4:30 pm
Jan. 23–May 1
San Francisco: Art and Design Center • $700

Sec. 006
Bruce Yelaska, B.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 29–May 7
San Francisco: Art and Design Center • $700

Graphic Design Studio II
DESIGN 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, 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 DESIGN X401.2; basic proficiency in Adobe Illustrator, InDesign or Photoshop is strongly recommended

Sec. 003
Charlene Lowe, B.A.
12 meetings
Thursdays, 6–9 pm
Feb. 13–May 1
San Francisco: Art and Design Center • $700
**Graphic Design Studio IV: Portfolio**

**DESIGN X434** • 2 semester units in Design

A requirement in the Professional Sequence in Graphic Design

To find work as a graphic designer, you need a strong portfolio and good presentation skills. In this course, concentrate on recognizing your best work and developing your signature style. Individual and group critiques help you build a portfolio that makes a dramatic and distinctive statement. You have the opportunity to create new work for your portfolio and find out how to market yourself to the employer you really want. The course includes lectures and discussions about career opportunities and the current state of design.

*Prerequisite:* All other required studio courses in the Professional Sequence in Graphic Design or consent of instructor

**Sec. 002**

Jesse Gottesman, M.F.A.

10 meetings

Mondays, 6:30–9:30 pm

Feb. 17 and March 10)

San Francisco: Art and Design Center • $700

**Typography Fundamentals**

**DESIGN X450.9** • 2 semester units in Design

An elective in the Professional Sequence in Graphic Design

Grasp professional typography through a broad understanding of historical and contemporary usage and the technological media associated with it. Apply professional processes to content design, and make intelligent and confident typographic design decisions.

*Prerequisite:* Graphic Design Studio I DESIGN X401.2, and proficiency in Adobe Illustrator and InDesign

**Sec. 001**

Nancy Cutler, B.S.

12 meetings

Mondays, 6:30–9:30 pm

Feb. 17 and March 10)

San Francisco: Art and Design Center • $700

**Computer Courses**

**Photoshop I**

**DESIGN X462** • 2 semester units in Design

An elective in the Professional Sequence in Graphic Design and in the Specialized Program in Digital Photography

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 ideal for anyone planning a career in the graphic arts.

*Prerequisite:* Apple Macintosh experience

**Sec. 002**

Nigel French, M.A.

4 meetings

Saturdays and Sundays, 9 am–5 pm

March 8–16

San Francisco: Art and Design Center • $790

**Illustrator I**

**DESIGN 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 skill 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

**Sec. 004**

Michael Starkman, M.F.A.

10 meetings

Mondays, 6:30–9:30 pm

Jan. 6–March 31 (no meetings on Jan. 20, Feb. 17 and March 10)

San Francisco: Art and Design Center • $825

**NEW THIS TERM**

**Digital Illustration**

**DESIGN X463** • 2 semester units in Design

An elective in the Professional Sequence in Graphic Design

Enhance your basic design and vector-based illustration techniques, and focus on conceptual approaches to digital illustration for specific design applications. Explore concept, composition, color and typography through design projects that require creating original graphics and illustrations. You pay particular attention to creative approaches to design solutions and developing your individual illustration style.

*Prerequisite:* Illustrator I DESIGN X461 or consent of instructor

**Sec. 001**

Jesse Gottesman, M.F.A.

10 meetings

Tuesdays, 6:30–9:30 pm

March 18–May 20

San Francisco: Art and Design Center • $750

**Digital Publishing With Adobe InDesign**

**DESIGN X496.1** • 1 semester unit in Design

An elective in the Professional Sequence in Graphic Design

Learn how to design interactive documents using Adobe InDesign CS6. Add interactivity to PDF files including hyperlinks, buttons and video. Learn to create ePubs from InDesign, and how to use InDesign with Adobe’s Digital Publishing system to create iPad and Android tablet apps.

*Prerequisite:* InDesign DESIGN X496 or consent of instructor

**Sec. 001**

Diane Burns, B.A.

5 meetings

Saturdays, 1:30–4:30 pm

Jan. 11–Feb. 22 (no meetings on Jan. 18 and Feb. 15)

San Francisco: Art and Design Center • $560

**Location Guide**

For detailed information, see p. 236.

Belmont: **Belmont Center** 1301 Shoreway Rd., Suite 400, Belmont

Berkeley Campus See campus map, p. 237. If no building location is given, visit extension.berkeley.edu for updated information.

Berkeley: **Golden Bear Center** 1995 University Ave., Berkeley

San Francisco: **Downtown Center** 425 Market St., 8th Floor (enter on Fremont Street), San Francisco

San Francisco: **Art and Design Center** 95 Third St., San Francisco

Online Internet and email access required. Schedules displaying no dates mean you may enroll anytime and take six months to complete (unless otherwise noted on course description).

Other Classes that are not located at Extension centers or on the UC Berkeley campus have the classroom address provided with the course information.

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
NEW THIS TERM
Interactive Design Fundamentals
DESIGN X471 • 2 semester units in Design
An elective in the Professional Sequence in Graphic Design
Get an introduction to interactive design for desktop and mobile screens. Focus on specific fundamentals of interaction in digital and networked contexts, such as the Web and mobile devices, as well as recognition of the rich and interdisciplinary nature of interaction design as a background for future projects and further study.
Sec. 001
Carol Gigliotti, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 7–March 11
San Francisco: Art and Design Center • $750

Designing Websites With HTML and CSS
EL ENG X453.1 • 2 semester units in Electrical Engineering
An elective in the Professional Sequence in Graphic Design
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, CSS and Web design.
Sec. 002
Catherine Chanse, M.A.
Jan. 21–April 15
Online • $595

Interior Design and Interior Architecture
COURSE INFORMATION
(415) 284-1041
designarts@unex.berkeley.edu
extension.berkeley.edu/art
ONLINE COURSE INFORMATION
(510) 643-4957
extension.berkeley.edu/online

FREE INFORMATION SESSION
Certificate Program in Interior Design and Interior Architecture
UNEX 1034
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 can enhance your knowledge and career prospects in this field. Tour the Art and Design Center at Third and Mission Streets in downtown San Francisco to see where courses are held, and view examples of current students’ work. For certificate details, see p. 21 or visit extension.berkeley.edu/cert/intdes.html.
Sec. 002
1 meeting
Thursday, 6:30–8 pm
Jan. 9
San Francisco: Art and Design Center • FREE

Sec. 003
1 meeting
Tuesday, 6:30–8 pm
May 13
San Francisco: Art and Design Center • FREE

General Interest
Inside Views of Design
ARCH 1005 • 0.4 ceu
Showcasing new residential and commercial projects by leading architects and design practitioners, this afternoon seminar begins at the headquarters of Gensler, the largest architectural firm in the world. Review its innovative work for leading San Francisco and Silicon Valley tech firms. Visit the dramatic studio and workshop of Aidlin Darling Design, an accomplished young firm with many high-tech clients, and winner of this year’s Smithsonian National Design Award for Interior Design. The firm is noted for stylistically varied commercial and residential work, as well as artful and ecoconscious buildings for nonprofits and arts groups. You complete the afternoon at Bohlin Cywinski Jackson, whose extraordinary aesthetic is based on a quiet rigor that is both intellectual and intuitive. Refreshments are then served as the group discusses current design topics with the architects. Park near Gensler’s office, and we will arrange carpools to the other locations.
Sec. 002
Diane Dorrans Saeks, B.A.
1 meeting
Saturday, 12:45–5 pm
Feb. 8
San Francisco: Lobby of Gensler Building, 2 Harrison St. • $100

Fundamentals of Interior Design
ARCH X474 • 1 semester unit in Architecture
Explore the world of residential and commercial interior design in this introductory course. For course schedule, see p. 23.

NEW THIS TERM
Principles of Sustainability
ARCH X411.6 • 1 semester unit in Architecture
Explore various pathways to global environmental sustainability, examining commerce, culture, design, policy and individual actions. For course schedule, see p. 23.

Professional Development
Zero Energy Buildings
ARCH X402.2 • 1 semester unit in Architecture
24 GBCI CE Hours
Study specific analytical approaches to quantify residential building energy savings through efficiency, conservation and generation. For course schedule, see p. 23.

NEW THIS TERM
Sketching for Interiors
ARCH X413.1 • 1 semester unit in Architecture
Enhance your hand drawing skills in this concise, freehand sketching class. For course schedule, see p. 23.

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/static/about/jobs.
UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO
Phase I

**Design Principles and Elements**
ARCH X475 • 3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture

Understand people’s relationship to space, architecture and the environment in this introductory, conceptual design class. Learn the basic elements of design to create 2-D compositions. Through lectures, readings, discussions and 3-D models, you apply the principles of design as you analyze space, form and context.

**Sec. 006**
Ivan Tzvetin, Dipl. Arch. (Bulgaria), AIA-E, Extension Honored Instructor
15 meetings
Mondays, 2–5 pm
Jan. 27–May 12 (no meeting on Feb. 17)
San Francisco: Art and Design Center • $825

**Sec. 007**
Ivan Tzvetin, AIA-E, Dipl. Arch. (Bulgaria), Extension Honored Instructor
15 meetings
Wednesdays, 6:30–9:30 pm
Feb. 4–May 13
San Francisco: Art and Design Center • $825

**Graphic Communication I**
ARCH X476.1 • 3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture

Learn the language and methods of mechanical drafting. Produce floor and ceiling plans, and learn how to draw elevations and sections that communicate your ideas. Throughout the process, you gain an understanding of industry standards and see how information is organized. Further enhance your communication skills by studying the principles of orthogonal drawings to create one- and two-point perspectives. Plan to purchase drafting equipment for use in this course and throughout the program.

**Sec. 005**
Amos Malkin, B.A., AIA
15 meetings
Mondays, 6:30–9:30 pm
Feb. 3–May 19 (no meeting on Feb. 17)
San Francisco: Art and Design Center • $850

**Sec. 006**
Jerry Veverka, M.Arch., AIA, and Johanna Forman, M.Arch.
15 meetings
Wednesdays, 2–5 pm
Feb. 5–May 14
San Francisco: Art and Design Center • $850

**Color Theory and Application for Interiors**
ARCH 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 for designing compelling interior spaces. Review the color-based theories of Albert Munsell, Johannes Itten and Josef Albers. Learn how to change the value and intensity of colors using paint. Two-dimensional exercises teach you to apply theory to using color in interior space.

**Sec. 003**
Vesta Kirby, M.F.A.
15 meetings
Tuesdays, 6:30–9:30 pm
Feb. 4–May 13
San Francisco: Art and Design Center • $850

**AutoCAD**
ARCH 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 using drafting and editing commands in Autodesk AutoCAD, the industry-standard computer-aided drawing software. 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.

**Prerequisite:** Graphic Communication I ARCH X476.1

We recommend you take this class before Revit ARCH X479.2. Course is only taught on PCs.

**Sec. 003**
Jennifer Dye, M.A.
15 meetings
Mondays, 2–5 pm
Jan. 29–May 7 (no meetings on Jan. 20, Feb. 17 and April 28)
San Francisco: Art and Design Center • $850

**Sec. 004**
Stephen Wong, M.Arch.
15 meetings
Wednesdays, 6–9 pm
Jan. 29–May 7
San Francisco: Art and Design Center • $850

**Graphic Communication II**
ARCH X476.2 • 3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture

Enhance your skills in translating 2-D floor plans into 3-D space. Exercises, including quick sketch vignettes, expand your ability to visualize design concepts and communicate them accurately and convincingly. Learn to use a variety of media that enhance your sketches graphically.

**Prerequisite:** Graphic Communication I ARCH X476.1

**Sec. 003**
Jennifer Mahoney, B.A.
15 meetings
Thursdays, 6:15–9:15 pm
Jan. 16–April 24
San Francisco: Art and Design Center • $850

**Digital Presentation Techniques**
ARCH 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 2-D and 3-D software. In this introductory course, learn how to use Google SketchUp, Adobe Photoshop and Illustrator to augment your creative ideas. This class is perfect for students and design professionals alike.

We recommend that you have personal copies of Google SketchUp, Adobe Illustrator and Photoshop to complete the homework. Plan to spend additional time outside of class to master these programs.

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

**Sec. 002**
Daniel Goldstein, M.Arch.
12 meetings
Tuesdays, 6:30–9:30 pm
Jan. 28–April 15
San Francisco: Art and Design Center • $850
Certificate Program in Interior Design and Interior Architecture

Learn how to create exciting spaces that are functional, aesthetically pleasing and sustainable. The Certificate Program in Interior Design and Interior Architecture offers a comprehensive education that combines studio courses with the study of design theory and history. It teaches you manual and digital drawing skills that allow you to communicate your ideas effectively. You learn from industry professionals who help you build a strong portfolio to start your career. The certificate also provides educational credits needed to qualify for the California Council of Interior Design Certification exam (IDEX) and the National Council for Interior Design Qualification certification exam (NCIDQ).

Curriculum Requirements
The curriculum comprises 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 ARCH X475 (offered this term)
- Graphic Communication I ARCH X476.1 (offered this term)
- Color Theory and Application for Interiors ARCH X412.7 (offered this term)
- AutoCAD ARCH X479.1 (offered this term)
- Graphic Communication II ARCH X476.2 (offered this term)
- Color Theory and Application for Interiors ARCH X412.7 (offered this term)
- AutoCAD ARCH X479.1 (offered this term)
- Graphic Communication II ARCH X476.2 (offered this term)
- Color Theory and Application for Interiors ARCH X412.7 (offered this term)
- Digital Presentation Techniques ARCH X481 (offered this term)

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

Phase III
- Building Components and Systems for Interior Architecture ARCH X483 (offered this term)
- Design Studio III ARCH X482.3
- Construction Documents ARCH X414.6

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

Find the Quality You Want
- Preparation for the IDEX California exam sponsored by the California Council for Interior Design Certification (CCIDC) and the National Council for Interior Design Qualification (NCIDQ) Examination
- American Society of Interior Designers and International Interior Design Association student chapters

Get the Knowledge You Need
- Design principles and elements
- History of architecture, interiors and decorative arts
- Color theory
- Space planning
- AutoCAD and Revit

Learn More and View the Brochure
extension.berkeley.edu/cert/intdes.html
(415) 284-1070
interiordes@unex.berkeley.edu

Effective spring 2014, a Certificate With Distinction is awarded to those who complete the program with a grade point average of 3.85 or higher.
**Phase II**

### Interior Finishes and Materials

**ARCH X480** • 3 semester units in Architecture

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

Learn how to use finishes and materials appropriately for interior applications. 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 properly. Activities include lectures and panel discussions by product representatives. Field trips to showrooms and manufacturing facilities expand your resource base.

**Prerequisites:** Design Principles and Elements ARCH X475; Graphic Communication II ARCH X476.2 and AutoCAD ARCH X479.1; Digital Presentation Techniques ARCH X481 is highly recommended.

**Sec. 002**
Cynthia Gordon, B.A., B.F.A., IIDA, LEED AP
15 meetings
Thursdays, 2–5 pm
Jan. 23–May 1 (meetings on Feb. 20 and March 27 meet 1–5 pm off-site)
San Francisco: Art and Design Center • $865

### History of Architecture, Interiors and Decorative Arts II

**ARCH X412.5** • 3 semester units in Architecture

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

Architecture and design changed radically from the time of the Industrial Revolution in the 19th century to the period of cultural modernism in the late 20th century. In this continuation of the History of Architecture, Interiors and Decorative Arts I ARCH 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 ARCH X412.4 and Graphic Communication II ARCH X476.2

**Sec. 001**
Sandra Poza, B.S., ASID, Extension Honored Instructor
15 meetings
Mondays, 6:30–9:30 pm
Jan. 6–May 19 (no meetings on Jan. 20, Feb. 3 and 17, and March 10 and 17)
San Francisco: Art and Design Center • $875

### Revit

**ARCH X479.2** • 3 semester units in Architecture

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

Learn the fundamentals of building information modeling (BIM) using Autodesk Revit Architecture. See how to implement and employ BIM software to facilitate the design process and automate documentation. Participate in hands-on activities to familiarize yourself with powerful, parametric 3-D modeling tools that enable you to generate fully coordinated plans, sections, elevations, 3-D perspectives and renderings.

**Prerequisites:** Graphic Communication I ARCH X476.1 and AutoCAD ARCH X479.1

**Sec. 004**
Tamara Roth, B.F.A., Associate IIDA, LEED AP ID+C
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 30–May 8
San Francisco: Art and Design Center • $975

### Space Planning

**ARCH X413.8** • 3 semester units in Architecture

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

Develop plans that satisfy programmatic needs and use space efficiently. Learn techniques for assimilating client-project information, analyzing program requirements, and developing schematic space-planning solutions for residential and commercial situations. You also study building codes, fire safety and barrier-free designs as essential components of laying out a workable interior space.

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

**Sec. 002**
Julie Barron, B.F.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 22–April 30
San Francisco: Art and Design Center • $950

### Design Studio II

**ARCH 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 finishings. Develop your color palette, and select suitable materials to produce a workable and aesthetic environment for everyday living.

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

**Sec. 002**
Esin Karilova, B.A., B.S., CID, LEED AP ID+C
15 meetings
Tuesdays, 6–9 pm
Jan. 28–May 6
San Francisco: Art and Design Center • $1,000

### Phase III

### Building Components and Systems for Interior Architecture

**ARCH X483** • 4 semester units in Architecture

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

Gain an understanding of the components of a building and the sequence of construction in residential and commercial spaces. Learn how various building systems—plumbing, mechanical, electrical and structural—are designed and integrated into the building shell so you can effectively design safe, healthy and suitable environments for human activity.

**Prerequisite:** Design Studio I ARCH X482.1

**Sec. 001**
Jennifer Dye, M.A.
15 meetings
Thursdays, 6–10 pm
Jan. 16–April 24
San Francisco: Art and Design Center • $1,025
Design Studio IV
ARCH X482.4  •  3 semester units in Architecture
A requirement in the Certificate Program in Interior Design and Interior Architecture
Combining your knowledge of space planning, color theory, lighting, material selection, design and construction, this final design studio challenges you to apply all of your skills to a multistory, mixed-use project. Use study models 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 ARCH X482.3 and Digital Presentation Techniques ARCH X481

Sec. 001
David Polikoff, M.F.A., M.S.  
15 meetings  
Tuesdays, 6–9 pm  
Jan. 14–April 22  
San Francisco: Art and Design Center • $1,200

Electives
Fundamentals of Interior Design
ARCH 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.

Sec. 003
Jayne Bunce, B.F.A., ASID, CID  
Jan. 21–March 4  
Online • $565

Sec. 004
Jayne Bunce, B.F.A., ASID, CID  
March 11–April 22  
Online • $565

Sec. 005
Jayne Bunce, B.F.A., ASID, CID  
6 meetings  
Tuesdays, 2–5 pm  
April 8–May 13  
San Francisco: Art and Design Center • $565

NEW THIS TERM
Sketching for Interiors
ARCH X413.1  •  1 semester unit in Architecture  
An elective in the Certificate Program in Interior Design and Interior Architecture
In this freehand sketching class, you are shown how to use quick perspective techniques, apply shade and shadow to enhance the depth and quality of your drawings; and implement light and reflection to create drama in your work. Much of the class time will be spent on location, drawing directly from the built environment. This class is appropriate for design professionals.
Prerequisite: Graphic Communication I ARCH X476.1

Sec. 001
James Freed, M.A.  
6 meetings  
Mondays, 2–5 pm  
April 14–May 19  
San Francisco: Art and Design Center • $500

Kitchen and Bath Design
ARCH X414.9  •  3 semester units in Architecture  
An elective in the Certificate Program in Interior Design and Interior Architecture
Understand the kitchen and bathroom design process from conceptual drawings to schematic design. Study the fundamentals of design and layout, including the functional use of space. Review artificial and natural daylight and ventilation requirements. Research available fixtures, equipment specifications, and cabinetry design and function. Refine your knowledge in choosing appropriate colors and in specifying materials for durability and easy maintenance.
Prerequisites: Graphic Communication II ARCH X476.2, AutoCAD ARCH X479.1 or Revit ARCH X479.2, and Digital Presentation Techniques ARCH X481

Sec. 001
Tiffany Leichter, BArch.  
15 meetings  
Wednesdays, 6–9 pm  
Feb. 5–May 14  
San Francisco: Art and Design Center • $1,100

Zero Energy Buildings
ARCH X402.2  •  1 semester unit in Architecture  
24 GBCI CE Hours  
An elective in the Certificate Program in Interior Design and Interior Architecture
Gain essential knowledge of what it means to create buildings that operate on a zero net energy, off-grid or carbon-neutral basis. Discuss and practice the modeling tools that designers, engineers and civilians use to predict building energy use. Learn from practicing professionals about many of the available renewable energy sources, such as wind turbines and photovoltaic panels. Understand how to calculate the size and cost of a system to offset building energy use, and the role of local, state and federal incentives in promoting renewable systems.

Through presentation examples, a site visit, guest lectures and a case study project, you learn about the categories of building energy demand and cost, as well as techniques for reducing that demand in each area. For a final project, you produce a cost-effective plan for making a case study project a net-zero-energy building.

Sec. 001
David Scheer, M.Arch., AIA, BEMP, and Adam Menter, M.S., M.B.A.  
8 meetings  
Mondays, 6:30–9:30 pm  
Feb. 24–April 14  
San Francisco: Art and Design Center • $550

NEW THIS TERM
Principles of Sustainability
ARCH X411.6  •  1 semester unit in Architecture  
An elective in the Certificate Program in Interior Design and Interior Architecture
Explore various pathways to global environmental sustainability, examining commerce, culture, design, policy and individual actions. Focus on key concepts such as ecological footprint measurement, life-cycle analysis, cradle-to-cradle design, green energy, biomimicry and zero waste. Then, learn to apply these sustainable principles to your personal lives and careers.

Sec. 001
Jessica Kraft, M.A., M.Res., LEED AP  
March 11–April 22  
Online • $500
Internship in Interior Design
ARCH X409.2 • 2 semester units in Architecture
An elective in the Certificate Program in Interior Design and Interior Architecture
Immerse yourself in the interior design profession through an internship at a design or architectural firm. With the guidance of the program director and the supervision of the host organization, you 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. A total of 90 internship hours is required within a period of six months. Before enrolling, call us at (415) 284-1070 to request 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 ARCH X482.2
Sec. 003 Rachael Hagner, M.Arch., AIA, IIDA
Meetings scheduled in consultation with instructor
San Francisco: Art and Design Center • $500

COURSES AVAILABLE THROUGHOUT THE YEAR
UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

Landscape Architecture

COURSE INFORMATION
(415) 284-1070
landarch@unex.berkeley.edu
extension.berkeley.edu/art

FREE INFORMATION SESSION
Certificate Program in Landscape Architecture and Professional Sequence in Cultural Landscape Preservation and Management
UNEX 1035
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 Q&A period. For more information on the professional certificate, see p. 25 or visit extension.berkeley.edu/cert/land.html. For more information on the specialized program of study, see p. 26 or visit extension.berkeley.edu/spos/preservation.html.

Sec. 002
1 meeting
Tuesday, 6:30–8 pm
Jan. 14
San Francisco: Art and Design Center • FREE

Sec. 003
1 meeting
Thursday, 6:30–8 pm
May 15
San Francisco: Art and Design Center • FREE

Foundation Courses

Introduction to Landscape Architecture
LD ARCH X457 • 2 semester units in Landscape Architecture
A requirement in the Certificate Program 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.
Sec. 003 Jennifer Ivanovich, M.L.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Feb. 4–April 8
San Francisco: Art and Design Center • $650

Principles and Elements of Design
LD ARCH X463 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Explore and develop your creativity in this beginning studio course. Experiment with 2-D and 3-D projects to learn the principles—balance, rhythm, focus, contrast and proportion—that are the foundation of good design. Understand how these principles interact with the elements of scale, form, color, pattern, light and texture.
Sec. 001 Stephen Albert, M.F.A.
11 meetings
Wednesdays, 6–10 pm
Feb. 19–April 23 (One five-hour field trip to be scheduled)
San Francisco: Art and Design Center • $870

NEW THIS TERM
History of Landscape Architecture
LD ARCH X473 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Get a broad historical survey of the planning and design of gardens, parks, cities and open spaces across cultures, geographic regions and time periods. Examine how these built environments are imagined and created in relationship to other disciplines such as art, architecture, planning, ecology and cultural geography.
Sec. 001 Elizabeth Boults, M.L.A.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 23–May 1
San Francisco: Art and Design Center • $870
Certificate Program in Landscape Architecture

Successful work in landscape architecture requires a comprehensive, multidisciplinary education in aspects of botany, horticulture, architecture, ecology and more. Without requiring prior background, the Certificate Program in Landscape Architecture prepares you for entry-level positions in the field and for continued professional achievement and advancement. Taught by industry experts, the curriculum enables you to develop aesthetic sensitivity and environmental awareness, a thorough knowledge of historical precedent, a definable and defensible design methodology, the technical knowledge and skills necessary to compete effectively for jobs, and a comprehensive portfolio. Designed to comply with the highest standards of the profession, the curriculum encourages individual creativity while emphasizing the practical applications of design solutions. It also helps you qualify to sit for the Council of Landscape Architectural Registration Boards’ Landscape Architect Registration Exam (LARE).

Curriculum Requirements
The curriculum comprises 19 required courses and a minimum of five units of electives for a total of 63 semester units (1,113 hours of instruction).

Foundation Courses
- Introduction to Landscape Architecture LD ARCH X457 (offered this term)
- Principles and Elements of Design LD ARCH X463 (offered this term)
- History of Landscape Architecture LD ARCH X473 (offered this term)
- Landscape Graphics I LD ARCH X458
- Digital Landscape Graphics LD ARCH X465 (offered this term)

Advanced Courses
- Spring Plants and Applications LD ARCH X444 (offered this term)
- Autumn Plants and Applications LD ARCH X445
- AutoCAD for Landscape Architecture: Level I LD ARCH X428
- Introductory Landscape Design Studio LD ARCH X466

Electives
- Construction Technology II LD ARCH X405
- Green Roof Systems LD ARCH X470 (offered this term)
- Neighborhood Design Studio LD ARCH X468
- Social Factors in Environmental Design LD ARCH X402
- Site Design Studio LD ARCH X464 (offered this term)
- Professional Practice in Landscape Architecture LD ARCH X427
- Environmental Analysis and Design Studio LD ARCH X474
- Studio L5: Site Planning Practicum LD ARCH X409 (offered this term)

Find the Quality You Want
- Certified by the Landscape Architects Technical Committee of the California Architects Board
- Qualification credit for the State Licensing Exam

Get the Knowledge You Need
- Landscape and urban design
- Digital and mechanical graphics
- Plants
- Portfolio presentation
- Construction technology

Learn More and View the Brochure
extension.berkeley.edu/cert/land.html
(415) 284-1070
landarch@unex.berkeley.edu
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 industry standards, receive an introduction to the vocabulary of the discipline, and apply expert techniques to class assignments. Develop awareness and build skills through a sequence of lecture-style and studio-based courses. All courses in the program are either requirements or approved electives in the Certificate Program in Landscape Architecture, which allows you to progress concurrently through both programs.

Curriculum Requirements
The curriculum comprises 5 required courses for a total of 9 semester units (142 hours of instruction).

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

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

Spring Plants and Applications
LD ARCH X444 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Learn the approximately 125 species of trees, shrubs and ground covers commonly used in landscaping in Northern California. Visual characteristics, nomenclature, cultural requirements and design applications are discussed. You pay particular attention to plants especially valued for springtime features such as blooms and new foliage. 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.

Sec. 001
Quin Ellis, A.S., and Mary Swanson, B.A.
12 meetings
Saturdays, 9 am–1 pm
Jan. 25–April 19 (no meeting on Feb. 15)
San Francisco: Art and Design Center • $860

NEW THIS TERM
Digital Landscape Graphics
LD ARCH X465 • 2 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture
Explore landscape architecture applications such as topography, outdoor space and landscape elements in this computer-graphics course. Expand your skills using Google SketchUp and the Adobe Creative Suite Package (Illustrator, InDesign and Photoshop). Focus on integrated work flow in your projects, combining hand drawing and AutoCAD with the graphic programs.
Prerequisite: Landscape Graphics I LD ARCH X458

Sec. 001
Chris Hardy, M.L.A., CA and RLA; and Jennifer Ng, B.L.A.
12 meetings
Mondays, 6:30–9:30 pm
Jan. 13–April 14 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Art and Design Center • $800

Advanced Courses

Planting Design
LD ARCH 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 LD ARCH X116

Sec. 001
Patrick Miller, M.L.A.
14 meetings
Wednesdays, 5:45–9:45 pm
Jan. 29–April 30 (also Sundays, March 9 and April 6, 9 am–3:30 pm; no meetings on Feb. 26 and April 16)
San Francisco: Art and Design Center • $1,150

Construction Technology I
LD ARCH 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 primary topics as you learn about structures appropriate to grading solutions (retaining walls, curbs) and develop grading skills for both earth forms and hard surfaces. You 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 the solution.
Prerequisites: Completion of all courses leading up to and including Studio L1: Environmental Design LD ARCH X116, Planting Design LD ARCH X401 and Social Factors in Environmental Design LD ARCH X402

Sec. 001
Ray Freeman, M.L.A., ASLA, CPESC
30 meetings
Tuesdays and Thursdays, 6:30–9:30 pm
Jan. 14–April 24
San Francisco: Art and Design Center • $1,450
**NEW THIS TERM**

**Site Design Studio**

LD ARCH X464 • 4 semester units in Landscape Architecture

A requirement in the Certificate Program in Landscape Architecture

This intermediate-level design studio challenges you to apply critical thinking to the design process. Learn how to give form in the landscape while addressing complexities of a site and client preferences. Through project exercises, you explore a range of sectors including residential, public and commercial spaces. Focus on green design practices such as rain gardens, green roofs, and urban heat island mitigation.

**Prerequisites:** Completion of all courses leading up to and including Studio L1: Environmental Design LD ARCH X116

**Sec. 001**

Jennifer de Graaf, BFQP, LEED AP, PLA

24 meetings

Mondays and Wednesdays, 6:30–9:30 pm

Jan. 15–April 14 (no meeting on Jan. 20 and Feb. 17)

San Francisco: Art and Design Center • $1,400

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**NEW THIS TERM**

**Green Roof Systems**

LD ARCH X470 • 2 semester units in Landscape Architecture

A requirement in the Certificate Program in Landscape Architecture

Explore basic design principles and methods of creating sustainable landscapes on structure, such as green roofs, podium decks and elevated linear parks. Taking a holistic approach to the design and construction of these complex contemporary landscape systems, you apply concepts of planting design and soil creation, rainwater harvesting and storm water management, and urban-heat-island mitigation.

**Prerequisites:** Basic understanding of introductory design, graphic communication and site analysis techniques

**Sec. 001**

Jesse Markman, M.L.A., ASLA

10 meetings

Mondays, 6:30–9:30 pm

Feb. 3–April 14 (no meeting on Feb. 17)

San Francisco: Art and Design Center • $750

**Studio L5: Site Planning Practicum**

LD ARCH X409 • 6 semester units in Landscape Architecture

A requirement in the Certificate Program in Landscape Architecture

This final course in the certificate program gives you 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 controls, working with other professionals, licensing and construction administration. You may wish to brush up on either hand-drafting or CAD skills in the weeks prior to the first class.

**Prerequisites:** All other required courses in the Certificate Program in Landscape Architecture

**Sec. 001**

Justin Winters, M.L.A., LEED AP, RLA

30 meetings

Tuesdays and Thursdays, 6:30–9:30 pm

Jan. 7–April 17

San Francisco: Art and Design Center • $2,050

**Electives**

**Landscape and Horticultural Photography**

LD ARCH X430 • 2 semester units in Landscape Architecture

An elective in the Certificate Program in Landscape Architecture and in the Specialized Program in Digital Photography

Build on your basic photographic skills, and learn the art of plant, garden and landscape photography for personal or professional use. This class alternates between field trips to public and private gardens and classroom critiques of student work. After visiting each garden and using assigned exercises, you produce images that demonstrate new skills. You also produce a project, based on your personal interests, to share at the last session.

Bring six of your plant and garden photos to the first class.

**Sec. 002**

David Goldberg, B.A.

10 meetings

Saturdays, 10 am–1 pm

March 8–May 10

San Francisco: Art and Design Center • $730

**Tools of Preservation: Managing Change in Cultural Landscapes**

LD ARCH 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

Get an introduction to the fundamental tools of the preservation process, and gain an understanding of the function and application of those tools. 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.

**Sec. 001**

Gretchen Hilyard, M.S.

6 meetings

Tuesdays, 6:30–9:30 pm

April 15–May 20

San Francisco: Art and Design Center • $510

**Landscape Architecture Internship**

LD ARCH X401.8 • 2 semester units in Landscape Architecture

An elective in the Certificate Program in Landscape Architecture

Gain insight and skills to benefit your future employment in the field of landscape architecture. Present a résumé and portfolio to a professional landscape architecture or related office that then sponsors your internship. On approval, you meet with your instructor and classmates three times during the semester, prepare written analyses and complete a minimum of 90 hours of internship work experience.

**Sec. 002**

Eddie Chau, M.L.A.

3 meetings

Meetings scheduled in consultation with instructor

San Francisco: Art and Design Center • $400

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**NEW THIS TERM**

**Landscape Architecture Portfolio Workshop**

LD ARCH X489 • 1 semester unit in Landscape Architecture

An elective in the Certificate Program in Landscape Architecture

This three-day course gives you ideas and inspiration to effectively lay out and construct an effective portfolio in hard copy and digital formats. Topics include work selection, editing, composition, format and graphic reproduction techniques.

**Sec. 001**

Jennifer Ng, B.L.A.

3 meetings

Saturdays, 9:30 am–4:30 pm

April 26 and May 3 (also Saturday, May 17, 9:30 am–12:30 pm)

San Francisco: Art and Design Center • $375

**ENROLL NOW**

VISIT EXTENSION.BERKELEY.EDU

CALL (510) 642-4111
Re-entering the health care field after six years as a stay-at-home mom, **Susan Dugan** looks to the Professional Program in Health Advocacy to supplement her Master of Social Work and Master of Public Policy degrees. Because the curriculum is at the forefront of the field, Dugan knows she’s getting the most current knowledge. “There are no established requirements for this career, so class content is evolving with the field and the health care advocates populating it,” Dugan explains.

While focusing on her chosen career path, Dugan also uses information learned in class to help coordinate her aging mother’s health care. “I recently took Helping Patients Make Informed Decisions, taught by a Ph.D. in the UCSF School of Medicine,” she says. “We were provided a simple decision-making tool to assist our clients in making difficult health-related decisions. I applied the tool with my mother in a very difficult health treatment option, and her answer was quite clear. This tool is beneficial because it ensures consistency in how an advocate practices, which lends legitimacy to the field.”

With certificate soon in hand, Dugan plans to return to where her health career began—Capitol Hill—to formulate policy from a health advocate perspective. “There is no better opportunity for this than to work as a congressional aide on Capitol Hill assisting constituents with their health care concerns,” she says.
Get top 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.

**Behavioral Health Sciences**

**NEW COURSES**

- Brief Interventions for Alcohol and Other Substance Use Disorders, p. 42
- DSM 5: Implications for Clinicians, p. 30
- Evaluating Health Information for Health Care Communication and Decision Making, p. 48
- Narrative Therapy to Undermine Anxiety and Depression, p. 34
- An Overview of Behavioral Medicine Practice in Primary-Care Settings, p. 32
- Methamphetamine: Clinical Considerations in Treatment, p. 42
- New Standards for Addictions Counselors Under the Affordable Care Act, p. 42
- Practical Clinical Psychopharmacology: From A to Z (Adderall to Caffeine to Zoloft), p. 31
- Social Psychology, p. 40
- Treatment Approaches to Dysfunctional Anger, p. 30
- Understanding and Working With Employee Assistance Programs, p. 30
- Understanding Human Emotions: Implications for Clinical Practice, p. 31

**Counseling and Psychotherapy**

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**General Psychology**

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**Alcohol and Drug Abuse Studies**

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**Health Advocacy**

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**Public Health and Health Management**

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Free Information Sessions
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
Sec. 002
Tuesday, Jan. 7, 7:30–9 pm
Berkeley: Golden Bear Center

Post-Baccalaureate Program for Counseling and Psychology Professions
Sec. 002
Wednesday, Jan. 8, 6–7:30 pm
Berkeley: Golden Bear Center

Professional Program in Health Advocacy
Sec. 002
Tuesday, Jan. 7, 6–7 pm
Berkeley: Golden Bear Center

Meet Licensing and Relicensing Requirements
Many of our courses carry continuing education units (CEUs) to help you meet your professional licensure requirements. Available CEUs are listed below the course title with the following designations:
BRN: Board of Registered Nursing (provider 00226), for registered nurses
CAADAC: California Association of Alcoholism and Drug Abuse Counselors (provider 4C-99-416-0803), for certified alcohol and drug counselors
LCSW/MFT: Board of Behavioral Sciences (provider PCE 1505), 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.

Counseling and Psychotherapy

COURSE INFORMATION
(510) 643-3883
counselpsych@unix.berkeley.edu
extension.berkeley.edu/counseling

ONLINE COURSE INFORMATION
(510) 643-4957
extension.berkeley.edu/online

NEW THIS TERM
Treatment Approaches to Dysfunctional Anger

PSYCH 1098
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists
Gain an understanding of the psychological assessment and diagnosis of anger, and review evidence-based approaches for treating it. Dysfunctional anger is defined in this workshop with special reference to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Study important psychometric tests of anger, paying particular attention to treatment, especially self-regulation skills and psychotherapeutic approaches. Video demonstrations and role-playing exercises enhance your understanding.

Sec. 001
Ephrem Fernandez, Ph.D.
1 meeting
Saturday, 9 am–5 pm
April 19
Berkeley: Golden Bear Center • $215

NEW THIS TERM
Understanding and Working With Employee Assistance Programs

PSYCH 1096
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists
Employee assistance programs (EAPs) were once limited to large organizations with concentrated workforces in one geographic location. EAPs have evolved to accommodate both the needs of geographically diverse workforces and the needs of small and mid-sized employers. As a result, these programs have become widely available. The evolution in service delivery models has caused a shift in staffing from a small number of highly trained EA professionals to a large network of EA network affiliate providers who primarily identify themselves as mental health professionals. Get a high-level overview of contemporary EAPs and the role of their staff members and network affiliate providers. Explore the unique blend of clinical skills and workplace expertise that EA professionals develop, and understand the issue of identifying and intervening in substance abuse issues in the workplace.

Sec. 001
Tamara Cagney, Ed.D., MFT
2 meetings
Friday and Saturday, 9 am–4 pm
March 21–22
Berkeley: Golden Bear Center • $320

Meet Licensing and Relicensing Requirements
Many of our courses carry continuing education units (CEUs) to help you meet your professional licensure requirements. Available CEUs are listed below the course title with the following designations:
BRN: Board of Registered Nursing (provider 00226), for registered nurses
CAADAC: California Association of Alcoholism and Drug Abuse Counselors (provider 4C-99-416-0803), for certified alcohol and drug counselors
LCSW/MFT: Board of Behavioral Sciences (provider PCE 1505), 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.
UC Berkeley Psychology Department  
Distinguished Faculty CEU Workshop Series

UC Berkeley Extension is pleased to announce the latest in a series of CEU workshops in collaboration with the UC Berkeley Department of Psychology, featuring some of the leading researchers in the field.

Enroll early for one or all of the workshops with three of the most well-known and esteemed professors on the Berkeley campus: Ann M. Kring, Robert Levenson and David Presti.

### Advances in Human Brain Science for Clinicians

**PSYCH 1002**  
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, allowing you to incorporate the latest neuroscientific knowledge into practice and presents the latest research on the mind/body connection.

**Sec. 002**  
David Presti, Ph.D. (license PSY12835), Extension Honored Instructor  
1 meeting  
Friday, 9 am–5 pm  
April 4  
Berkeley: Golden Bear Center • $215

### Practical Clinical Psychopharmacology: From A to Z (Adderall to Caffeine to Zoloft)

**PSYCH 1100**  
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Get a comprehensive overview of the pharmacological properties and behavioral effects of all classes of psychiatric medications and other psychotropic drugs. Review the pharmacologic and behavioral aspects of medications used in the treatment of depression, psychosis, bipolar disorder, anxiety disorders and other psychiatric conditions. You also review the categories of drugs having potential for abuse, such as stimulants, depressants, analgesics, marijuana, psychedelics and dissociative anesthetics. Gain a comprehensive understanding of these drugs’ history, pharmacology and behavioral effects.

**Sec. 001**  
David Presti, Ph.D. (license PSY12835), Extension Honored Instructor  
1 meeting  
Friday, 9 am–5 pm  
May 2  
Berkeley: Golden Bear Center • $195

### Understanding Human Emotions: Implications for Clinical Practice

**PSYCH 1004**  
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

Emotions are a critical part of the human condition. In this workshop, you review some of the most exciting findings from affective science, drawing on state-of-the-art studies that explore the nuances of emotional experience, behavior and physiology, including emotion regulation and aging (surprising new strengths), emotion and couples relationships (how emotions create lasting, satisfying relationships) and emotion and health and well-being. The workshop includes the use of videos along with a number of hands-on exercises. You improve your ability to read emotions in your clients and others, and discuss implications for your clinical practice.

**Sec. 001**  
Robert Levenson, Ph.D.  
1 meeting  
Saturday, 9 am–4 pm  
May 10  
Berkeley: Golden Bear Center • $195

### DSM-5: Changes, Challenges and Opportunities

**PSYCH 1081**  
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists  
Study the history of *Diagnostic and Statistical Manual of Mental Disorders* revisions, focusing particular attention on the recent release of DSM-5. Examine the major changes made to DSM-5, including the rationale and scientific bases for the changes, and also discuss the process of DSM-5 development, the controversies surrounding DSM-5 and how changes to DSM-5 can affect research and practice. Compare the new DSM-5 to the latest edition of the International Classification of Disease, and consider the development of the Research Domain Criteria from the National Institute of Mental Health.

**Sec. 002**  
Ann M. Kring, Ph.D.  
1 meeting  
Friday, 9 am–4 pm  
May 16  
San Francisco: Downtown Center • $195
Professional Program in
Aging and Mental Health

Recipient of the UPCEA 2012 Outstanding Noncredit Program Award

As the U.S. population ages, the number of age-related morbidities increases and the need for knowledgeable health, social service and mental health professionals continues 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 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 comprises 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 PSYCH 1007
• Clinical Case Seminar on Aging and Mental Health PSYCH 1015

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
counspsy@unex.berkeley.edu

NEW THIS TERM
An Overview of Behavioral Medicine Practice in Primary-Care Settings
PSYCH 1099
0.7 ceu • 7 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

Learn about the emerging profession of behavioral medicine in primary-care settings to help determine your future health-care career options. Get an overview of the emergence of an integrated primary-care practice for mental health professionals. Examine the framework of an integrated care model that provides mental health services in private, public and military primary-care medicine settings. You also study varying guidelines appropriate to a multidisciplinary team and to a biopsychosocial model of care. You get an introduction to a range of diagnostic assessment tools and strategies appropriate for crafting a treatment plan appropriate for primary care physicians and other specialties.

Sec. 001
Robertta Celest Powell, M.S.W., Ph.D.
1 meeting
Saturday, 9 am–5 pm
March 15
Berkeley: Golden Bear Center • $215

An Experiential Introduction to Art Therapy
SOC WEL 1001
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. Study psychodynamic, analytic, humanistic, behavioral and mind/body techniques that, when applied, should open up new pathways for working with your clients. You are encouraged to bring a case about how to develop an art-therapy treatment plan to discuss with the class. 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.

Sec. 002
Janet Long, M.A., ATR-BC, CTP, MFT
2 meetings
Saturdays, 9 am–5 pm
April 5 and 12
Berkeley: Golden Bear Center • $345

Aging and Mental Health
Alzheimer’s Disease and Memory Loss: Working With Families
PSYCH 1003
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the professional programs in Aging and Mental Health and in the Study of Loss and Grief

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 Speaker
Craig Hou, M.D., a neurologist at Kaiser South San Francisco, specializes in behavioral and cognitive neurology, which includes degenerative conditions of the brain and causes of dementia such as Alzheimer’s disease.

Sec. 001
Julene Johnson, Ph.D., and Jennifer Merrilees, Ph.D., RN
1 meeting
Saturday, 9 am–4 pm
Feb. 1
San Francisco: Downtown Center • $195

Art Therapy With the Elderly
SOC WEL 1002
0.8 ceu • 8 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the professional programs in Aging and Mental Health and in the Study of Loss and Grief

Enhancing and renewing old skills, stimulating spontaneous expression, and providing a safe and lively place for life-review and revitalization of the creative spirit is critical for elders in hospitals, nursing homes and other long-term institutional settings. In this hands-on workshop, you learn exciting and developmentally appealing group creative-arts therapy ideas and methods. Open to all professionals working with this population. Wear comfortable clothes for art making.

Sec. 001
Janet Long, M.A., ATR-BC, CTP, MFT
1 meeting
Saturday, 9 am–6 pm
March 15
Berkeley: Golden Bear Center • $245
Aging and Long-Term Care: Update for Clinicians

PSYCH 1101
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the Professional Program in Aging and Mental Health

Get an overview of important aspects of geropsychology. Examine the medical, psychological, and social concerns that face older adults and their families and caregivers. Discuss various types of dementia and their treatment strategies. Review other treatment issues, including a survey of assessment measures; medication options; and treatment procedures in home, outpatient and residential care settings. In the afternoon, you also examine the most common medical and psychological illnesses of aging, including heart disease, stroke, Parkinson’s disease, high blood pressure, dementia and sleep disorders, as well as the medications to treat them. The workshop includes a special section on how a mind/body approach and a range of alternative medications can play a healing role.

Guest Instructor
Norana Caivano, M.D. is an integrative psychiatrist located in Berkeley, Calif. She specializes in holistic mental health treatment, including psychotherapy, medication management, and complimentary and alternative treatments such as supplements, yoga and meditation.

This workshop runs concurrently with the Licensing Workshop on Aging and Long-Term Care PSYCH 1043. See p. 39 for course schedule.

Sec. 001
Melinda Ginne, Ph.D., Extension Honored Instructor
1 meeting
Saturday, 9 am–4 pm
March 1
Berkeley: Golden Bear Center • $195

Neuropsychological Assessment

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

PSYCH 1052
1.3 ceu • 13 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Neuropsychological Assessment

Learn more about the growing field of neuropsychology. Examine the key concepts and principles behind neuropsychology, and gain a better understanding of the process by which testing and interpretation attack specific clinical problems. You also learn about screening, testing, interpreting test findings and writing reports. A serious introduction to this field, the course provides you with practical, hands-on experience in a workshop setting. Enrollment is limited.

Prerequisite: Previous Rorschach/MMPI experience

Guest Speakers
Philip Erdberg, Ph.D., is a diplomate in clinical psychology of the American Board of Professional Psychology.
James Livingston, Ph.D., is a clinical psychologist and the Clinical Services Manager for San Jose’s Center for the Survivors of Torture.

Sec. 001
William Lynch, Ph.D. (license PSY5151)
2 meetings
Saturdays, 9 am–4:30 pm
May 3 and 10
San Francisco: Downtown Center • $325

Advances in Human Brain Science for Clinicians

PSYCH 1002
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Gain an intuitive appreciation for how the brain operates and how it changes as a result of experience.

For course schedule, see p. 31.

Neurobiology of Complex Trauma

PSYCH 1051
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

Learn how complex trauma (repeated trauma) affects the chemistry, functioning and anatomy of the brain.

For course schedule, see p. 34.

Professional Program in Neuropsychological Assessment

Recipient of the UPCEA 2012 Outstanding Noncredit Program Award

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 aim to help 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 comprises 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 PSYCH 1002 (offered this term)
• Introduction to Neuropsychological Assessment PSYCH 1041
• Neuropsychological Assessment, Rorschach and MMPI-2: An Update for Advanced Clinical Practice PSYCH 1052 (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 counspsych@unex.berkeley.edu

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Professional Program in
The Treatment of Anxiety Disorders

Recipient of the UPCEA 2012 Outstanding Noncredit Program Award

An increasing number of evidence-based treatment approaches can help people overcome some of the most common anxiety disorders, including 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.

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

Required Workshops
• Cognitive Behavioral Treatment of Panic Disorders and Specific Phobias PSYCH 1019 (offered this term)
• Post-Traumatic Stress Disorder: Assessment and Treatment PSYCH 1057 (offered this term)
• Treating Obsessive-Compulsive Disorder and Body Dysmorphic Disorder PSYCH 1068
• Understanding and Treating Anxiety Disorders: An Overview PSYCH 1072
• Clinical Case Seminar: Anxiety Disorders PSYCH 1016

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
counselpsych@unex.berkeley.edu

Anxiety Disorders

NEW THIS TERM
Narrative Therapy to Undermine Anxiety and Depression

PSYCH 1097
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists
An elective in the professional programs in the Treatment of Anxiety Disorders and in the Treatment of Mood Disorders

Learn a narrative approach to working with clients who are dealing with anxiety and depression. Narrative therapists help people externalize their problems through increasingly complicated stories that they tell about themselves, a process that is guided and encouraged by the narrative therapist. This class is accessible for people new to narrative therapy and those with more experience.

Sec. 001
Julia Wallace, LCSW, and William Sherwin, M.A.
1 meeting
Saturday, 9 am–4 pm
March 22
San Francisco: Downtown Center • $195

Cognitive Behavioral Treatment of Panic Disorders and Specific Phobias

PSYCH 1019
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 disorders and specific phobias are highly prevalent and, at times, debilitating conditions called panic attacks and avoidance. These disorders can be effectively treated, often to remission and within a relatively brief period, using cognitive-behavioral therapy. Understand key elements of making a diagnosis, individualized case formulation; and treatment strategies, including psychoeducation, somatic relaxation, cognitive restructuring and exposure.

Sec. 001
Daniel Weiner, Ph.D.
1 meeting
Saturday, 9 am–5 pm
Jan. 11
San Francisco: Downtown Center • $215

Post-Traumatic Stress Disorder: Assessment and Treatment

PSYCH 1057
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists
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.

For course schedule, see p. 35.

Trauma-Informed Interventions

Overview of Trauma-Informed Assessment and Intervention

PSYCH 1056
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in Trauma-Informed Interventions

Learn the initial basic clinical concepts you as a clinician should know regarding the assessment and treatment of trauma and post-traumatic stress disorder (PTSD). Learn how trauma is defined socially, culturally and clinically, as well as how to assess and identify trauma histories in your clients. Examine strategies to clinically explore these histories in healing ways, including specific interventions to support clients in the clinical hour and manage your own feelings as you hear clients’ stories of trauma. Study helpful self-care strategies for clients with PTSD, as well as psychoeducational materials that can help support clients in reframing their trauma histories and starting along the path to healing. Teaching techniques include large- and small-group discussions, exploration of vignettes and a guest speaker.

Sec. 001
Rick Nizzardini, J.D., LCSW
2 meetings
Saturday and Sunday, 9 am–4 pm
Feb. 1–2
San Francisco: Art and Design Center • $320

Neurobiology of Complex Trauma

PSYCH 1051
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in Trauma-Informed Interventions; an elective in the Professional Program in Neuropsychological Assessment

Learn how complex, repeated trauma affects the chemistry, functioning and anatomy of the brain. Study these effects in the context of attachment, affect regulation and normative brain development and 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 affect the neuro-physiological effects of trauma. Plan to practice these interventions in the workshop. Teaching methods include lecture, case presentations, modeling and experiential exercises.

Sec. 001
Stefanie Smith, Ph.D.
1 meeting
Saturday, 9 am–4 pm
April 12
San Francisco: Downtown Center • $195
Post-Traumatic Stress Disorder: Assessment and Treatment
PSYCH 1057
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 post-traumatic stress disorder (PTSD), and it can occur at any age, including during childhood. In this workshop, you define PTSD, identify clinical manifestations and highlight treatment considerations. You also 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.
Sec. 001
Mark Balabanis, Ph.D.
1 meeting
Saturday, 9 am–5 pm
Feb. 8
Berkeley: Golden Bear Center • $215

Treatment of the Traumatized Child
PSYCH 1070
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.
Sec. 001
Julie Robbins, LCSW
1 meeting
Saturday, 9 am–5 pm
April 26
San Francisco: Downtown Center • $215

Professional Program in Trauma-Informed Interventions
Recipient of the UPCEA 2012 Outstanding Noncredit Program Award
Researchers have documented the prevalence of trauma in the majority of public-sector clients. Programs and systems seeking to integrate trauma-informed interventions include mental health, substance abuse, criminal justice, victim assistance and child welfare. Post-traumatic stress disorders and other trauma-related disorders and symptoms are increasing in the population of war veterans and those who have been exposed to other forms of violence in urban and domestic settings. With the innovative Professional Program in Trauma-Informed Interventions, you learn to serve your clients better—and improve your practice—through evidence-based assessment and treatment models developed for trauma victims.

Curriculum Requirements
The curriculum comprises 3 required workshops and 3 electives for a total of 4.2 ceu (42 hours of instruction).

Required Courses
• Overview of Trauma-Informed Assessment and Intervention
  PSYCH 1056 (offered this term)
• Neurobiology of Complex Trauma
  PSYCH 1051 (offered this term)
• Vicarious and Secondary Trauma
  PSYCH 1076

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

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

COURSES AVAILABLE THROUGHOUT THE YEAR
UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.
Professional Program in
Child and Adolescent Treatment

Recipient of the UPCEA 2012 Outstanding Noncredit Program Award

Children and adolescents have unique issues that require treatment tailored to their specific emotional needs, developmental issues and family circumstances. This program offers a series of topical workshops designed to help you and other mental health professionals stay current in your work with children, adolescents and their families. Choose from electives—taught by outstanding researchers and clinicians—that help you make better assessments and diagnoses, as well as more informed referrals and other professional recommendations related to your current practice.

Curriculum Requirements
The curriculum comprises 2 required workshops and 48 hours of electives for a total of 7.2 CEU hours.

Required Workshops
- Psychiatric Disorders in Children and Adolescents: Diagnostic Evaluation and Treatment PSYCH 1058
- Treatments That Work: Evidence-Based Psychotherapy for Children and Adolescents PSYCH 1071 (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

Child and Adolescent Treatment

Treatments That Work: Evidence-Based Psychotherapy for Children and Adolescents

PSYCH 1071
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. This two-day workshop presents guidelines for conducting evidence-based psychotherapy and reviews psychosocial treatments 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.

Sec. 001
Daniela Owen, Ph.D.
2 meetings
Saturdays, 9 am–4 pm
March 15 and 29
San Francisco: Downtown Center • $320

ASD (Autism Spectrum Disorders)
Chronic Conditions and Integrated Care Model

PSYCH 1005
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.

Sec. 002
Maria-Pilar Bernal-Estevez, M.D.
1 meeting
Saturday, 9 am–5 pm
Feb. 22
San Francisco: Downtown Center • $215

Professional Program in
Eating and Weight Disorders

Recipient of the UPCEA 2012 Outstanding Noncredit Program Award

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 adolescents, men, women, athletes and others.

Curriculum Requirements
The curriculum comprises 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 PSYCH 1006 (offered this term)
- Assessment, Etiology and Diagnosis of Eating Disorders PSYCH 1008
- Cognitive-Behavioral and Psychodynamic Approaches to the Treatment of Eating and Weight Disorders PSYCH 1020
- Nutrition and Eating and Weight Disorders PSYCH 1053 (offered this term)
- The Psychology of Weight Reduction: Eating, Exercise and Body Image PSYCH 1066

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
counspsych@unex.berkeley.edu

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
Treatment of the Traumatized Child
PSYCH 1070
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists
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. 35.

Eating and Weight Disorders
Assessing Levels of Care and the Use of Family Therapy in the Treatment of Eating Disorders
PSYCH 1006
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Professional Program in Eating and Weight Disorders
When a patient with an eating disorder presents in an outpatient setting, the clinician needs to know how to assess the appropriate level of care. Get an overview of the levels of care available, and clarify admission and discharge criteria at each level. Examine selected modalities of psychotherapy successful in the treatment of eating disorders—including the Maudsley method and the family systems approach—with an emphasis on the role of family therapy.
Sec. 001
Jacquelyn Holmes, M.Ed., MFT
1 meeting
Saturday, 9 am–4 pm
March 1
San Francisco: Downtown Center • $195

Nutrition and Eating and Weight Disorders
PSYCH 1053
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT 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.
Sec. 001
Sandi Liddicoat, B.S., RD
1 meeting
Saturday, 9 am–4 pm
May 17
San Francisco: Downtown Center • $195

Loss and Grief
Introduction to Loss and Grief Issues: Refreshing Old Skills, Learning New Skills
PSYCH 1040
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists
An elective in the Professional Program in the Study of Loss and Grief
Loss and grief provide an opportunity to transform deep emotion into healing. This workshop provides an overview of 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.
Guest Speakers
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
Sec. 001
Susan Moore, M.A., FT
2 meetings
Saturday and Sunday, 9 am–4 pm
May 31–June 1
San Francisco: Art and Design Center • $320

Somatic Aspects of the Grief Response
PSYCH 1102
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists
An elective in the Professional Program in the Study of Loss and Grief
Get the information, skills and resources to better understand the human body’s somatic grief process. During this workshop, you gain insight into the mental, emotional and physical aspects of the grief process from the perspective of terminally ill patients and the bereaved. Examine the interrelationship between physical and emotional pain. Learn to differentiate between preparatory and anticipatory grief, and understand the difference between depression and grief. Explore specific communication skills and grief assessment tools. Learn how to more fully support a grieving individual, recognize options for treatment modalities and make effective referrals.
This class is intended for health care professionals and licensed clinicians as well as hospice staff, teachers, clergy, first responders and any others who work in settings with individuals facing loss and grief.
Sec. 001
Joseph Lummelo, M.A.
1 meeting
Saturday, 9 am–4 pm
March 1
Berkeley: Golden Bear Center • $195

Professional Program in
The Study of Loss and Grief
Recipient of the UPCEA 2012 Outstanding Noncredit Program Award
If you are a professional working 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 comprises 2 required workshops and 41 hours of electives for a total of 6.4 ceu (60 hours of instruction).

Required Workshops
• Clinical Case Seminar in Loss and Grief
PSYCH 1014
• Introduction to Loss and Grief Issues: Refreshing Old Skills, Learning New Skills PSYCH 1040 (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
counspsych@unex.berkeley.edu

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Mood Disorders

Evidence-Based Psychotherapy for Mood Disorders

PSYCH 1031
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. You learn specific evidence-based treatment for unipolar and bipolar depression in adults, as well as cognitive-behavior therapy.

Sec. 001
Robert Hise, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Feb. 8
San Francisco: Downtown Center • $195

NEW THIS TERM
Narrative Therapy to Undermine Anxiety and Depression

PSYCH 1097
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

Learn a narrative approach to working with clients who are dealing with anxiety and depression.

For course schedule, see p. 34.

Post-Traumatic Stress Disorder: Assessment and Treatment

PSYCH 1057
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Gain a thorough understanding of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnostic criteria for post-traumatic stress disorder; recognize clinical manifestations of the disorder; and review considerations for treatment, including psychotherapy and medications.

For course schedule, see p. 35.

Art Therapy With the Elderly

SOC WEL 1002
0.8 ceu • 8 hours CE credit: BRN, LCSW/MFT and psychologists

Learn exciting and developmentally appealing group creative-arts therapy ideas and methods.

For course schedule, see p. 32.

Alzheimer’s Disease and Memory Loss: Working With Families

PSYCH 1003
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

Learn the causes, clinical presentation, prognosis and treatment of Alzheimer’s disease and mild cognitive impairment.

For course schedule, see p. 32.

An Experiential Introduction to Art Therapy

SOC WEL 1001
1.4 ceu • 14 hours CE credit: BRN, LCSW/MFT and psychologists

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. 32.

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/static/about/jobs.

UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO
Licensing and Relicensing Workshops and Courses

Human Sexuality: Prelicensure Workshop

PSYCH 1038
1.0 ceu • 10 hours CE credit: BRN, LCSW/MFT and psychologists

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.

Sec. 003
Rick Nizzardini, J.D., LCSW
2 meetings
Saturday, 9 am–4 pm
March 15 (also Sunday, March 16, 9 am–1 pm)
San Francisco: Art and Design Center • $285

Child Abuse and Incest: Assessment, Reporting and Treatment

PSYCH 1010
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Learn to place child abuse and neglect within their historical and cultural context; then, review 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.

Sec. 002
Julie Robbins, LCSW
1 meeting
Saturday, 9 am–5 pm
Feb. 22
San Francisco: Downtown Center • $215

Sec. 003
Allison Briscoe-Smith, Ph.D.
Enroll anytime
Online • $215

Ethical Decision Making in Complex Cases

PSYCH 1029
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

This course satisfies the ethics continuing education course requirement for psychologists, MFTs, LCSWs and LPCs that is required every license-renewal period.

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.

Sec. 002
David Jull-Patterson, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Feb. 1
San Francisco: Downtown Center • $195

Licensure Workshop on Aging and Long-Term Care

PSYCH 1043
0.3 ceu • 3 hours CE credit: BRN, LCSW/MFT and psychologists

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.

This workshop runs concurrently with Aging and Long-Term Care: Update for Clinicians PSYCH 1101. See p. 33 for course schedule.

Sec. 003
Melinda Ginne, Ph.D.
1 meeting
Saturday, 9 am–12 pm
March 1
Berkeley: Golden Bear Center • $95

Assessment and Treatment of Alcohol and Drug Problems

PB HLTH 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 to understand 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 write-up. Enrollment is limited.

Sec. 001
Nancy Piotrowski, Ph.D.
Enroll anytime
Online • $365

FIVE WAYS TO ENROLL

1. Online: extension.berkeley.edu
2. Phone: (510) 642-4111
3. Mail:
   Department B
   1995 University Ave., Suite 110
   Berkeley, CA 94704-7000
4. Purchase Order: (510) 642-3910
5. In Person: At Golden Bear Center, 1995 University Ave., Berkeley
The U.S. Department of Labor forecasts more than a half-million job openings in the next decade in the health and helping professions: counseling, psychotherapy, social work, clinical psychology, psychiatric nursing and health education. This program is ideal if you are a career changer who needs to complete undergraduate course prerequisites or if you want to become more competitive for graduate or professional school in counseling and psychology. Designed for those with bachelor’s degrees, the curriculum comprises a range of upper-division psychology courses that are required or strongly recommended by graduate and professional schools in social work, counseling and psychology. The program also offers guidance in planning your academic program of study and in initiating the graduate school application process.

**Curriculum Requirements**
The curriculum comprises 6 required courses for a total of 12 semester units and 2.4 ceu (204 hours of instruction).

**Required Courses**
- Counseling and Psychotherapy as a Career Option PSYCH 1021 (offered this term)
- Abnormal Psychology PSYCH X146 (offered this term)
- Introduction to Developmental Psychology PSYCH X140 (offered this term)
- Psychology of Personality PSYCH X176 (offered this term)
- Research Methods in Psychology PSYCH X106 (offered this term)
- Career Seminar in Counseling and Psychology PSYCH 1009 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/spos/psychologyprofessions.html
(510) 643-3883 counspsynch@unex.berkeley.edu

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**General Psychology**

**COURSE INFORMATION**
(510) 643-3883 counspsynch@unex.berkeley.edu
extension.berkeley.edu/counseling

**ONLINE COURSE INFORMATION**
(510) 643-4957 extension.berkeley.edu/online

**FREE INFORMATION SESSION**
**Post-Baccalaureate Program for Counseling and Psychology Professions**
UNEX 1058
Learn how the program can prepare you to become more competitive for admission to graduate or professional schools in counseling and psychology. Whether you are changing careers or already working in the field, understand how this program can help you plan an academic program of study and initiate the graduate school application process. For details, see this page or visit extension.berkeley.edu/spos/psychologyprofessions.html.

**Sec. 002**
1 meeting
Wednesday, 6–7:30 pm
Jan. 8
Berkeley: Golden Bear Center • FREE

**Counseling and Psychotherapy as a Career Option**
PSYCH 1021
1.8 ceu • 18 hours CE credit
A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions
Investigate the training and licensing options available for mental health professionals. Speak to and ask questions of several mental health professionals working in the field. 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 and are designed to assist you in your decision process regarding a career in mental health.

**Enrollment is limited.**

**Sec. 002**
Richard Chiavarelli, Psy.D.
3 meetings
Saturday and Sunday, 9 am–5 pm
Jan. 25–26 (also Sunday, Feb. 2, 9 am–1 pm)
Berkeley: Golden Bear Center • $385

**Abnormal Psychology**
PSYCH X146 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit
A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions
Learn about the dynamics and prevention of abnormal behavior, including neuroses, psychoses, character disorders, psychosomatic reactions, schizophrenia and other abnormal personality patterns.

**Sec. 004**
Michael Shopshire, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 23–May 1
Berkeley: Golden Bear Center • $645

**Research Methods in Psychology**
PSYCH X105 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit
A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions
Gain an understanding of the scientific methods behind psychological research. 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.

**Prerequisite:** A lower-division general psychology course

**Sec. 003**
Bernadette M. Guimberteau, Ph.D.
Jan. 21–April 15
Online • $730

**Sec. 004**
Bernadette M. Guimberteau, Ph.D.
10 meetings
Saturdays, 1:30–6 pm
Feb. 8–April 19 (no meeting on Feb. 15)
Berkeley Campus: 103 Wheeler Hall • $625

**Adolescent Psychology**
PSYCH X391.1 • 3 semester units in Psychology
Explore current theories about adolescents’ physical, mental, emotional, social and personality characteristics. 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.

**Sec. 001**
Darrel Dean Richards, Ph.D.
Enroll anytime
Online, proctored final exam • $730
Psychology of Personality
PSYCH X176  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit
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. 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.

Sec. 004
Christina Chin-Newman, Ph.D.
Jan. 21–April 15
Online  • $730

Sec. 005
Lon Felton, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–April 29
Berkeley Campus: 109 Wheeler Hall  • $645

Introduction to Developmental Psychology
PSYCH X140  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit
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.

Sec. 004
Richard Sprott, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 22–May 14 (no meetings on Jan. 29 and March 19)
Berkeley Campus: 20 Wheeler Hall  • $645

Sec. 001
Richard Sprott, Ph.D.
Enroll anytime
Online  • $730

Career Seminar in Counseling and Psychology
PSYCH 1008  • 0.6 ceu
A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions
If you are applying to graduate programs in psychology, counseling or social work and have enrolled (and have completed half of the coursework) in the Post-Baccalaureate Program for Counseling and Psychology Professions, this course helps you make final decisions on where to apply to graduate or professional schools. It can also assist you in preparing your applications, letters of references and other requirements.

Sec. 002
Richard Chiocarelli, Psy.D.
2 meetings
Sundays, 9 am–12 pm
May 11 and 18
Berkeley: Golden Bear Center  • $195

Biological Psychology
PSYCH X155  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit
Explore brain-behavior relationships with a 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.

Sec. 002
Nicola Wolfe, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–May 6 (no meeting on March 25)
San Francisco: Downtown Center  • $645

Intimate Relationships Throughout the Lifespan
PSYCH X173  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit
Get an introduction to the major theories and findings regarding parent-child relationships and attachment, friendships, and sexual and romantic relationships. Explore developmental changes during childhood, adolescence, adulthood and old age, focusing on the impact of intimate relationships in relation to gender, culture, class, society and technology.

Sec. 003
Richard Sprott, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 27–May 12 (no meeting on Feb. 17)
Berkeley Campus: 24 Wheeler Hall  • $645

NEW THIS TERM

Social Psychology
PSYCH X180  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit
Get an introduction to the experimental methods used in the study of social psychology through reading and evaluating primary research. Examine social psychological constructs from a broad range of theoretical approaches. Learn to apply principles of introductory psychology to social phenomenon, and gain a working knowledge of established principles in social psychology.

Sec. 001
Ihsana Salmon, Psy.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 22–April 30
Berkeley Campus: 221 Wheeler Hall  • $645

Psychology of Communication
PSYCH X156.1  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit: BRN
An elective in the Post-Baccalaureate Program for Counseling and Psychology Professions
Recipient of the Meritorious Award for the Best College-Level Distance Course from the University Professional and Continuing Education Association (UPCEA).
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: A lower-division general psychology course

Sec. 001
Michael Swett, Ph.D.
Enroll anytime
Online, proctored final exam  • $730

General Psychology
PSYCH XBW1  • 3 semester units in Psychology
4.5 ceu  • 45 hours CE credit: BRN
Important: Special academic policies apply to XBW courses. See p. 230 for details.
Get 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.

Sec. 001
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam  • $730
Alcohol and Drug Abuse Studies

COURSE INFORMATION
(510) 642-1061
alcdrug@unex.berkeley.edu
extension.berkeley.edu/counseling

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)

FREE INFORMATION SESSION
Certificate Program in Alcohol and Drug Abuse Studies
UNEX 1037

Students, instructors and staff discuss the certificate and its benefits in terms of career development, personal growth and job opportunities. Staff members discuss the program’s history, philosophy, cost and completion time. Some instructors are present to describe their courses. Current students share the intellectual, conceptual and personal challenges they have faced in the program and the changes they have experienced as a result of attending. For details, see p. 43 or visit extension.berkeley.edu/cert/alcohol.html.

Sec. 002
1 meeting
Tuesday, 7:30–9 pm
Jan. 7
Berkeley: Golden Bear Center • FREE

Electives

NEW THIS TERM
New Standards for Addictions Counselors Under the Affordable Care Act

PB HLTH 1032
0.6 ceu • 6 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

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

The implementation of the Affordable Care Act is a defining moment for the addictions field. New standards have been created for delivery of addiction treatment. Health care reform requires addictions counselors to have the ability to work in a multidisciplinary environment and more fully document outcomes to meet new insurance requirements. Explore some of the major new benchmarks for the addiction professional including scope of practice issues, documentation skills and the evolving nomenclature in health care settings.

Sec. 001
Thomas P. Gorham, M.A., CADC-II
1 meeting
Saturday, 9 am–4 pm
Feb. 1
Berkeley: Golden Bear Center • $185

NEW THIS TERM
Methamphetamine: Clinical Considerations in Treatment

PB HLTH 1031
0.6 ceu • 6 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

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

Research shows that prolonged methamphetamine use can cause cognitive impairment, physiological toxicity and even mood disorder. Understanding how the drug affects the user is imperative in engaging clients in treatment and preventing relapse. The insights and strategies provided in this workshop can help you become more effective in working with this difficult population. You learn the most recent pharmacological and behavioral treatment methods based on what research has shown about the affects of methamphetamine on the brain and body. Discuss empirically based assessment and treatment techniques. Get practical information and clinical treatment strategies to stabilize and engage clients in treatment.

Sec. 001
Mark Stanford, Ph.D., Extension Honored Instructor
1 meeting
Friday, 9 am–4 pm
March 21
San Francisco: Art and Design Center • $185

NEW THIS TERM
Brief Interventions for Alcohol and Other Substance Use Disorders

PB HLTH 1030
0.6 ceu • 6 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

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

Most alcohol-related harm is caused by excessive drinkers whose consumption exceeds recommended drinking levels, not the drinkers with severe alcohol-dependency problems. Get an overview of the practice of brief interventions, which has found increased usage in emergency room, primary-care and university settings. Drawing on Motivational Interviewing (MI) techniques, you discuss screening, referral, moderation and abstinence. You also learn how to use these MI techniques with problem drinkers and other substance abusers.

Sec. 001
Joshua Kirsch, LCSW
1 meeting
Friday, 9 am–4 pm
April 4
Berkeley: Golden Bear Center • $185

NEW THIS TERM
Practical Clinical Psychopharmacology: From A to Z (Adderall to Caffeine to Zoloft)

PSYCH 1100
0.7 ceu • 7 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

Get a comprehensive overview of the pharmacological properties and behavioral effects of all classes of psychiatric medications and other psychotropic drugs.

For course schedule, see p. 31.
Certificate Program in Alcohol and Drug Abuse Studies

This program has been approved for California Foundation for Advancement of Addictions Professionals (CFAAP) members and meets all of the educational requirements for membership in the California Association of Alcoholism and Drug Abuse Counselors (CAADAC).

This professional certificate can help you start a career in addictions counseling or enhance your counseling expertise. Developed in association with the University of California, Berkeley, School of Public Health, this certificate raises the quality of professionalism in addictions counseling. Following a three-level, developmental approach to the critical issues contributing to substance abuse, the curriculum begins with a thorough foundation in the biomedical, cultural, historical and psychological aspects of chemical dependency. It then covers the knowledge needed to work effectively in the field and culminates with intervention instruction, career-preparatory courses and internship options, providing practical experience to ensure you remain effective and positive in this demanding field.

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

Required Courses

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

Level II
- Addressing Co-Occurring Disorders in Addictions Counseling PB HLTH X143 (offered this term)
- Career Preparation and Self-Care in Addictions Counseling PB HLTH 1004 (offered this term)
- Continuing Care and Case Coordination in Chemical Dependency PB HLTH X134 (offered this term)
- Diagnosis and Assessment in Chemical Dependency PB HLTH X132 (offered this term)
- Environmental Strategies for the Prevention of Alcohol and Drug Problems PB HLTH X151
- Family Recovery in Chemical Dependency PB HLTH X116 (offered this term)
- Group Process and Practice With Chemically Dependent Populations PB HLTH X144 (offered this term)
- Legal and Ethical Aspects of Chemical Dependency Treatment PB HLTH X135 (offered this term)

Level III
- Counseling Interventions in Chemical Dependency PB HLTH X133 (offered this term)
- Field Experience in Chemical Dependency PB HLTH X109 (offered this term)
- Field Experience in Chemical Dependency—CAADAC Option PB HLTH X159 (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

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
Level I

Behavioral Pharmacology and Biomedical Foundations of Chemical Dependency

PB HLTH X126 • 2 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies; an elective in the Post-Baccalaureate Health Professions Program
For centuries, chemical dependency has been seen as a character flaw rather than a medical condition. Research, however, shows a strong biological basis for addiction. Examine the genetic predisposition to alcoholism, the classification of drugs based on their effect on behavior, the metabolism of drugs and the treatment of withdrawal symptoms. Other topics include neurotransmitter theory and drug-related depression, suicide and violence. Study in-depth how to integrate this complex medical model with 12-step programs and other approaches to recovery. You also review basic neuroanatomy and physiology.

Sec. 002
Mark Stanford, Ph.D., Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–March 12
San Francisco: Art and Design Center • $395

Introduction to Counseling Techniques in Chemical Dependency

PB HLTH 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.

Sec. 002
Jimmie Turner, Ph.D., Extension Honored Instructor
4 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–29 (also Saturday, Jan. 25, 9 am–4 pm; no meeting on Jan. 22)
Berkeley Campus: 109 Wheeler Hall • $285

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

PB HLTH X128 • 2 semester units in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Political and social contexts shape society’s views about and responses to drug use. Explore the cultural and historical roots of evolving alcohol and drug policies in American society. Investigate traditional substance-abuse service systems, as well as critiques of the war on drugs and pressures to reform and innovate.

Sec. 003
John De Miranda, Ed.D., LAADC
10 meetings
Thursdays, 6:30–9:30 pm
Feb. 13–April 17
Berkeley Campus: 2 Evans Hall • $395

Psychological Foundations of Chemical Dependency

PB HLTH X127 • 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. You examine behavioral-cognitive, social-psychological and developmental theories of motivation and behavior change for the contributions they can make to treatment strategies appropriate to the varied and complex needs of the addicted population. You pay particular attention to such critical aspects of recovery as overcoming denial and resistance and working with codependents.

Sec. 001
Valerie Gruber, M.P.H., Ph.D.
10 meetings
Wednesdays, 6–9 pm
March 19–May 21
San Francisco: Downtown Center • $395

Level II

Addressing Co-Occurring Disorders in Addictions Counseling

PB HLTH X143 • 1 semester unit in Public Health
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
The occurrence of mental health disorders is the norm in addictions counseling, and the integration of mental health and substance treatment is critical. Understand how to recognize the signs of commonly co-occurring disorders. Learn how to tailor substance abuse interventions to clients with different types of mental health problems and recognize when to refer clients elsewhere. You also examine research-based interventions such as motivational interviewing, social skills training, grounding and cognitive-behavioral therapy.

Sec. 001
Joshua Kirsch, LCSW
2 meetings
Fridays, 9 am–5:30 pm
March 14 and 21
Berkeley: Golden Bear Center • $295

Career Preparation and Self-Care in Addictions Counseling

PB HLTH 1004 • 0.2 ceu
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Get a brief overview of current workforce issues and trends, and discover ways 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 Field Experience in Chemical Dependency PB HLTH X109.

Prerequisites: All Level I courses in the Certificate Program in Alcohol and Drug Abuse Studies

Sec. 003
Perri Franskoviak, Ph.D.
1 meeting
Thursday, 6:30–8:30 pm
May 22
Berkeley: Golden Bear Center • $65
Continuing Care and Case Coordination in Chemical Dependency
PB HLTH X134  •  2 semester units in Public Health  
3.0 ceu  •  30 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Get an overview of continuing care, case coordination principles, and the practices used to establish and maintain recovery and prevent relapse. Learn different ways of thinking about the recovery and potential relapse process for chemically dependent clients, and identify effective treatment and case coordination approaches for these clients. Topics aim to serve a diverse population.
Sec. 002
Dee-Dee Stout, M.A., CADC-II, LAADC  
30 hours CE credit: BRN, LCSW/MFT  
Mondays, 9 am–4 pm  
San Francisco: Art and Design Center  
Berkeley: Golden Bear Center  
Feb. 20–May 15  
Thursdays, 6:30–9:30 pm  
5 meetings
San Francisco: Art and Design Center  
Berkeley: Golden Bear Center  
• $295

Diagnosis and Assessment in Chemical Dependency
PB HLTH X132  •  2 semester units in Public Health  
3.0 ceu  •  30 hours CE credit: BRN, LCSW/MFT and psychologists
Learn to identify and define an addiction syndrome. Review various physiological, psychological and social variables in making a diagnosis. Discuss the legal and financial constraints in making referrals. Topics include a review of treatment alternatives and their underlying philosophies, how to match a client with the most appropriate alternative and how to develop an effective treatment and referral plan. The use of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and difficulties in dual-diagnosis receive special attention.
Sec. 002
Steven Allen, Ph.D.  
10 meetings  
Wednesdays, 6:30–9:30 pm  
March 13–May 21  
Berkeley Campus: 4 Evans Hall  
• $385

Family Recovery in Chemical Dependency
PB HLTH X116  •  1 semester unit in Public Health  
1.5 ceu  •  15 hours CE credit: BRN, LCSW/MFT and psychologists
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Review assessment, intervention and treatment in chemically dependent families using a developmental model of recovery. Topics include needs, concerns and resistances of individual members and the family as a whole; the dynamics of codependency; a comparison of approaches to family recovery; treatment techniques appropriate to the different phases of family recovery; and strategies to help prevent family relapse.
Sec. 002
Karen Kaufman, Ph.D.  
5 meetings  
Thursday, March 27, 6–9 pm  
(also Mondays, March 31, and April 21 and 28, 6–9 pm;  
Saturday, April 12, 9 am–4 pm)  
Berkeley: Golden Bear Center  
• $335

Group Process and Practice With Chemically Dependent Populations
PB HLTH X144  •  1 semester unit in Public Health  
1.5 ceu  •  15 hours CE credit: BRN, LCSW/MFT and psychologists
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 learn strategies on selecting patients and being a group leader. You also examine methods appropriate to the transitional (open) group and the closed group. Structured time lets you practice these strategies in small groups.
Sec. 001
Anthony Scuderi, D.Min., Psy.D., CADC, CCS  
5 meetings  
Tuesdays, 6:30–9:30 pm  
April 22–May 20  
San Francisco: Art and Design Center  
• $295

Legal and Ethical Aspects of Chemical Dependency Treatment
PB HLTH X135  •  1 semester unit in Public Health  
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
Learn to examine various ethical and legal issues that are designed to increase the standard of care for the client, including competence, consultations with colleagues, documentation requirements, consent to treatment, client confidentiality (including the Code of Federal Regulations), suicidal and homicidal clients, child and elder abuse reporting requirements, and civil commitment procedures.
Sec. 001
James Sorensen, Ph.D.  
4 meetings  
Thursdays, 6:30–9:30 pm  
April 24, and May 8 and 15 (also Saturday,  
May 3, 9 am–4 pm)  
San Francisco: Downtown Center  
• $295

Environmental Strategies for the Prevention of Alcohol and Drug Abuse Problems
PB HLTH X151  •  1 semester unit in Public Health  
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
This course will be offered in summer 2014.

Level III
Counseling Interventions in Chemical Dependency
PB HLTH 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. You learn about 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
Sec. 002
Jimmie Turner, Ph.D., Extension Honored Instructor  
13 meetings  
Thursdays, 6–9:30 pm  
Feb. 20–May 15  
Berkeley: Golden Bear Center  
• $695
Test Preparation

**CAADAC Test Preparation Workshop**

PB HLTH 1003 • 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. Improve your understanding of the written test process, review key content areas of study for the written examination, learn skill-building tips for addictions counselors, and practice using a series of sample questions to identify keys for success.

**Sec. 003**
Neil Miller, CADC-II

1 meeting
Saturday, 9 am–4 pm
May 17

Berkeley: Golden Bear Center • $185

Health Advocacy

**COURSE INFORMATION**

(510) 642-1061
pubhealth@unex.berkeley.edu
extension.berkeley.edu/counseling

**FREE INFORMATION SESSION**

**Professional Program in Health Advocacy**

UNEX 1061

Learn how this program can help you better understand the increasingly complex and dynamic health system in the United States, including how you can become an informed health advocate qualified to advise patients and their families. Meet staff members who discuss how you can become a health advocate, geriatric case manager, discharge planner or family adviser. For more information, see p. 47 or visit extension.berkeley.edu/spos/healthadvocacy.html.

**Sec. 002**

1 meeting
Tuesday, 6–7 pm
Jan. 7

Berkeley: Golden Bear Center • FREE

**Overview of Health Care Advocacy**

PB HLTH X403.5 • 1 semester unit in Public Health

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.

**Sec. 002**
Joanna Smith, M.P.H., CHA, LCSW

5 meetings
Mondays, 6:30–9:30 pm
Feb. 3–March 10 (no meeting on Feb. 17)
Berkeley Campus: 203 Wheeler Hall • $265

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**Field Experience in Chemical Dependency**

PB HLTH 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 delivering client services. The course’s 30-hour classroom portion provides a supportive setting for you to discuss, analyze and solve problems arising from your field experience and project.

**Enrollment is limited to 15.**

**Prerequisites:** Completion of all Level I and II courses in the Certificate Program in Alcohol and Drug Abuse Studies or consent of instructor

**Sec. 002**
Peter Goetz, M.S., MFT
4 meetings

Saturdays, 9 am–5:30 pm
Jan. 11 and 25, Feb. 8 and March 22

Berkeley: Golden Bear Center • $560

**Field Experience in Chemical Dependency—CAADAC Option**

PB HLTH 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 PB HLTH X109 but extends the coursework and requires 255 CAADAC-eligible internship hours. The instructor approves placement sites and student assignments based on CAADAC acceptability and an individualized assessment of student capabilities.

**Prerequisites:** Completion of all Level I and II courses in the Certificate Program in Alcohol and Drug Abuse Studies or consent of instructor

**Sec. 002**
Peter Goetz, M.S., MFT
6 meetings

Saturdays, 9 am–5:30 pm
Jan. 11 and 25; Feb. 8; March 8 and 22; and April 12

Berkeley: Golden Bear Center • $695
Overview of Health Care Insurance Options
PB HLTH X403.3 • 1 semester unit in Public Health
A requirement in the Professional Program in Health Advocacy
Get an introduction to issues related to public and private health insurance programs in California. Learn about public program eligibility criteria; the application process; and what is covered by Medicare, Medi-Cal, Healthy Families and county programs. You also review upcoming changes to these programs by the Patient Protection and Affordable Care Act (ACA) of 2010.
Guest Lecturer
Elaine Wong Eakin, executive director, California Health Advocates
Sec. 002
Todd Landreneau, Ph.D., CHC, CPHQ
3 meetings
Saturdays, 9 am–2 pm
March 15–29
Berkeley Campus: 30 Wheeler Hall • $265

Families and Health Care Advocacy
PB HLTH X404.6 • 1 semester unit in Public Health
A requirement in the Professional Program in Health Advocacy
Examine how family systems theory can help you work collaboratively with families to better meet their 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.
Sec. 001
Jamie Bachman, LCSW
5 meetings
Wednesdays, 6:30–9:30 pm
April 2–30
Berkeley Campus: 2 Evans Hall • $265

Navigating the Health Care System
PB HLTH X404.7 • 1 semester unit in Public Health
An elective in the Professional Program in Health Advocacy
Enhance your ability to advocate for your clients and patients in health care settings. Learn the questions to ask to make more informed choices for others. Gain general knowledge about types of insurance plans and where to get additional information or assistance about Medicare and Medi-Cal benefits. This workshop is designed primarily for health professionals who want to increase their effectiveness in navigating the health care system.
Sec. 002
Frances Franco, M.S.W.
5 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–Feb. 12
Berkeley: Golden Bear Center • $265

Professional Program in Health Advocacy
With an increasingly complex and dynamic health care system in the United States and an aging population, the need is growing 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 and the key provisions of both Medicare and Medicaid/Medi-Cal legislation. Gain an in-depth understanding of the continuum of options available for both inpatients and outpatients, 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 comprises 5 required courses (5 semester units) and 2 electives (1 semester unit and 0.6 ceu) for a total of 6 semester units and 0.6 ceu (96 hours of instruction).
Required Courses
• Overview of Health Care Advocacy PB HLTH X403.5 (offered this term)
• Families and Health Care Advocacy PB HLTH X404.6 (offered this term)
• Overview of Health Insurance Options PB HLTH X403.3
• Navigating the Health Care System PB HLTH X404.7
• Ethical and Legal Issues in Health Care PB HLTH X403.4

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

Learn More and View the Flyer
extension.berkeley.edu/spos/healthadvocacy.html
(510) 642-1061
pubhealth@unex.berkeley.edu

FREE PUBLIC EVENT
Health Care Reform Update: Progress and Challenges
PB HLTH 1210
The Affordable Care Act (ACA) federal health reform law was passed four years ago. What has the ACA accomplished, what progress has been made and what health reform challenges lay ahead? This public lecture provides an overview of what every health professional and consumer needs to know.
Sec. 001
1 meeting
Friday, 4:30–6 pm
April 4
Berkeley: Golden Bear Center • FREE
William Dow, Ph.D., is Henry J. Kaiser Professor of Health Economics and chair of the Health Services and Policy Analysis Graduate Group at the University of California, Berkeley. His main fields of study are health economics, particularly health insurance, international health and economic demography. Dow has recently explored the impact of conditional cash transfers as an HIV-prevention tool in Tanzania.
Helping Patients Make Informed Decisions  
PB HLTH 1014  
0.6 ceu  •  6 hours CE credit: BRN, LCSW/MFT and psychologists  
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.  
Sec. 001  
Shelley Vozl, M.A.  
1 meeting  
Saturday, 9:30 am–4:30 pm  
March 8  
San Francisco: Downtown Center • $195

NEW THIS TERM  
Evaluating Health Information for Health Care Communication and Decision Making  
PB HLTH X441  •  1 semester unit in Public Health  
An elective in the Professional Program in Health Advocacy  
Learn to critically appraise the scientific literature, and understand potential biases in the design, conduct and publication of clinical research. Review published studies, including randomized control trials, systematic reviews, nonexperimental designs and media reports of findings. Lectures, reading assignments, and interactive evaluation and discussion of published research papers and media reports form the core of this course. You also discuss the role of a health advocate in translating key research information for patients and their families.  
Sec. 001  
Donna H. Odierna, M.S., Dr.P.H.  
5 meetings  
Tuesdays, 6:30–9:30 pm  
April 22–May 20  
Berkeley Campus: 203 Wheeler Hall • $265

NEW THIS TERM  
An Overview of Behavioral Medicine Practice in Primary-Care Settings  
PSYCH 1099  
0.7 ceu  •  7 hours CE credit: BRN, LCSW/MFT and psychologists  
Learn about the emerging profession of behavioral medicine in primary-care settings to help determine your future health-care career options.  
For course schedule, see p. 32.

Public Health and Health Management

COURSE INFORMATION  
(510) 643-3883  
counspych@unex.berkeley.edu  
extension.berkeley.edu/counseling

ONLINE COURSE INFORMATION  
(510) 643-4957  
extension.berkeley.edu/online

Health Policy in the United States  
PB HLTH 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.  
Sec. 003  
Dana Hughes, A.B., M.P.H., M.S., Ph.D.  
10 meetings  
Wednesdays, 6:30–9:30 pm  
Jan. 8–March 12  
Berkeley Campus: 2 Evans Hall • $395

Introduction to Health Economics  
PB HLTH 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 form your own vision of the economics of health care.  
Prerequisite: An undergraduate introductory economics course  
Sec. 001  
Koziah Cook, Ph.D.  
10 meetings  
Mondays, 6:30–9:30 pm  
Jan. 27–April 7 (no meeting on Feb. 17)  
San Francisco: Downtown Center • $395

Principles of Epidemiology  
PB HLTH X186  •  2 semester units in Public Health  
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. 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.  
Sec. 003  
Paul Gilbert, Sc.M., Ph.D.  
10 meetings  
Saturdays, 9 am–12 pm  
Jan. 29–April 5 (no meeting on Feb. 15)  
Berkeley Campus: 24 Wheeler Hall • $385

General Nutrition  
NUSCTX 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 enables 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 macronutrients and micronutrients; 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.  
Sec. 001  
Alanna Nimau Vigil, M.S., RD  
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Online • $770
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**Free Information Sessions and Open Houses**

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**BUSINESS**
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**CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT**
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- Certificates and Professional Programs in Technology and Information Management (p. 170)

**WRITING, EDITING AND TECHNICAL COMMUNICATION**
- Online Information Session: Writing and Editing (p. 188)
- Post-Baccalaureate Certificate Program in Writing (p. 191)
- Professional Sequence in Editing and Specialized Program in Professional Writing (p. 188)
Having recently relocated from Russia, Mila Ioffe recalls the need to gain new skills to be an effective marketer in the U.S. and land a position stateside. Thanks to the Certificate Program in Marketing, Ioffe now has the job to show for it.

Her current marketing position with software developer CM Latitude allows Ioffe to apply skills learned in class to projects at work each day. “A sales brochure and banner ad I completed in one class, I used as part of my portfolio,” she says. “I’m using all of the projects I did during class and putting it to work. Almost immediately after I completed the program, I got this job.”

Looking back on her certificate experience—which she completed in just one year—Ioffe is enthusiastic about the instructors and the real-world experience they bring to the classroom: “It’s not about theoretical knowledge and book studying; most of the time, we were practicing real cases.”

extension.berkeley.edu/business
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.

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- Fiduciary as Administrator of Estate (Probate, Trust and Conservatorship), p. 70
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- Introduction to Being a Private Professional Fiduciary and Special Need Trust Administration and Public Benefits, p. 70
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Free Information Sessions

Learn more about courses and programs, meet other 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 Accounting
Sec. 003
Monday, May 19, 7–7:45 pm
Berkeley: Golden Bear Center

Certificate Program in Business Administration
Sec. 001
Wednesday, Dec. 11, 5:15–6:15 pm
Berkeley: Golden Bear Center
Sec. 003
Thursday, May 22, 5:30–6:30 pm
San Francisco: Downtown Center

Certificate Program in Entrepreneurship and Small Business Management
Sec. 003
Monday, May 12, 5:30–6:30 pm
San Francisco: Downtown Center

Certificate Program in Finance
Sec. 003
Monday, May 19, 5:30–6:15 pm
Berkeley: Golden Bear Center

Certificate Program in Financial Planning and Analysis
Sec. 003
Monday, May 19, 6:15–7 pm
Berkeley: Golden Bear Center

Certificate Program in Human Resource Management
Sec. 003
Monday, May 12, 6:45–7:45 pm
San Francisco: Downtown Center

Certificate Program in Leadership and Management
Sec. 001
Monday, Dec. 16, 5:30–6:30 pm
San Francisco: Downtown Center
Sec. 003
Monday, May 19, 5:30–6:30 pm
San Francisco: Downtown Center

Certificate Program in Marketing and Professional Sequences in Marketing Metrics and ROI and in Managing Marketing Communications
Sec. 001
Monday, Dec. 16, 6:45–7:45 pm
San Francisco: Downtown Center
Sec. 003
Monday, May 19, 6:45–7:45 pm
San Francisco: Downtown Center
Online Information Session
Wednesday, March 12, 12–12:45 pm

Certificate Program in Paralegal Studies
Sec. 002
Monday, Jan. 13, 5:30–7 pm
San Francisco: Downtown Center
Online Information Session
Wednesday, March 19, 12–12:45 pm

Certificate Program in Personal Financial Planning
Sec. 003
Thursday, May 22, 6:45–7:45 pm
San Francisco: Downtown Center

Certificate Program in Project Management
Sec. 002
Thursday, Dec. 12, 6–7 pm
San Francisco: Downtown Center
Sec. 004
Thursday, Jan. 9, 6–7 pm
Belmont: Belmont Center
Sec. 005
Thursday, June 5, 6–7 pm
Berkeley: Golden Bear Center

Fiduciary Studies
Sec. 001
Thursday, Jan. 9, 6–7 pm
Berkeley: Golden Bear Center

Professional Sequence in Agile Management
Sec. 002
Thursday, Dec. 12, 7–8 pm
Berkeley: Golden Bear Center
Sec. 004
Thursday, Jan. 9, 7–8 pm
Belmont: Belmont Center

COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business
ONLINE COURSE INFORMATION
(510) 643-1550
extension.berkeley.edu/online

CPA LICENSING REQUIREMENTS
For information about Certified Public Accountant (CPA) and Certified Management Accountant (CMA) licensing and renewal requirements:
California Board of Accountancy: dca.ca.gov/cba
Uniform CPA Examination: cpa-exam.org
Institute of Management Accountants: imanet.org

FREE INFORMATION SESSION
Certificate Program in Accounting
UNEX 1036
Find out how an accounting certificate can help you become the kind of accountant businesses want. For certificate details, see p. 55 or visit extension.berkeley.edu/cert/account.html.

Sec. 003
1 meeting
Monday, 7–7:45 pm
May 19
Berkeley: Golden Bear Center • FREE

Introduction to Financial Accounting
UGBA XB102A • UGBA XBW102A
for online sections
3 semester units in Business Administration
We recommend you take this course and Introduction to Managerial Accounting BUS ADM XB102B before you register for the Certificate Program in Accounting.
Important: Special academic policies apply to XBW courses. See p. 230 for details.
Learn financial accounting fundamentals and how to identify, measure and report on the financial effects of economic events on enterprises. Topics include accrual accounting concepts and accounting for investments, liabilities and present value concepts.

Sec. 005
Ronald Macaluso, M.B.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
Berkeley: Golden Bear Center • $850

Sec. 001
Andrew Barnett, Ph.D., CPA,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900

Sec. 002
Joseph McPeak, M.B.A., M.S., CPA
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900
Introduction to Managerial Accounting

UGBA XB102B • UGBA XBW102B for online sections
3 semester units in Business Administration

We recommend you take this course and Introduction to Financial Accounting BUS ADM XB102A before you register for the Certificate Program in Accounting.

Important: Special academic policies apply to XBW courses. See p. 230 for details.

Study the concepts, theory and practice of the cost-control function of management. Learn what information is needed within an organization; where to obtain this information; and how managers can use this information to plan, control and make decisions. Topics include cost behavior and forecasting, capital budgeting, activity-based costing and management, costs of quality and productivity improvement programs, cost-volume analysis, tactical decision making, and transfer pricing.

Introduction to Financial Accounting BUS ADM XB102A or equivalent is strongly recommended.

Sec. 003
Gregory Sinclair, M.B.A., CPA
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–April 22
San Francisco: Downtown Center • $850

Sec. 001
Martha S. Doran, Ph.D., CPA
Enroll anytime
Online, proctored final exam • $900

Accounting Ethics

BUS ADM X420.6 • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting

Gain an understanding of ethical standards for accountants and auditors at all levels. Learn the nature and scope of ethics standards and the need for them in business and society. Review professional codes of conduct for principal governing bodies and discuss their application in real-world situations. Thorough case studies bolster your understanding of the importance and the applicability of current ethical rules for accountants and auditors.

Sec. 001
Harry Lorsbach, M.B.A., CIA, CPA
Jan. 21–April 15
Online: proctored final exam • $900

Intermediate Accounting I

BUS ADM X421.1 • 3 semester units in Business Administration

A requirement in the certificate programs in Accounting and in Financial Planning and Analysis, Accounting Concentration

Build on the financial accounting concepts and principles covered in Introduction to Financial Accounting BUS ADM 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 pay 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 BUS ADM XB102A or equivalent

Sec. 006
Anna Lee, M.B.A.
Feb. 4–April 29
Online • $900

Sec. 008
Dongha Lee, M.B.A., Ed.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–April 22
San Francisco: Downtown Center • $850

Sec. 007
Nancy Batch, M.B.A., M.S., CPA
Feb. 4–April 29
Online • $900

Sec. 012
Marc Hyman, M.B.A.
Feb. 4–April 29
Online • $900

Intermediate Accounting II

BUS ADM X421.2 • 3 semester units in Business Administration

A requirement in the certificate programs in Accounting and in Financial Planning and Analysis, Accounting Concentration

Expand upon the financial accounting concepts and principles covered in Intermediate Accounting I BUS ADM 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. Additional topics cover earnings per share, the statement of cash flows, accounting changes and error corrections.

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

Sec. 006
Kelly Pope, Ph.D., CPA
Jan. 14–April 8
Online • $900

Sec. 008
Yan Gelman, B.S., M.B.A.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–April 24
San Francisco: Downtown Center • $850

Sec. 007
Nancy Batch, M.B.A., M.S., CPA
Jan. 21–April 15
Online • $900

Advanced Accounting

BUS ADM X421.3 • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting, an elective in the Certificate Program in Financial Planning and Analysis

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 nonbusiness 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.

Sec. 004
George Perko, M.B.A., CPA
15 meetings
Mondays, 6:30–9:30 pm
Jan. 27–May 12 (no meeting on Feb. 17)
San Francisco: Downtown Center • $850

Sec. 001
Joseph McPeak, M.B.A., M.S., CPA
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900

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• Increase efficiency
• Increase retention
• Increase employee satisfaction

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Auditing
BUS ADM XB126 • 4 semester units in Business Administration
Important: Special academic policies apply to XBW courses. See p. 230 for details.
Examine the 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). 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 BUS ADM X421.1 and Intermediate Financial Accounting II BUS ADM X421.2, equivalent experience or consent of instructor
Sec. 001
Andrew Barnett, Ph.D., CPA,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $1,025

Auditing and Attestation
BUS ADM X422.2 • 4 semester units in Business Administration
A requirement in the Certificate Program in Accounting
Get a solid theoretical and practical background in auditing. 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.
Prerequisites: Intermediate Accounting I BUS ADM X421.1, Intermediate Accounting II BUS ADM X421.2 or consent of instructor
Sec. 003
Harry Lorsbach, M.B.A., CIA, CPA
20 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–May 29
Berkeley: Golden Bear Center • $975

Principles of Management Accounting
BUS ADM X421.5 • 3 semester units in Business Administration
A requirement in the Certificate Program in Business Administration
Learn the basics of financial accounting, and 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. You do not need an accounting background, but you should have some aptitude for numbers to succeed in this course.
Sec. 006
Reggie Murray, B.S., M.B.A., Ed.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
Belmont: Belmont Center • $850

Sec. 005
Gregory Sinclair, M.B.A., CPA
15 meetings
Mondays, 6:30–9:30 pm
Jan. 27–May 12 (no meeting on Feb. 17)
Berkeley: Golden Bear Center • $850

Cost Accounting
BUS ADM X419 • 3 semester units in Business Administration
A requirement in the Certificate Program in Accounting; an elective in the Certificate Program in Financial Planning and Analysis
Intensively study basic cost-accumulation systems and refinements 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 BUS ADM XB102A and Introduction to Managerial Accounting BUS ADM XB102B or equivalent
Sec. 005
Instructor to be announced
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–April 24
San Francisco: Downtown Center • $850

Sec. 001
Anna Lee, M.B.A.
Enroll anytime
Online, proctored final exam • $900

Federal Income Taxes for Individuals
BUS ADM X419.8 • 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.
Sec. 001
Frank Paré, B.A., M.B.A., CFP
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–April 22
Berkeley: Golden Bear Center • $850

Financial Statement Analysis
BUS ADM X419.2 • 2 semester units in Business Administration
Gain an understanding of the effective analysis of financial statements by integrating the concepts and principles learned in previous accounting courses.
For course schedule, see p. 78.

VISIT OUR WEBSITE
Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
Certificate Program in Accounting

With accounting, you’re part of a field with significant potential: 28 percent job growth by 2018, according to the U.S. Bureau of Labor Statistics. And as new Certified Public Accountant (CPA) educational requirements and updated International Financial Reporting Standards (IFRS) come to the fore, the need for additional expertise to implement global standards is crucial. To meet these evolving requirements, UC Berkeley Extension’s Certificate Program in Accounting provides you with a current, thorough understanding of accounting principles and reporting practices, as well as expertise in financial planning, data analysis and interpretation. You benefit from a curriculum that is overseen by an advisory board of business and education leaders and approved by the University of California, Berkeley, Haas School of Business. Our online and classroom courses, taught by professionals with many years of practical business experience, ensure that you’re prepared to succeed in accounting.

Curriculum Requirements
The curriculum comprises 8 required courses for a total of 24 semester units (at least 360 hours of instruction).

Required Core Courses
We recommend that you begin the certificate with Intermediate Accounting I BUS ADM X421.1.

- Intermediate Accounting I BUS ADM X421.1 (offered this term)
- Intermediate Accounting II BUS ADM X421.2 (offered this term)
- Advanced Accounting BUS ADM X421.3 (offered this term)
- Accounting Ethics BUS ADM X420.6 (offered this term)
- Auditing and Attestation BUS ADM X422.2 (offered this term)
- Cost Accounting BUS ADM X419 (offered this term)
- Financial Statement Analysis BUS ADM X419.2 (offered this term)
- Taxation for Corporations and Other Flow-Through Entities BUS ADM X419.5 (offered this term)

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

Kyle Cameron says that the breadth of courses offered in UC Berkeley Extension’s Certificate Program in Accounting opens up just about any field in accounting—from auditing to taxation to controllership. “I can really do anything with the education,” he says.
CPA Examination Preparation

The following four courses prepare you to take each of the Uniform Certified Public Accountant (CPA) Examination’s four modules: Auditing and Attestation (AUD), Regulatory (REG), Financial Accounting and Reporting (FAR), and Business Environment and Concepts (BEC). To receive your CPA license, you must pass all four modules, in any order. Likewise, you can take these courses in any order. Each course begins with an overview of the topic, including its importance and how corporations regularly apply it. Review the relevant topics and issues, discuss sample problems, and strengthen your understanding through structured and repetitive exercises. Each course culminates in a six-hour Saturday workshop with timed tests simulating what is required as part of the CPA exam.

- **Regulation (REG) Module**
  - BUS ADM X483.5 (offered this term)
  - Review and test your understanding of professional, legal and ethical responsibilities of a Certified Public Accountant.
- **Financial Accounting and Reporting (FAR) Module**
  - BUS ADM X423.1 (offered this term)
  - Review accounting concepts, theory and practice; financial statements; and other financial reporting requirements for nonprofit and for-profit organizations and governmental agencies.
- **Business Environment and Concepts (BEC) Module**
  - BUS ADM X423.9 (offered this term)
  - Review external and internal business environment and concepts, principally from an internal-company viewpoint, including corporate-governance structures and mission.
- **Auditing and Attestation (AUD) Module**
  - BUS ADM X422.7 (offered this term)
  - Review auditing and attestation standards and their organization.

CalCPA members receive a 15-percent enrollment fee discount for the following four courses. Membership in CalCPA is free for full-time students and free for one year for CPA candidates. To receive the discount, you must enroll by phone at (510) 642-4111 or by mail, with your CalCPA member number.

### Auditing and Attestation (AUD) Module

BUS ADM X422.7 • 1 semester unit in Business Administration

Review auditing and attestation standards and their organization. Evaluate effective research techniques and accessibility. Examine the professional responsibilities, required standards and ethics for accountants and auditors. Pay particular attention to the shared client and auditor responsibility to assess internal controls and perform substantive tests on audits and attestation engagements. Topics include financial statement review and compilation.

**Sec. 003**  
Harry Lorsbach, M.B.A., CIA, CPA  
**6 meetings**  
Mondays, 6:30–9:30 pm  
April 14–May 12 (also Saturday, May 17, 9 am–4 pm)  
San Francisco: Downtown Center • $700

### Business Environment and Concepts (BEC) Module

BUS ADM X423.9 • 1 semester unit in Business Administration

Review external and internal business environments and concepts, principally from an internal–company viewpoint, including corporate–governance structures and mission. Review the broad global business and economic markets, and explore how they affect appropriate business strategies. Review financial and operational risk-management issues, including cost and performance measurement techniques and objectives. Study financial-management topics such as capital budgeting, financing, asset management, modeling and analyses. You also examine information systems needs assessments, system design, security and Internet considerations.

**Sec. 003**  
Anna Lee, M.B.A.  
**6 meetings**  
Tuesdays, 6:30–9:30 pm  
April 29–May 27 (also Saturday, May 31, 9 am–4 pm)  
San Francisco: Downtown Center • $700

### Financial Accounting and Reporting (FAR) Module

BUS ADM X423.1 • 1 semester unit in Business Administration

Review accounting concepts, theory and practice; financial statements; and other financial reporting requirements for nonprofit and for-profit organizations and governmental agencies. Understand the accounting treatment required regarding inventory, fixed assets, monetary assets, investments (including derivative instruments and hedging activities), current liabilities, long-term liabilities, accrued taxes, ratios, and stockholders’ equity. Study topics such as accounting treatment and reporting of business combinations, consolidations and eliminations; foreign currency translations; and standard financial reporting statement presentations and disclosures, including SEC reporting requirements and statements of cash flow.

**Sec. 002**  
Anna Lee, M.B.A.  
**5 meetings**  
Mondays, 6:30–9:30 pm  
April 14–May 12 (also Saturday, May 17, 9 am–4 pm)  
San Francisco: Downtown Center • $700

### Regulation (REG) Module

BUS ADM X483.5 • 1 semester unit in Business Administration

Review and test your understanding of professional, legal and ethical responsibilities of a Certified public Accountant (CPA). Examine professional, legal and ethical responsibilities required standards of legal and ethical conduct. Study business structure, including proprietorships, partnerships, LLCs, LLPs, S corporations and C corporations, exempt corporations, and trusts and estates. Discuss the legal and tax implications of each structure. You also review the federal tax code and tax process and procedures, as well as certain uniform state tax codes and compliance issues.

**Sec. 002**  
Anna Lee, M.B.A.  
**6 meetings**  
Wednesdays, 6:30–9:30 pm  
Jan. 15–Feb. 12 (also Sunday, Feb. 23, 9 am–4 pm)  
San Francisco: Downtown Center • $700
Agile Management

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

FREE INFORMATION SESSION
Professional Sequence in Agile Management
UNEX 1066

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.

Sec. 004
1 meeting
Thursday, 7–8 pm
Jan. 9
Belmont: Belmont Center • FREE

Agile Management: Principles and Practices
BUS ADM X486.1 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Agile Management; an elective in the Certificate Program in Project Management

An Agile management framework of values, principles and practices 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 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 comprises 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 BUS ADM X486.1 (offered this term)
• Agile Management Mastery BUS ADM 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

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.

Agile Management for Project Managers
BUS ADM X498.6 • 2 semester units in Business Administration

An elective in the Professional Sequence in Agile Management and in the Certificate Program in Project Management

Project managers need to respond effectively to change and complexity in the workplace. Gain an understanding of Agile management and what it means to be an Agile project manager. Learn about the Agile project life cycle and how Agile teams work. Get hands-on experience with basic Agile management tools and techniques that you can apply to your projects.

Sec. 001
Ainsley Nies, M.S., PMP, and Balasubramanian Swaminathan, B.S., PDMM, PMP, PMI-ACP, CSM
5 meetings
Saturdays, 9 am–4 pm
March 1–29
San Francisco: Downtown Center • $750

Project Chartering
BUS ADM X474.6 • 1 semester unit in Business Administration

An elective in the Certificate Program in Project Management and in the Professional Sequence in Agile Management

Learn how to create a project charter, a preliminary project-management document that details an upcoming project’s scope, objectives and participants. Understand the importance of such a document in establishing authority and responsibility and in providing a baseline reference so that project team members can work more effectively toward a common goal.

Sec. 001
Ainsley Nies, M.S., PMP, and Anup Deshpande, B.S., PMP
2 meetings
Saturdays, 9 am–5 pm
May 10 and 17
San Francisco: Downtown Center • $500
Lean Using Kanban
BUS ADM X483.9 • 1 semester unit in Business Administration
An elective in the Professional Sequence in Agile Management and in the Certificate Program in Project Management
Get an introduction to Lean, Pull Systems and Kanban, and learn how to apply established industrial engineering theory to work processes. Understand how to control variables that affect customer satisfaction. Study a service-oriented approach to the design of systems and processes that promotes improved service delivery for customers and other stakeholders.
Sec. 002
Daniel Vacanti, M.B.A.
2 meetings
Friday and Saturday, 9 am–5 pm
April 4–5
San Francisco: Downtown Center • $500

NEW THIS TERM
Coaching Agile Teams
BUS ADM X486.2 • 1 semester unit in Business Administration
Agile management methods focus on people. Individuals and interactions are valued over processes and tools. Analyze the characteristics of high-performance teams and the attributes of the Agile coach. Explore the dynamics of Agile teams and the stages of team development, focusing on personality types and team synergies to help people come together as teams work on projects and products.
Sec. 001
Nadine Kabbara, M.B.A.
2 meetings
Saturdays, 9 am–5 pm
May 10 and 17
San Francisco: Downtown Center • $500

NEW THIS TERM
Advanced Quality Methods for Agile Management
BUS ADM X489 • 1 semester unit in Business Administration
Agile management methods work to achieve successful solutions with a focus on customer needs and business value. Explore the best ways to integrate the tools and techniques of quality management into iterative development processes, and get practical experience in applying quality methods to Agile undertakings.
Sec. 001
Douglas Hawley, M.B.A., Extension Honored Instructor
2 meetings
Saturdays, 9 am–5 pm
March 15 and 22
San Francisco: Downtown Center • $500

Business Administration
COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business
ONLINE COURSE INFORMATION
(510) 644-4979
extension.berkeley.edu/online
FREE INFORMATION SESSION
Certificate Program in Business Administration
UNEX 1038
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. 59 or visit extension.berkeley.edu/cert/busad.html.
Sec. 003
1 meeting
Thursday, 5:30–6:30 pm
May 22
San Francisco: Downtown Center • Free

Essentials of Business
BUS ADM 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
Understand the goals, processes and operations of business enterprises. Examine the functions that a company must effectively manage to be successful, such as accounting, finance, human resource management, marketing, operations management and strategic planning. Pay particular attention to the legal environment in which businesses operate and the importance of business ethics and corporate citizenship.
Sec. 009
Eric Yap, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
Belmont: Belmont Center • $750

Sec. 010
Mark Bettini, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–March 20
Berkeley: Golden Bear Center • $750

Sec. 001
Kevin M. Shea, M.B.A.
Enroll anytime
Online, proctored final exam • $800

Corporate Financial Management
BUS ADM 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. Gain 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. 007
Robert Coackley, B.S.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–March 18
San Francisco: Downtown Center • $750

Sec. 008
Eric Yap, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 26–May 28
Belmont: Belmont Center • $750

Organization and Management
BUS ADM 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
Study high-level leadership strategies, and gain skills in resolving disputes, managing diversity and building productive teams. Using case studies and small group discussions, explore issues such as organizational conflict and power, management development, interpersonal influence, and the advantages and drawbacks of participative management.
Sec. 007
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Jan. 11–Feb. 22 (no meetings on Jan. 18 and Feb. 15)
San Francisco: Downtown Center • $750

Sec. 006
Derek Day, M.B.A., Ph.D.
Jan. 21–April 15
Online • $800

Sec. 008
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
March 1–29
Belmont: Belmont Center • $750

For course and schedule information VISIT extension.berkeley.edu/catalog
Certificate Program in Business Administration

The Certificate Program in Business Administration introduces the fundamental concepts and practices of business to develop a broad-based practical understanding of its context, purpose and underlying functional areas: accounting, economics, finance, marketing and management. Whether you’re an entrepreneur, a new business manager or a professional seeking greater business responsibility, 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 professionals with many years of practical business experience.

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

Required Courses
- Principles of Management Accounting  
  BUS ADM X421.5 (offered this term)
- Essentials of Business  
  BUS ADM X406.6 (offered this term)
- Applied Economics for Business  
  BUS ADM X402.8 (offered this term)
- Corporate Financial Management  
  BUS ADM X412.5 (offered this term)
- Introduction to Marketing  
  BUS ADM X460.1 (offered this term)
- Organization and Management  
  BUS ADM X490.1 (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
International Business

International Business Management
BUS ADM X495.1 • 2 semester units in Business Administration
Examine successful international business strategies, and learn how to internationalize your business and career. Study the basics of marketing, economics, finance and business negotiation in a global context. This entrepreneur-focused course prepares you for participation in larger international businesses.

Sec. 001
Christopher Lai, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $800

Communicating Across Cultures: Marketing and Sales Challenges Around the World
BUS ADM 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.

Sec. 001
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $800

International Business and National Economic Policy
BUS ADM X478.4 • 2 semester units in Business Administration
Explore the relationships and dynamics between multinational enterprises (MNEs) and national governments.

For course schedule, see p. 74.

Start Up Your Importing Business
BUS ADM 1043 • 0.8 cuu
Learn how to be a successful importer in this one-day seminar.

For course schedule, see p. 70.

Business Administration

Business Analysis Essentials and Planning
BUS ADM X448.1 • 3 semester units in Business Administration

Learn business analysis fundamentals and the planning and monitoring knowledge areas—the first of the seven generally accepted areas that define the profession’s framework. Discover how practitioners determine 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. 003
Ashley Wright, B.S., M.B.A.
Jan. 2–Feb. 27
Online • $995

Sec. 004
Ashley Wright, B.S., M.B.A.
March 4–April 29
Online • $995

Elicitation, Requirements Management and Communication
BUS ADM X448.2 • 2 semester units in Business Administration

Learn how to manage conflicts, issues and changes to ensure that stakeholders agree on the solution scope. Study the elicitation knowledge area. 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℠). Those who intend to sit for the CBAP exam should also meet IIBA® testing requirements.

Sec. 003
Wei Zhu, B.S.
Jan. 2–Feb. 27
Online • $995

Sec. 004
Wei Zhu, B.S.
March 4–April 29
Online • $995

Enterprise and Requirements Analysis
BUS ADM X448.3 • 3 semester units in Business Administration

Learn to identify a business need using enterprise and requirements analysis to refine and clarify the definition of that need and define a solution scope that the business can implement. Understand 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 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 IIBA® testing requirements.

Sec. 003
Wei Zhu, B.S.
Jan. 2–Feb. 27
Online • $995

Sec. 004
Wei Zhu, B.S.
March 4–April 29
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 developed properly and implemented efficiently. Learn how a business analyst communicates requirements from customers, managers, users and subject-matter experts to technical deployment teams to ensure that optimized solutions can be designed and implemented. The Certificate Program in Business Analysis turns your familiarity with business and operations into expertise in business analysis so that you can move your company confidently to future success. The curriculum is overseen by an advisory board of business and education leaders and approved by the University of California, Berkeley, Haas School of Business, ensuring your education is relevant and up to date. UC Berkeley Extension offers this certificate in both online and classroom formats, giving you the flexibility to master these new skills in an environment that fits your learning style.

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

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

Learn More and View the Flyer
extension.berkeley.edu/cert/busanalysis.html (510) 642-4151
course@unex.berkeley.edu

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.
Solution Assessment and Validation, Underlying Competencies
BUS ADM X448.4 • 2 semester units in Business Administration

Learn to assess proposed solutions to determine which best fit the business need. You also learn 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 organization. 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. 003
Ashley Wright, B.S., M.B.A.
Jan. 2–Feb. 27
Online • $995

Sec. 004
Ashley Wright, B.S., M.B.A.
March 4–April 29
Online • $995

FIVE WAYS TO ENROLL
1. Online:
   extension.berkeley.edu
2. Phone:
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3. Mail:
   Department B
   1995 University Ave.,
   Suite 110
   Berkeley, CA
   94704-7000
4. Purchase Order:
   (510) 642-3910
5. In Person:
   At Golden Bear Center,
   1995 University Ave.,
   Berkeley, Calif.

Business and Professional Communication

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

NEW THIS TERM
Essential Business Communication Skills
BUS ADM X404.1 • 2 semester units in Business Administration
A Core Course in the Program in Professional Communication

Effective communication skills help foster cooperation, productivity and teamwork within an organization. Learn essential interpersonal skills that can boost your influence and effectiveness with individuals and groups in a business setting. Learn to overcome typical barriers to listening strategically, provide constructive feedback, identify strategies for communicating across cultures and generations, and understand how gender differences influence communication. Apply core communication concepts and skills to contexts that are critical for enhancing collaboration, increasing message clarity, heightening emotional intelligence, managing conflict and facilitating teams.

Sec. 001
Dan Popkin-Clurman, M.A.
5 meetings
Saturdays, 9:30 am–4:30 pm
Feb. 1–March 8 (no meeting on Feb. 15)
Berkeley: Golden Bear Center • $750

Business Communication: Writing and Speaking
BUS ADM 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.

Sec. 003
Erin Faverty, M.A.
5 meetings
Saturdays, 9 am–4 pm
April 19–May 17
Berkeley: Golden Bear Center • $750

Best Practices in Negotiation
BUS ADM 1003 • 0.8 ceu
An elective in the Program in Professional Communication

Everyone negotiates, but some are much better at this vital skill than others and, consequently, are more likely to reach ambitious goals and receive more recognition and rewards. In this seminar, 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 in scenarios such as buying, selling and financing cars, housing and other big-ticket items.

Sec. 002
Gary Goodman, J.D., M.B.A., Ph.D.
1 meeting
Friday, 8:30 am–5 pm
Feb. 28
San Francisco: Downtown Center • $325

Business Writing Fundamentals
BUS ADM 1007 • 1.2 ceu
An elective in the Program in Professional Communication

In this interactive business writing seminar, you learn a writing process that can help you target readers, organize information and get important points across quickly, whether you’re writing a memo, email, letter or report. Practice using clear language and spotting and fixing common errors. Learn to set the proper tone in your writing, especially when delivering bad news. This refresher course is ideal if you need to tune up your writing skills and review the basics of writing professionally in a business setting.

Sec. 003
Margaret Steen, M.J., Extension Honored Instructor
2 meetings
Fridays, 9 am–4 pm
Feb. 28 and March 7
San Francisco: Downtown Center • $525

Communicate Effectively: Connecting in Personal and Work Life
BUS ADM 1008 • 1.2 ceu
An elective in the Program in Professional Communication

Miscommunication with customers, employees and clients can be frustrating and costly. Practice how to communicate effectively and resolve issues by demonstrating a willingness to understand the other’s perspective, feelings and experience without negating the right to your own point of view. Help to build and maintain connection, support, and work and personal relationships that are mutually beneficial.

Sec. 003
Neil Fiore, Ph.D.
2 meetings
Fridays, 9 am–1:30 pm
May 23 and 30
Berkeley: Golden Bear Center • $295
Diversity Awareness for Effective Leadership
BUS ADM 1014 • 1.2 ceu
An elective in the Program in Professional Communication
Today’s workforce is increasingly diverse. Effective leaders and team members need to be capable of welcoming, including and utilizing diverse people and their perspectives, styles and experiences to achieve organizational success and capacity. Learn practical tools and concepts designed to resolve tensions, maximize create, support collaboration and create more welcoming environments.
Sec. 003
Bill Say, M.A.
2 meetings
Fridays, 9 am–4 pm
May 9 and 16
Berkeley: Golden Bear Center • $595

Emotional Intelligence (EQ) and Improvisation: Building Your Leadership Toolkit
BUS ADM 1017 • 0.7 ceu
An elective in the Program in Professional Communication
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 help develop skills for intuitive and creative action “in the moment.” Led by experienced improv performers with organizational experience, this workshop combines the art of improv with emotional intelligence and business management skills to enhance your leadership toolkit.
Sec. 003
Allison Gilmore, B.A.
1 meeting
Friday, 9 am–5 pm
April 11
San Francisco: Downtown Center • $295

Grant Writing for Professionals
BUS ADM 1024 • 1.3 ceu
An elective in the Program in Professional Communication
In today’s competitive business climate, poorly written grant proposals that don’t 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 grant writing. In this introductory, two-day course, gain the skills necessary to tackle the grant-writing process. Explore the steps involved in finding funding opportunities, managing and scheduling the grant proposal project, writing narrative sections that sell, and editing effectively. Class time focuses on research, planning and writing strategies, not program development.
Sec. 003
Melanie Wise, M.A.
2 meetings
Fridays, 9 am–4:30 pm
Jan. 24 and 31
San Francisco: Downtown Center • $395

Handling Difficult Interactions With Skill and Confidence
BUS ADM 1026 • 0.8 ceu
An elective in the Program in Professional Communication
In this interactive, skills-based workshop, explore strategies for handling a difficult interaction and maintaining your composure and confidence no matter how the other person responds. Learn techniques to help you resolve future conflicts, improve relationships and make progress.
Sec. 004
Roberta Streimer, M.Ed.
1 meeting
Tuesday, 8:30 am–5 pm
May 13
Berkeley: Golden Bear Center • $295

Innovations in Negotiation
BUS ADM 1028 • 0.8 ceu
An elective in the Program in Professional Communication
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.
Sec. 002
Gary Goodman, J.D., M.B.A., Ph.D.
1 meeting
Saturday, 8:30 am–5 pm
March 1
San Francisco: Downtown Center • $325

COURSES AVAILABLE THROUGHOUT THE YEAR
UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

Updated for Spring 2014
Program in Professional Communication

Managers, supervisors and executives know that communication is a mission-critical skill in the ever-changing business environment. Strong communicators are in high demand for their enhanced skills in business writing, speaking and listening; strategic communications; critical thinking; conflict management; creative problem solving; group facilitation; and more. With the Program in Professional Communication, you learn how to motivate yourself and others, communicate a consistent message, negotiate and close deals, and implement strategies for improving career prospects and advancement. In addition to acquiring these interpersonal skills, you focus on the areas of communication competency, effectiveness and influence to build a personal communication plan critical for business productivity.

Curriculum Requirements
The curriculum comprises 1 required course and a varied number of electives (at least one from each functional area) for a minimum of 2 semester units and 6 ceu (90 hours of instruction).

Core Course
• Essential Business Communication Skills BUS ADM X404.1 (offered this term)

Electives
You must choose one or more electives from each grouping in Communication Competency, Effectiveness and Influence.
For a list of electives available this term, visit extension.berkeley.edu/spos/professional_communication.html

Learn More and View the Flyer
extension.berkeley.edu/spos/professional_communication.html
(510) 642-4231
business@unex.berkeley.edu
**Nonverbal Communication: Messages Beyond Words**  
BUS ADM 1033 • 0.6 ceu  
(Formerly Time and Life Management)  
An elective in the Program in Professional Communication  
Learn strategies to be more productive and efficient as you gain control of your time and focus. Examine best practices in time management, and understand how to implement time-saving strategies for increased productivity and balance. Learn simple strategies to remove obstacles such as negativity and procrastination in the pursuit of optimal performance and heightened productivity so that you can be more creative and enjoy your work more fully.

**Overcome Procrastination and Become Productive**  
BUS ADM 1057 • 0.8 ceu  
(Formerly Time and Life Management)  
An elective in the Program in Professional Communication  
Learn critical information and explore strategies and techniques for ensuring successful performance evaluations. Learn how to give constructive negative feedback and how to use a participative style of leadership to obtain desired results. Understand how to develop meaningful goals, including how to evaluate the quality of the goals set. Learn how to measure the outcome of goals by developing a set of mutually established standards within a framework of ongoing employee development and corrective action.

**Performance Evaluations: Measuring Goals and Outcomes**  
BUS ADM 1036 • 0.8 ceu  
An elective in the Program in Professional Communication  
Learn critical information and explore strategies and techniques for ensuring successful performance evaluations. Learn how to give constructive negative feedback and how to use a participative style of leadership to obtain desired results. Understand how to develop meaningful goals, including how to evaluate the quality of the goals set. Learn how to measure the outcome of goals by developing a set of mutually established standards within a framework of ongoing employee development and corrective action.

**Preventing and Resolving Conflict Using Restorative Justice Principles**  
BUS ADM 1010 • 1.6 ceu  
(Formerly Conflict and Decision Coaching for Organizational Productivity)  
An elective in the Program in Professional Communication  
Learn to resolve and leverage situations with conflict and decision coaching to create a better workplace environment and encourage more productive teams. Understand how to use techniques and tools such as design thinking and restorative justice. Look at ways you can better handle objections and resolve conflicts. In this hands-on workshop, you practice strategies and discuss the appropriate use of these strategies in different situations.

**Strategic Problem Solving**  
BUS ADM 1048 • 0.8 ceu  
An elective in the Program in Professional Communication  
Understand how to approach business problems in a structured and efficient way that is based on the problem-solving techniques of top-tier consulting firms. Focus on and practice a variety of tactics used to enhance communication and persuasion and to build trust within teams and senior management.

**BUILD A CAREER**  
Turn your talents into a new career. UC Berkeley Extension professional certificates and specialized programs of study can help you advance in your current position or start your dream career.  
Program details at extension.berkeley.edu/cert.
The Actor Within: Improving Your Business Presentation and Communication Skills

BUS ADM 1050 • 2.1 ceu
An elective in the Program in Professional Communication

Improve your business presentation and communication skills using the simple, proven techniques of successful speakers and actors. This highly interactive course explores basic presentation techniques, communicating with confidence and using the power of your personal style. Learn how to manage jittery nerves, grab the audience’s attention, simplify your message, effectively deliver your information and respond to impromptu questions. Through specific and direct one-on-one work with the instructor, you can triumph over fear to become an inspired speaker.

Sec. 003  Billie Shepard, M.A.
3 meetings
Fridays, 9 am–5 pm
April 18–May 2
Belmont: Belmont Center • $650

The Coach Approach to Effective Communication and Leadership Development

BUS ADM 1051 • 2.0 ceu
An elective in the Program in Professional Communication

Whether you are a business professional, human resource manager or experienced coach, develop a deeper understanding of and facility with essential coaching competencies. Gain knowledge and build confidence to create value for your organization or business and the people involved. Study the eight core-coaching competencies for effective communication, and learn how to design and execute the Coach Approach relationship. Fieldwork includes working with an in-class peer coach and establishing, maintaining and completing a coaching engagement with one real-world client. Upon completion, you are ready to put the learned coaching protocols into action to support individuals and leaders in targeting success and achieving results.

Sec. 003  Barbara Russo, B.A.
8 meetings
Mondays, 6:30–9 pm
March 31–May 19
San Francisco: Downtown Center • $450

The Power of Listening

BUS ADM 1055 • 0.6 ceu
An elective in the Program in Professional Communication

Listening is an important business skill yet one many tend to take for granted. Listening is critical for building teamwork and trust, getting necessary information, and motivating others to do their best. Explore obstacles to listening, and learn how to overcome them. Discover appropriate listening styles, gain tips for being a better listener, and practice effective listening skills.

Sec. 003  Janene Frahm, M.A.
1 meeting
Wednesday, 9 am–4 pm
April 9
San Francisco: Downtown Center • $295

Two-Day Business Presentation Skills Workshop

BUS ADM 1059 • 1.2 ceu
An elective in the Program in Professional Communication

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. 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.

Sec. 003  Edward Alter, B.A.
2 meetings
Monday and Wednesday, 9 am–4 pm
March 31 and April 2
San Francisco: Downtown Center • $595

Women and Negotiation

BUS ADM 1061 • 0.7 ceu
An elective in the Program in Professional Communication

Get a self-assessment of your negotiating style in this interactive seminar. Study real-life 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 of getting what you want and deserve in all types of negotiating.

Sec. 002  Denise Brouillette, M.B.A.
1 meeting
Tuesday, 9 am–5 pm
April 8
San Francisco: Downtown Center • $295

Business Writing Review

BUS ADM X455 • 1 semester unit in English

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.

Sec. 001  Margaret Steen, M.J.
Extension Honored Instructor
Enroll anytime
Online • $550

Mediation and Conflict Resolution

BUS ADM X499.2 • 2 semester units in Business Administration

Gain the ability and confidence to resolve almost any business dispute as a mediator, negotiator or representative.

For course schedule, see p. 82.
Professional Program in
Business Process Management

With the Professional Program in Business Process Management, you 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. Ultimately, 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 comprises 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 A: Process Modeling and Analysis BUS ADM X441.1 (offered this term)
- BPM B: Process Design, Transformation and Organization BUS ADM X441.2
- BPM C: Business Process Measurement BUS ADM 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

Business Process Management

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

BPM A: Process Modeling and Analysis
BUS ADM X441.1 • 1 semester unit in Business Administration

A Core Course 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 process-improvement key concepts and techniques, 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.

Sec. 002
Shelley Sweet, M.A.
2 meetings
Saturdays, 8:30 am–5 pm
Feb. 8 and 22
San Francisco: Downtown Center • $445

Economics

COURSE INFORMATION
(510) 643-8916
business@unex.berkeley.edu
extension.berkeley.edu/business

ONLINE COURSE INFORMATION
(510) 643-1550
extension.berkeley.edu/online

Applied Economics for Business
ECON 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.

Sec. 009
Ashish Sahni, M.P.P.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
San Francisco: Downtown Center • $750

Sec. 001
Mar in A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $750

Economic Indicators: Making Sense of Market Data
BUS ADM X408.4 • 2 semester units in Business Administration

Recipient of the Distinguished Course Award for excellence in distance learning from the University Professional and Continuing Education Association (UPCEA)

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. 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.

Sec. 001
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $750

START WITH A COURSE

You do not have to apply for acceptance into UC Berkeley Extension. Courses are open to all eligible students. Our courses can help you develop career skills, meet professional certification requirements or satisfy an intellectual urge.
Introduction to Macroeconomics
BUS ADM X3 • 3 semester units in Economics
An elective in the Certificate Program in Business Administration

Get an introduction to the 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 ECON X2 concurrently with this course.

Sec. 004
Lall Ramrattan, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 29–May 7
Berkeley Campus: 3 Evans Hall • $850

Introduction to Microeconomics
ECON 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. 004
Lall Ramrattan, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 27–May 12 (no meeting on Feb. 17)
Berkeley Campus: 2 Evans Hall • $850

International Business and National Economic Policy
BUS ADM X478.4 • 2 semester units in Business Administration

Explore the relationships and dynamics between multinational enterprises (MNEs) and national governments.

For course schedule, see p. 74.

Entrepreneurship and Small Business Management
COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
text@berkeley.edu/business

ONLINE COURSE INFORMATION
(510) 644-4979
text@berkeley.edu/online

FREE INFORMATION SESSION
Certificate Program in Entrepreneurship and Small Business Management
UNEX 1041

Attend a free, no-obligation event to learn how UC Berkeley Extension’s Certificate Program in Entrepreneurship and Small Business Management can help you successfully launch and manage your business. Talk with program administrators, and get answers to questions. For certificate details, see p. 69 or visit extension.berkeley.edu/cert/entrepreneur.html.

Sec. 003
1 meeting
Monday, 5:30–6:30 pm
May 12
San Francisco: Downtown Center • FREE

Action Planning and Management for a New Business Venture
BUS ADM 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.

Sec. 003
Paul Terry, B.Comm.
10 meetings
Mondays, 6–9 pm
Jan. 27–April 7 (no meeting on Feb. 17)
San Francisco: Downtown Center • $750

Finances for Entrepreneurs and Small Business Owners
BUS ADM X476.6 • 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. Note: You should bring a laptop to class with Excel or compatible software already installed.

Sec. 004
John Beck, B.S.
6 meetings
Wednesdays, 6–9 pm
March 26–April 30
Belmont: Belmont Center • $625
Marketing Strategies for Entrepreneurs and Small Business Owners
BUS ADM 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. Study social media marketing, including blogging, viral marketing, video marketing, Twitter, Facebook, LinkedIn, word-of-mouth, networking 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 website.

Sec. 004
Kathryn Gorges, M.A., M.B.A.
5 meetings
Saturdays, 9 am–4 pm
April 5–May 3
San Francisco: Downtown Center ● $750

Building, Presenting and Executing a Business Plan
BUS ADM X445.6 ● 2 semester units in Business Administration
A requirement in the Certificate Program in Entrepreneurship and Small Business Management

In this capstone course to the Certificate Program in Entrepreneurship and Small Business Management, you participate in a collaborative workshop environment and review in detail the planning process for creating a successful business venture. Work with other students to write, review, critique, present and further develop your business planning, writing and communication abilities. Complete a comprehensive business plan for your own venture using the knowledge gained in previous courses, and learn successful strategies to present your business plan to potential investors, partners and early adopters.

Sec. 002
Paul W. Emery, M.B.A.
10 meetings
Tuesdays, 6–9 pm
March 25–May 27
Berkeley: Golden Bear Center ● $750

Business Development for Web Startups
BUS ADM X498 ● 2 semester units in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management

Explore business development topics relevant to Web startups. Topics include networking, partnerships, legal requirements, accounting, business models, sales, fundraising and team building. Learn to build a detailed action and implementation plan for each subject. Take actionable steps to move your Web business forward. Course methodology focuses on real-world problems, so if you do not have a prospective startup or company, you are paired with a student who does.

Sec. 003
Mary Jean Koontz, M.B.A., D.B.A.
10 meetings
Thursdays, 6–9 pm
March 27–May 29
San Francisco: Downtown Center ● $750

E-Commerce Strategies for Startups
BUS ADM X429.4 ● 1 semester unit in Business Administration
(Formerly Small Business Web Strategies)

Focus on business strategies and Web design to effectively support your vision for a small business enterprise. Build a clear, concise business plan, reinforced by a Web presence tailored to your needs and goals. Investigate a variety of options for Web-design solutions. Enhance your ability to communicate technically and to technical people. Leave this seminar empowered by your own business plan, slide deck, basic website, online promotional tools and Web-design strategies.

Sec. 003
LeAnn Hilgers, M.S.
3 meetings
Saturdays, 9 am–3 pm
April 26–May 10
Berkeley: Golden Bear Center ● $595

Web Technology Entrepreneurship
BUS ADM X429.3 ● 2 semester units in Business Administration
(Formerly Introduction to Web Technology Entrepreneurship)
An elective in the Certificate Program in Entrepreneurship and Small Business Management

Learn about Web technology entrepreneurship in a fast-paced, hands-on environment. Examine launch strategies and action-oriented steps that can turn a new idea into a profitable company. Begin with a broad overview of the startup ecosystem and culture, and then delve into website product development. Gain a practical understanding of marketing and finance. Web technology entrepreneurship is a highly technical subject matter, and this introductory course involves technical implementation, though no prior technical experience is required. Note: You should bring a laptop to class.

Sec. 002
Allan Chao, B.A.
5 meetings
Saturdays, 9 am–4 pm
March 22–April 19
Berkeley: Golden Bear Center ● $750

Creating and Selling Your Own Music
BUS ADM 1011 ● 0.6 ceu

Designed for songwriters, music enthusiasts and engineers, this workshop teaches best practices and approaches to developing a musical project from design concept to product launch. Learn a step-by-step process to create, manage and market your own recording project. You also learn about developing a finished product and explore tactics for a successful product launch.

Sec. 001
Jonathan Gill, B.A.
1 meeting
Saturday, 9 am–4 pm
May 17
Berkeley: Golden Bear Center ● $225

NEW THIS TERM

Social Entrepreneurship
BUS ADM 1074 ● 1.2 ceu

Social entrepreneurship incorporates concepts, tools and practices of entrepreneurship that can be used to build mission-driven organizations. In this experiential workshop, you identify barriers to, and opportunities for, market penetration specific to social ventures. Learn how to connect key resources, activities, partners, customers, costs and revenues to your value proposition. Discover how to utilize the concepts, tools and practices of business to develop sustainable business models and drive social change.

Sec. 001
Leslie Williams, Ph.D.
2 meetings
Fridays, 9 am–4 pm
April 11 and 18
Berkeley: Golden Bear Center ● $495

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
Certificate in Entrepreneurship and Small Business Management

The Certificate Program in Entrepreneurship and Small Business Management presents a strong instructional foundation for launching and successfully operating a small business venture. The curriculum spans all stages of small business development, from defining an idea and finding and managing your finances to building marketing strategies and managing your operation. The capstone course teaches you how to finalize your business plan and execute and manage a successful business. The curriculum is overseen by an advisory board of business entrepreneurs and education leaders and approved by the University of California, Berkeley, Haas School of Business. Courses are taught by professionals with many years of practical business experience.

Curriculum Requirements
The curriculum comprises 5 required courses and a minimum of 1 elective for a total of 10 semester units (156 hours of instruction).

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

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

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

Gaining the fundamentals and logistic skills necessary to successfully launch a business from his studies in the Certificate Program in Entrepreneurship and Small Business Management, Richard Cartagena plans to open a small auto dealership with his brother. “Because all my classes were about business, everything I learned reinforced what I want to do,” he says. “It gave me the detailed information on financials and advertising to help round out my passion. It will give me the experience in running my own business, and then we’ll see where that goes.”
Start Up Your Importing Business
BUS ADM X413 • 0.8 ceu
Learn how to be a successful importer in this one-day seminar. Understand strategies for licensing, selecting products, finding suppliers, financing, costing and pricing, and gaining orders for your products. Gain the knowledge to work with governments, banks, brokers and carriers.

Sec. 003
John Spiers, M.A.
1 meeting
Monday, 8:30 am–5 pm
May 12
San Francisco: Downtown Center • $350

Small Business Management
BUS ADM X105 • 3 semester units in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management
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.

Sec. 001
Judith Forbes, M.B.A., Ph.D.
Enroll anytime
Online • $900

Marketing Tools for Startups
BUS ADM X419.4 • 2 semester units in Business Administration
Learn how to develop a face and voice for your startup; assess benefits to define target markets; and use visual design, copywriting and content creation in combination with social networking strategies to launch your new venture.
For course schedule, see p. 88.

New Product Development
BUS ADM X405.8 • 2 semester units in Business Administration
Explore the entire product development process, from identifying customer needs to product launch.
For course schedule, see p. 88.

New Venture Finance
BUS ADM X475.3 • 2 semester units in Business Administration
Review the standard techniques of venture capital financing for high-risk, high-growth and entrepeneurial startups and early-stage companies.
For course schedule, see p. 74.

Fiduciary

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

FREE INFORMATION SESSION
Fiduciary Studies
UNEX 1214
Private Professional Fiduciaries are entrusted with the management of the property, finances and care of those individuals incapable of performing these activities for themselves. Find out how this program can provide the essential skills to enter this field and offer seasoned fiduciaries enhanced career opportunities.

Sec. 001
1 meeting
Thursday, 6–7 pm
Jan. 9
Berkeley: Golden Bear Center • FREE

NEW THIS TERM
Fiduciary as Administrator of Estate (Probate, Trust and Conservatorship)
BUS ADM X416.5 • 1 semester unit in Business Administration
Analyze the administration of various types of estates: probates, trusts and conservatorships. Learn from fiduciaries, attorneys and court personnel to gain an understanding of the common problems and solutions in estate administration. Discuss what to do when considering a case, the first steps after accepting a case, and the different ways to handle court-supervised and noncourt-supervised estates.
Prerequisite: Introduction to Being a Private Professional Fiduciary and Special Needs Trust Administration and Public Benefits BUS ADM X416.5 or consent of instructor

Sec. 001
Instructor to be announced
5 meetings
Tuesdays, 6:30–9:30 pm
March 4–April 1
Berkeley Campus: 5 Evans Hall • $595

NEW THIS TERM
Fiduciary as Administrator of Person (PAO, Health Care, Conservatorship)
BUS ADM X416.7 • 1 semester unit in Business Administration
Learn the concepts to manage the personal care of people who suffer diseases such as dementia, brain injury, mental health diagnoses, and developmental delays and need assistance. Additionally, you learn the legal and decision-making requirements when appointed as conservator or person, trustee or power of attorney agent for health care. Understand the basics of different living arrangements, medication management, health care advocacy for a variety of medical issues, oversight of caregivers and care managers and end of life care. You also learn about alternatives to course involvement in personal care of individuals.

Sec. 001
Instructor to be announced
5 meetings
Thursdays, 6:30–9:30 pm
April 3–May 1
Berkeley Campus: 2 Evans Hall • $595
Behavioral Finance
BUS ADM X436.7 • 2 semester units in Business Administration
An elective in the certificate programs in Business Administration, in Finance and in Personal Financial Planning

Look at the financial industry and practice within the context of behavioral theory to understand the psychological aspects and reactions of individuals to financial markets and economic conditions. More than three decades of academic research on how human behavior and psychology affect financial decisions and markets is beginning to enter the public domain. Learn how this new approach either supports or refutes conventional wisdom.

Sec. 003
Richard Lehman, M.B.A.
6 meetings (accelerated schedule)
Mondays, 6–9:30 pm
April 7–21 (also Saturdays, April 12–26, 9 am–4:30 pm)
San Francisco: Downtown Center • $750

Intermediate Corporate Finance
BUS ADM X444.1 • 2 semester units in Business Administration

A requirement in the certificate programs in Finance and in Financial Planning and Analysis, Planning Concentration

A continuation of Basic Corporate Finance BUS ADM X430.1, this course rounds out the comprehensive overview of corporate finance topics and examines the concepts, techniques and tools that financial managers use to make effective investing, financing and working capital management decisions. Understand advanced capital budgeting topics, financing decisions, working capital management and multinational finance.

Sec. 004
Tony Yeh, M.B.A., M.Engr.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–March 18
San Francisco: Downtown Center • $750

Corporate Financial Analysis and Modeling
BUS ADM X435.6 • 1 semester unit in Business Administration

A requirement in the certificate programs in Finance and in Financial Planning and Analysis

This hands-on computer course provides the skills to apply the theories, concepts and tools covered in Basic Corporate Finance BUS ADM X430.1 and Intermediate Corporate Finance BUS ADM X444.1 to develop 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.

Sec. 004
Peter Lou, M.B.A., CFA,
Extension Honored Instructor
3 meetings
Saturdays, 9 am–3 pm
Jan. 25–Feb. 8
San Francisco: Downtown Center • $595

Sec. 001
Catherine Pinkas, M.B.A., PMP
Enroll anytime
Online, proctored final exam • $645

Derivative Securities
BUS ADM 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. 001
Instructor to be announced
10 meetings
Mondays, 6:30–9:30 pm
Jan. 27–April 7 (no meeting on Feb. 17)
San Francisco: Downtown Center • $750
International Finance
BUS ADM X430.8 ● 2 semester units in Business Administration
A requirement in the certificate programs in Finance and in Financial Planning and Analysis; 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. 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.

Sec. 005
Joseph S. Leung, M.B.A., CFA
10 meetings
Mondays, 6:30–9:30 pm
Jan. 13–March 31 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center ● $750

Fundamentals of Risk Management
BUS ADM X436.5 ● 2 semester units in Business Administration
A requirement in the Certificate Program in Finance; an elective in the certificate programs in Business Administration and in Personal Financial Planning
Learn the fundamentals of financial risk management as it is practiced by corporate treasury staffs and investment managers. Focus on current theory, best practices and financial products that can be used for risk mitigation.

Sec. 004
Lawrence Cox, B.S., M.B.A.
Jan. 14–April 8
Online ● $800

Sec. 005
Wayne Price, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
San Francisco: Downtown Center ● $750

Advanced Topics in Corporate Financial Modeling
BUS ADM X410.7 ● 2 semester units in Business Administration
An elective in the Certificate Program in Finance
Designed to provide a broad overview of current practices in financial modeling and data analysis, this hands-on course teaches you how to access and manipulate financial data and how to perform analysis using various analytical tools. Some course topics include discounted cash-flow analysis, financial statement analysis, cash-flow estimation, simple and multiple regressions, financial options and other derivatives, and international financial management.

Sec. 001
Peter Lou, M.B.A., CFA
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Feb. 22–March 22
San Francisco: Downtown Center ● $750

Financial Securities Analysis
BUS ADM X425.5 ● 2 semester units in Business Administration
An elective in the certificate programs in Personal Financial Planning and in Finance, Investment Management Specialization
Acquire a solid framework to understand and practice fundamental analysis as it applies to stocks, bonds and fixed-income securities. Develop the 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.

Sec. 001
Peter Lou, M.B.A., CFA
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
April 5–May 3
San Francisco: Downtown Center ● $750

Presenting Data Effectively
BUS ADM X419.1 ● 1 semester unit in Business Administration
(Formerly Presenting Financial and Other Numerical Information Effectively)
Study the rules and practices of quantitative communication to ensure that your audience understands your financial and other numerical presentations. Examine ways to use software tools such as spreadsheets to produce your reports quickly and efficiently. Learn how to apply the rules and tools of quantitative communication to your specific business needs. Ensure that your financial communication supports a narrative that is clear and meaningful, whether you deliver it in printed, electronic or spoken form.

Sec. 001
Randall Bolten, M.B.A.
5 meetings
Mondays, 6:30–9:30 pm
Jan. 27–March 3 (no meeting on Feb. 17)
San Francisco: Downtown Center ● $595

International Leadership Strategies: Managing Across Multiple Cultures and Industries
BUS ADM X478.6 ● 2 semester units in Business Administration
Learn to make effective and responsible business decisions in international markets with employees from various cultural backgrounds. Review the cultural aspects of global management initiatives, and learn strategies to create a supportive and innovative working environment. Investigate key multinational issues such as intellectual property rights in foreign markets, corporate governance and political risks. Analyze and compare the business environment and management practices in emerging versus developed countries. A special session addresses China’s economy and business practices.

Sec. 001
Volker E. Kuebler, M.B.A., Ph.D.
10 meetings
Wednesdays, 6:30–9:30 pm
March 26–May 28
San Francisco: Downtown Center ● $750
Certificate Program in Finance

With the UC Berkeley Extension Certificate Program in Finance, you gain in-depth knowledge and skills to advance your career—in less time and at less cost than a master’s degree requires. The integrated curriculum features both financial theory and practical tools. First, build a strong foundation with courses in risk, financial analysis and modeling, and corporate finance. Then, choose a specialization for further study:

- **Capital Markets** for portfolio management; options; derivatives; debt markets; and techniques for creating, using, acquiring and selling complex financial instruments.
- **Investment Management** for securities analysis, portfolio management, and options and other derivatives for managing the investment of financial instruments.

The curriculum is overseen by an advisory board of business and education leaders and approved by the University of California, Berkeley, Haas School of Business, ensuring your education is relevant and up to date. Courses are taught by working financial professionals with many years of practical business experience.

**Curriculum Requirements**
The curriculum comprises 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
  BUS ADM X435.6 (offered this term)
- Fundamentals of Risk Management
  BUS ADM X436.5 (offered this term)
- Intermediate Corporate Finance
  BUS ADM X444.1 (offered this term)
- International Finance
  BUS ADM X430.8 (offered this term)

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

**Capital Markets Specialization**
- Advanced Portfolio and Risk Management
  BUS ADM X436.6
- Debt Markets and Fixed-Income Securities
  BUS ADM X436.3
- Derivative Securities
  BUS ADM 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**
extension.berkeley.edu/cert/finance.html
(510) 642-4231
business@unex.berkeley.edu

As an investment banker at Robert W. Baird & Co., Certificate Program in Finance student Josh Fiedler uses lessons learned in class to solve issues at work. “I had to run an analysis of companies at my work, and I brought ideas from class to this exercise,” he recalls. “The scenarios presented in class were directly applicable to this case.”

Find the Options You Want
- Capital markets
- Investment management

Get the Knowledge You Need
- Financial analysis and modeling
- Risk management
- Business valuation
- Investment portfolio management
- Securities analysis
New Venture Finance
BUS ADM X475.3 • 2 semester units in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management

First, review the standard techniques of venture capital financing for high-risk, high-growth and entrepreneurial startups and early-stage companies. Then, examine in more detail relatively new and unique financing practices from both a venture investor’s and an entrepreneur’s perspective. Learn effective strategies for blending traditional financial and management theories with current venture-investing practices, particularly in Silicon Valley—the world’s leading source of venture capital sourcing.

Sec. 002
Robert Coackley, B.S.
10 meetings
Tuesdays, 6:30–9:30 pm
March 25–May 27
San Francisco: Downtown Center • $750

Budgeting and Planning for Nonfinancial Managers
BUS ADM 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 learn techniques for making shrewd investment decisions, including issues such as return on investment and risk versus return.

Sec. 002
Susanna Wong, M.B.A., M.S.
6 meetings
Saturdays, 9:30 am–3:30 pm
April 15–May 31 (no meeting on May 24)
Belmont: Belmont Center • $750

International Business and National Economic Policy
BUS ADM X478.4 • 2 semester units in Business Administration

Explore the relationships and dynamics between multinational enterprises (MNEs) and national governments. Use a multidisciplinary approach to examine how government policies affect, and in turn are affected by, the strategies of international businesses. Learn to understand, analyze and evaluate theories and philosophies that influence home and host government policies; the roles businesses play in shaping these policies; and how policies and other factors shape the competitive strategies of international businesses in the areas of trade, investment and other international economic activities. You use case studies to identify, apply and evaluate models of business and government relations across major geographic regions of the world.

Sec. 002
Rajeev Sooreea, Ph.D.
5 meetings
Saturdays, 9 am–4 pm
Jan. 25–Feb. 22 (no meeting on Feb. 15)
Berkeley: Golden Bear Center • $750

Basic Financial Mathematics and Financial Calculators
BUS ADM 1002 • 0.6 ceu

Get 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.

If you are unsure of your math skills, this class is helpful preparation for Basic Corporate Finance BUS ADM X430.1 and Survey of Personal Financial Planning BUS ADM X433. Please check course textbook requirements for the preferred calculator.

Prerequisite: High school–level algebra

Sec. 004
Martin Brook, M.B.A., Extension Honored Instructor
1 meeting
Saturday, 10 am–5 pm
Jan. 11
San Francisco: Downtown Center • $300

Sec. 003
Martin Brook, M.B.A., Extension Honored Instructor
1 meeting
Saturday, 10 am–5 pm
March 8
Berkeley: Golden Bear Center • $300

Performance Metrics for Results
BUS ADM X410.4 • 2 semester units in Business Administration
(Formerly Transforming Performance Measurement)

Learn how to identify high-leverage measures of success. Gain the tools that help you define and evolve these measures as your organization grows and matures. Review frameworks for evaluating the relevance of particular measures, as well as how to evolve measures from retrospective to predictive ones. Finally, learn how to create a culture in which measurement is positive and transformative.

Sec. 002
Jessica Weatherford, M.S., M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 27–May 29
San Francisco: Downtown Center • $750

Basic Corporate Finance
BUS ADM X430.1 • 2 semester units in Business Administration

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.

For course schedule, see p. 75.

Finances for Entrepreneurs and Small Business Owners
BUS ADM X476.5 • 1 semester unit in Business Administration

Learn 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.

For course schedule, see p. 67.

Corporate Financial Management
BUS ADM X412.5 • 2 semester units in Business Administration

Get a broad, practical introduction to financial management even if you have no previous knowledge of finance or accounting.

For course schedule, see p. 58.
Advanced Corporate Finance
BUS ADM X431.5 • 2 semester units in Business Administration
Apply essential financial tools and techniques in a series of case studies selected to illustrate the analysis of critical corporate finance decisions.
For course schedule, see p. 76.

Business Valuation
BUS ADM X431.9 • 2 semester units in Business Administration
Learn to apply financial and economic theory to investment, financing and dividend decisions to identify ways to maximize shareholder returns.
For course schedule, see p. 76.

Strategic Planning and Analysis
BUS ADM X417.4 • 2 semester units in Business Administration
Understand the key components required to develop a strategic plan, and learn to define and develop the concept of competitive advantage.
For course schedule, see p. 76.

Financial Planning and Analysis
COURSE INFORMATION
(510) 642-4231
business@unex.berkeley.edu
extension.berkeley.edu/business
ONLINE COURSE INFORMATION
(510) 643-1550
extension.berkeley.edu/online

FREE INFORMATION SESSION
Certificate Program in Financial Planning and Analysis
UNEX 1043
Find out how a certificate in financial planning and analysis from UC Berkeley Extension can prepare you for career advancement or an advanced degree. For certificate details, see p. 77 or visit extension.berkeley.edu/cert/financial_planning_analysis.html.

Sec. 003
1 meeting
Monday, 6:15–7 pm
May 19
Berkeley: Golden Bear Center • FREE

Mergers and Acquisitions
BUS ADM X415.9 • 2 semester units in Business Administration
A requirement in the Certificate Program in Financial Planning and Analysis, Planning Concentration
Explore the various stages and strategies of corporate mergers and acquisitions, and understand the benefits of a merger or acquisition in relation to corporate objectives. Learn practical planning methods and tools for making an eventual acquisition; determining the value of a company; working with various advisers; and leading the transaction process through the letter of intent, due diligence and the close. By the end of this course, you are able to demonstrate your ability to utilize a variety of techniques to value a company, obtain deal terms consistent with shareholders’ objectives, possess an overview of legal and tax knowledge to engage various advisers, and effectively support a transaction.
Sec. 003
Rene-Francois Cervantes, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 26–May 28
San Francisco: Downtown Center • $750

Basic Corporate Finance
BUS ADM X430.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Financial Planning and Analysis, Accounting Concentration; 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. Devote specific attention to the financial management context, the time value of money, risk and return, the cost of capital, the valuation of stocks and bonds, capital budgeting decision-analysis tools, the impact of financial leverage on cost of capital and valuation, dividend policy, and an overview of financial statement analysis.
This course serves as a prerequisite for most other finance courses at UC Berkeley Extension.

Sec. 007
Bradley Fox, M.B.A.
Jan. 14–April 8
Online • $800

Sec. 008
Fernando Garcia, J.D., M.B.A.
Jan. 21–April 15
Online • $800

Sec. 009
Patricia Muscatelli, M.B.A., M.S., Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
San Francisco: Downtown Center • $750

Sec. 012
Instructor to be announced
Feb. 4–April 29
Online • $800

Sec. 010
Susanna Wong, M.B.A., M.S.
10 meetings
Tuesdays, 6–9 pm
March 25–May 27
Belmont: Belmont Center • $750
Business Administration

BUS ADM X431.9 • 2 semester units in Business Administration
A requirement in the Certificate Program in Financial Planning and Analysis; an elective in the Certificate Program in Personal Financial Planning

Learn to apply financial and economic theory to investment, financing and dividend decisions to identify ways to maximize shareholder returns. Understand how 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.

Sec. 004
Mohsin Hafeez, M.B.A., CFP®
10 meetings
Tuesdays, 6:30–9:30 pm
March 25–May 27
San Francisco: Downtown Center • $750

Sec. 001
Bradley Fox, M.B.A.
Enroll anytime
Online, proctored final exam • $800

Financial Statement Analysis

BUS ADM X419.2 • 2 semester units in Business Administration
A requirement in the certificate programs in Accounting and in Financial Planning and Analysis

Focus on the effective analysis of financial statements by integrating the concepts and principles learned in previous accounting courses. Examine the analytical tools to assess a company’s performance, the concept of quality of earnings, approaches to valuation and other issues.

Sec. 006
Kenneth Kurtz, M.Acc.
10 meetings
Thursdays, 6:30–9:30 pm
March 27–May 29
San Francisco: Downtown Center • $750

Sec. 001
Donald Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $800

Sec. 003
Kenneth Kurtz, M.Acc.
Enroll anytime
Online, proctored final exam • $800

Advanced Corporate Finance

BUS ADM X431.5 • 2 semester units in Business Administration
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 BUS ADM X430.1 and Intermediate Corporate Finance BUS ADM X444.1; you should also be proficient with computer spreadsheets and financial calculators.

Sec. 002
Tony Yeh, M.B.A., M.Engr.
10 meetings
Tuesdays, 6:30–9:30 pm
March 25–May 27
San Francisco: Downtown Center • $750

Sec. 001
Donald Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $800

Strategy Execution With the Balanced Scorecard

BUS ADM X464.6 • 2 semester units in Business Administration
(Formerly Balanced Scorecard for Metric-Centered Strategic Management)
A requirement in the Certificate Program in Financial Planning and Analysis, Planning Concentration
The Balanced Scorecard (BSC) is a strategic performance-management tool that helps you choose a set of targets through which a company measures success. Most often, this set includes sales, financial, customer service, employee learning and operations measures. Review the management theory that led to the creation of the BSC method, and explore its subsequent evolution in the real business world. Study components of the BSC—such as strategy maps, key performance indicators and scorecards—to learn best practices and implementation strategies, including performance information systems. Gain an understanding of this widely used, empirical management tool, and be ready to implement it in your own business environment to spur sales and profit growth.

Sec. 003
Erick Ahrens, B.S., M.B.A.
Jan. 14–April 8
Online, proctored final exam • $800

Sec. 004
Erick Ahrens, B.S., M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
San Francisco: Downtown Center • $750

Strategic Planning and Analysis

BUS ADM X417.4 • 2 semester units in Business Administration
Understand the key components required to develop a strategic plan, and learn to define and develop the concept of competitive advantage. Through a review of texts and relevant cases, and the composition of a final strategic plan, gain the tools to apply to your own business environment and career.

Sec. 001
Tony Yeh, M.B.A., M.Engr.
10 meetings
Tuesdays, 6:30–9:30 pm
March 25–May 27
Berkeley Campus: 9 Evans Hall • $750

Corporate Financial Analysis and Modeling

BUS ADM X435.6 • 1 semester unit in Business Administration
Develop spreadsheet knowledge that you can use for effective financial analysis and decision making.

For course schedule, see p. 71.

International Finance

BUS ADM X430.8 • 2 semester units 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.

For course schedule, see p. 72.

New Venture Finance

BUS ADM X475.3 • 2 semester units in Business Administration
Review the standard techniques of venture capital financing for high-risk, high-growth and entrepreneurial startups and early-stage companies.

For course schedule, see p. 74.
Certificate Program in Financial Planning and Analysis

Learn to guide your employer to optimum financial performance and growth with UC Berkeley Extension’s Certificate Program in Financial Planning and Analysis. Gain an understanding of the analytical underpinnings of economic decision making for the growth area of corporate accounting and finance. In this certificate, you learn to interpret accounting results and formulate plans and strategies for future growth based on sound analytical principles. You also examine the latest analytical techniques used by industry executives to shape their companies’ future plans and strategies.

Taught by practicing executives, the certificate curriculum is overseen by an advisory board that comprises a mix of successful corporate executives, consultants, education leaders and other experts and is approved by the University of California, Berkeley, Haas School of Business. In addition to fulfilling the core competencies of the certificate, you also develop specific expertise in either an accounting or planning concentration. Courses are available in both online and classroom formats.

Curriculum Requirements
The curriculum comprises 8 required courses (4 core courses, 3 concentration courses and 1 elective) for a total of 16–18 semester units (at least 240 hours of instruction).

Required Core Courses
- Business Valuation BUS ADM X431.9 (offered this term)
- Corporate Financial Analysis and Modeling BUS ADM X435.6 (offered this term)
- Financial Statement Analysis BUS ADM X419.2 (offered this term)
- International Finance BUS ADM X430.8 (offered this term)

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

Target Your Needs
- Accounting
- Planning

Gain the Knowledge You Need
- Business valuation
- Financial statement analysis
- International finance

Accounting Concentration
- Basic Corporate Finance BUS ADM X430.1 (offered this term)
- Intermediate Accounting I BUS ADM X421.1 (offered this term)
- Intermediate Accounting II BUS ADM X421.2 (offered this term)

Planning Concentration
- Strategy Execution With the Balanced Scorecard BUS ADM X464.6 (offered this term)
- Intermediate Corporate Finance BUS ADM X444.1 (offered this term)
- Mergers and Acquisitions BUS ADM X415.9 (offered this term)

Learn More and View the Flyer
extension.berkeley.edu/cert/financial_planning_analysis.html
(510) 642-4231
business@unex.berkeley.edu
Human Resources

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

ONLINE COURSE INFORMATION
(510) 644-4979
extension.berkeley.edu/online

FREE INFORMATION SESSION
Certificate Program in Human Resource Management
UNEX 1044
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. 79 or visit extension.berkeley.edu/cert/hrm.html.

Sec. 003
1 meeting
Monday, 6:45–7:45 pm
May 12
San Francisco: Downtown Center • Free

Essentials of Human Resources
BUS ADM X450.1 • 2 semester units in Business Administration
A prerequisite for 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 laws, rules and regulations that affect the California employer and the role of the human resources professional in an organizational setting.

Sec. 005
David Schlocker, M.B.A., GPHR, SPHR
8 meetings
Mondays, 6–9:45 pm
Jan. 6–March 10 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $750

Sec. 004
Catherine McKnight, M.A.
Jan. 14–April 8
Online • $800

NEW THIS TERM
Aligning Human Resource Initiatives With Business Success
BUS ADM X493.5 • 1 semester unit in Business Administration
A requirement in the Certificate Program in Human Resource Management
Examine HR’s shift away from an administrative function to a more strategic vision within the organization that aims to bring high-value contributions to business success. Understand the changing role of HR, and learn how to develop and present initiatives that support and inform business demands, outsourcing, technology and compliance issues. Using basic business acumen, gain skills and best practices to evaluate your company’s strategic plan and help secure a C-level seat at the table.

Sec. 001
Monica Doshi Becker, B.A., SPHR
5 meetings
Wednesdays, 6–9 pm
Jan. 8–Feb. 5
San Francisco: Downtown Center • $625

Effective Performance Management
BUS ADM 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, measuring performance against goals, performance appraisals, and employee development.

Sec. 003
Terri Lynn Cardona, M.S.
10 meetings
Tuesdays, 6–9 pm
Jan. 14–March 18
San Francisco: Downtown Center • $750

Employee Recruitment, Selection and Placement
BUS ADM 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 and making hiring decisions. Recruiters who manage multiple openings can also benefit from this course.

Sec. 003
Nicole Jackson, M.B.A., M.S.
5 meetings
Saturdays, 9 am–4 pm
May 3–June 7 (no meeting on May 24)
San Francisco: Downtown Center • $750

Employee Relations
BUS ADM 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.

Sec. 002
Susan J. Gallagher, M.S.
6 meetings
Wednesdays, 6:30–9:30 pm
Feb. 12–March 19
San Francisco: Downtown Center • $625
The Certificate Program in Human Resource Management has new requirements effective spring 2014 term. If you have already paid your certificate application fee and still have courses to complete, you may choose to continue with the old requirements or you may choose to complete the new requirements, but not both. If you have questions or need further guidance about the new curriculum, please call or email the department.

With the Certificate Program in Human Resource Management, you can develop the knowledge, methods and skills necessary to meet the human resource challenges of today’s changing workplace and workforce. With courses developed by top HR professionals and approved for recertification credits by the HR Certification Institute, the certificate gives you a strong foundation in current HR best practices. It also prepares you to lead the strategic deployment of human capital in today’s corporations, government agencies, nonprofit organizations and small businesses. The curriculum is overseen by an advisory board of business and education leaders and approved by the University of California, Berkeley, Haas School of Business, ensuring your education is relevant and up to date. Courses are taught by human resource professionals with many years of practical experience.

**Curriculum Requirements**

The curriculum comprises 8 required courses and a minimum of 2 electives for a total of 18 semester units (273 hours of instruction).

**Prerequisite**

Essentials of Human Resources BUS ADM X450.1

**Required Courses**

- Aligning Human Resource Initiatives With Business Success BUS ADM X493.5 (offered this term)
- Employee Recruitment, Selection and Placement BUS ADM X450.8 (offered this term)
- Employee Relations BUS ADM X454.4 (offered this term)
- HR Metrics; Measuring and Analyzing Human Capital BUS ADM X496.9 (offered this term)
- Human Resource Systems and Technology BUS ADM X482.2 (offered this term)
- Talent Management and Workforce Development BUS ADM X493.9 (offered this term)
- Total Compensation BUS ADM X493.8 (offered this term)

**Electives**

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

**Find the Quality You Want**

- Courses approved for certification and recertification credit through the HR Certification Institute
- Instructors with Senior Professional in Human Resources designation
- Industry and UC Berkeley Haas School of Business advisers

Maria Briggs Berta finds that she can put lessons learned in Certificate Program in Human Resources Management classes immediately to work—specifically, coursework in Terri Lynn Cardona’s Effective Performance Management course. “I delivered my classroom assignments to my management team,” she says. “That was remarkable to me: It wasn’t just class work, but something I could use 100 percent at an engineering firm. Managers were impressed with the expanded resources I was able to develop for them as a direct result of knowledge I gained from classes.”
HR Metrics: Measuring and Analyzing Human Capital
BUS ADM X493.9 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management
Learn to assess and measure employee and organizational performance to understand 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 qualitative and quantitative recommendations that affect key management decisions.
Prerequisite: Essentials of Human Resources
BUS ADM X450.1
Sec. 002
Amit Mahindra, M.A.
10 meetings
Wednesdays, 6–9 pm
Jan. 8–March 12
San Francisco: Downtown Center • $750

Human Resource Systems and Technology
BUS ADM X482.2 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management
Explore the strategic role of human resource systems in the effective management of an organization. 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 or tablet with Wi-Fi capability to every class.
Sec. 003
Lilian Loyola, M.S., PHR
10 meetings
Thursdays, 6–9 pm
Jan. 16–March 20
Berkeley: Golden Bear Center • $750

Total Compensation
BUS ADM X493.8 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management
Study total compensation rewards and work-life option 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.
Sec. 003
Instructor to be announced
10 meetings
Thursdays, 6–9 pm
March 27–May 29
San Francisco: Downtown Center • $750

Talent Management and Workforce Development
BUS ADM X493.9 • 2 semester units in Business Administration
A requirement in the Certificate Program in Human Resource Management; an elective in the Certificate Program in Leadership and Management
Talent management has evolved beyond the hiring and firing of employees, covering all elements of human capital strategy, from employee selection, retention, performance management and compensation to succession planning, diversity and more. In this course, intended for professionals who manage talent across a broad spectrum of organizations, you survey the core elements of talent management and learn how to develop and implement effective talent management systems within your organization.
Sec. 003
Rasa Peay-Wainwright, B.A.
5 meetings
Saturdays, 9 am–4 pm
March 1–29
San Francisco: Downtown Center • $750

Employment Law
BUS ADM X455.2 • 2 semester units in Business Administration
An elective in the Certificate Program in Human Resource Management
The complex issues surrounding human resource management necessitate a good understanding of the interrelationship between state and federal legislation and court decisions, as well as the daily activities of the human resources function. Explore issues that affect workplace policies, such as the Americans With Disabilities Act, sexual harassment, privacy rights and related matters.
Sec. 002
Linda Chan, J.D.
5 meetings
Saturdays, 9 am–4 pm
April 26–May 31 (no meeting on May 24)
San Francisco: Downtown Center • $750

Employee Benefit Plans
BUS ADM 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. Explore legal requirements, administrative problems and available options, as well as government-mandated plans such as workers’ compensation and Social Security. 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.
Sec. 001
Richard Takahashi, M.B.A.
Enroll anytime
Online • $800

Internal Workplace Mediation for the Human Resources Professional
BUS ADM X434.1 • 2 semester units in Business Administration
An elective in the Certificate Program in Human Resource Management
Gain a conceptual understanding of mediation, and the unique features of workplace mediation. Learn to distinguish between different kinds of conflicts in the workplace, specifically those that can be mediated internally and those that need outside, professional (or formal) mediation. Practice mediating conflict in class. Learn to more effectively help employees resolve their conflicts in the workplace and advise senior management on the need to escalate to professional or formal mediation where appropriate and necessary.
Sec. 002
John Ford
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–March 12
San Francisco: Downtown Center • $750

Training and Learning in Organizations
BUS ADM X499.1 • 2 semester units in Business Administration
An elective in the Certificate Program in Human Resource Management
Today’s business world is lean and mean, with fewer employees, fewer levels of management, and increased global competition. Understand how performance and productivity can deliver the results that allow an organization to achieve its strategic goals. Explore how the training and human resource development function is also rapidly changing and being asked to make a larger contribution to an organization’s success. Learn to focus on roles, methods and techniques that help an organization directly link the development and training of people to business results and organizational effectiveness.
Sec. 001
Richard Ragan, M.S., CPT
Extension Honored Instructor
8 meetings
Wednesdays, 6–9 pm
March 19–April 23 (also Saturdays, March 15 and April 26, 9 am–4 pm)
Berkeley: Golden Bear Center • $750

Performance Evaluations: Measuring Goals and Outcomes
BUS ADM 1036 • 0.8 ceu
Learn critical information and explore strategies and techniques for ensuring successful performance evaluations.
For course schedule, see p. 64,
Principles of Business Law

BUS ADM X410.1 • 2 semester units in Business Administration

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.

Sec. 003
Jason Lum, J.D.
Jan. 14–April 8
Online • $800

Sec. 004
John Harding, J.D., M.A.
10 meetings
Thursdays, 6–9 pm
Jan. 9–March 13
San Francisco: Downtown Center • $750

Intellectual Property Law

BUS ADM 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, and recent technological developments and trends in the legislative and legal arenas. Anyone involved in the creation, acquisition, use, sale, marketing, licensing and ownership of intellectual property can benefit from this course.

Sec. 001
Brien Walton, J.D., LL.M.
Enroll anytime
Online • $800

Paralegal Studies

FREE INFORMATION SESSION
Certificate Program in Paralegal Studies

UNEX 1047

UC Berkeley Extension’s Certificate Program in Paralegal Studies 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 certificate is available in a classroom format in San Francisco. It is also available in an online format that you can begin at any time.

Sec. 002
1 meeting
Monday, 5:30–7 pm
Jan. 13
San Francisco: Downtown Center • FREE

ONLINE INFORMATION SESSION
Certificate Program in Paralegal Studies

Find out how you can prepare for a career as a paralegal. Visit the certificate page online to register at extension.berkeley.edu/cert/paralegal.html.

Sec. 002
Wednesday, 12–12:45 pm
March 19
Online • FREE

Essential Paralegal Studies Part I: Foundational Skills

LAW X418 • 2 semester units in Law

A requirement in the Certificate Program in Paralegal Studies

Study the foundational paralegal qualities most sought by attorneys and law firms. Learn various aspects of paralegal skills, including legal terminology; court structures and procedures; legal ethics; evidence; investigation; interviewing; formal discovery methods and procedures; legal research, analysis and writing; and other subjects relevant to becoming a qualified paralegal.

Online section must be completed within three months of receiving course login information.

Sec. 003
Tod Zuckerman, J.D., Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
March 25–May 27
San Francisco: Downtown Center • $1,550

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750

Essential Paralegal Studies Part II: Authority, Research and Writing

LAW X419 • 2 semester units in Law

A requirement in the Certificate Program in Paralegal Studies

Learn all aspects of advanced paralegal practice, 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 a successful paralegal.

Online section must be completed within three months of receiving course login information.

Prerequisite: Essential Paralegal Studies Part I: Foundational Skills LAW X418

Sec. 003
Tod Zuckerman, J.D., Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Jan. 7–March 11
San Francisco: Downtown Center • $1,550

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750

Paralegal Business Law

LAW X404 • 1 semester unit in Law

An elective in the Certificate Program in Paralegal Studies

Study relevant examples from the day-to-day practices of business lawyers and their paralegals. Learn about sole proprietorships, partnerships, corporations and limited-liability companies.

Online section must be completed within two months of receiving course login information.

Sec. 002
Jason P. Gordon, J.D.
5 meetings
Mondays, 6–9 pm
Feb. 10–March 17 (no meeting on Feb. 17)
San Francisco: Downtown Center • $795

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875
Mediation and Conflict Resolution

BUS ADM 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 conflicts 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.

Sec. 002
Ronald Kelly, Extension Honored Instructor
5 meetings
Saturdays, 9 am–5:30 pm
March 1–29
Berkeley Campus: Valley Life Sciences Building • $1,095

Paralegal California Procedures

LAW X407 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies

Study California court rules and procedures, as well as ways 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 to successfully assist attorneys in identifying and applying trial court rules.

Online section must be completed within two months of receiving course login information.

Sec. 004
David Yang, J.D., LL.B.
5 meetings
Thursdays, 6–9 pm
March 27–April 24
San Francisco: Downtown Center • $795

Paralegal Contract Law

LAW X405 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies

Learn how to form effective legal contracts, how contracts are performed, and how to remedy for nonperformance or breach of contract. You can apply the contract drafting, analysis and litigation skills learned in this course to a wide variety of legal situations.

Online section must be completed within two months of receiving login information.

Sec. 003
Todd Zuckerman, J.D., Extension Honored Instructor
5 meetings
Thursdays, 6–9 pm
Jan. 9–Feb. 6
San Francisco: Downtown Center • $795

Paralegal Criminal Law

LAW X406 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies

Study substantive and procedural criminal law, and learn to identify the elements of and defenses against criminal charges. Examine levels of criminal intent and the purpose of criminal punishment.

Online section must be completed within two months of receiving course login information.

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Family Law

LAW X410 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies

Learn the paralegal’s role in family law practice. Topics include child custody and visitation matters. Examine issues of paternity proceedings, adoption and surrogacy rights.

Online section must be completed within two months of receiving course login information.

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Intellectual Property Law

LAW X409 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies

Explore trademark, copyright, patent and trade-secret laws as they relate to a paralegal’s role in representing clients. Gain quantifiable paralegal skills in the area of intellectual property law to assist clients with their intellectual property matters under an attorney’s supervision.

Online section must be completed within two months of receiving course login information.

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Tort Law

LAW X403 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies

Get an overview of negligence, personal injury, strict and products liability. Examine the intentional torts of battery, assault and false imprisonment. Analyze the distinctions between criminal and civil law, as well as liability, duty, breach of duty, causation and damages while applying the appropriate legal defenses.

Online section must be completed within two months of receiving course login information.

Sec. 003
Larry Sager, J.D.
5 meetings
Thursdays, 6–9 pm
May 1–29
San Francisco: Downtown Center • $795

Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875
Certificate Program in Paralegal Studies

Designed by paralegals for paralegals and taught by practicing attorneys approved by the University of California, Berkeley, the Certificate Program in Paralegal Studies offers the skills and knowledge you need to become a practicing paralegal. In just six months, you can fulfill California’s education 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 an online curriculum that you can begin anytime, or choose the hybrid format that combines classroom and online study.

Curriculum Requirements
The curriculum for both hybrid and online formats comprises 2 required courses and 4 electives for a total of 8 semester units (360 hours of instruction).

Required Courses
- Essential Paralegal Studies Part I: Foundational Skills LAW X418 (offered this term)
- Essential Paralegal Studies Part II: Authority, Research and Writing LAW X419 (offered this term)

Electives
- Paralegal Business Law LAW X404 (offered this term)
- Paralegal California Procedures LAW X407 (offered this term)
- Paralegal Contract Law LAW X405 (offered this term)
- Paralegal Criminal Law LAW X406 (offered this term)
- Paralegal Family Law LAW X410 (offered this term)
- Paralegal Intellectual Property Law LAW X409 (offered this term)
- Paralegal Tort Law LAW X403 (offered this term)

Statement Regarding California Regulatory Requirements
The UC Berkeley Extension online and hybrid Certificate Program in Paralegal Studies 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.

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

Find the Quality You Want
- Meets California’s paralegal requirements
- Instructors approved by UC Berkeley
- Curriculum designed for paralegals by paralegals

Get the Flexibility You Need
- Complete the certificate in just six months
- Choose online or hybrid format
- Start online at any time
Leadership and Management

BUSINESS ADMINISTRATION

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG

BUS ADM X451.3 • 2 semester units in Business Administration

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

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. In this highly interactive course, you learn successful negotiation skills through role play and real-world case studies, 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. Learn techniques to overcome obstacles that prevent you from reaching your goals.

Sec. 004
Eli W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor
5 meetings
Sat/Sun, 6–9 pm
San Francisco: Downtown Center • FREE

Leadership, Influence and Power in Organizations

BUS ADM 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 materials and case studies about the global economy, Silicon Valley innovation and current events provide you with the tools to develop personal leadership skills and styles.

Sec. 003
Eli W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Jan. 8–March 15
Belmont: Belmont Center • $750

Managing Change and Ambiguity in the Workplace

BUS ADM X411.9 • 1 semester unit in Business Administration

A requirement in the Certificate Program in Leadership and Management; an elective in the Certificate Program in Project Management and 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 understand 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.

Prereading assignments are listed in the course reader.

Sec. 002
Anna Ewins, Ph.D.
2 meetings
Thursdays, 6–9 pm
San Francisco: Downtown Center • $595

Organizational Communication Strategies for Managers

BUS ADM X498.9 • 2 semester units in Business Administration

A requirement in the Certificate Program in Leadership and Management

Learn to communicate effectively in a complex business environment. Understand 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.

Prerequisites: Business Communication: Writing and Speaking BUS ADM X404.7 or equivalent; you must possess basic business writing, speaking and communication skills.

Sec. 003
Mary Lynn Wilson, Ph.D.
5 meetings
Thursdays, 6–9 pm
San Francisco: Downtown Center • $750

Effective Leadership and Management: Understanding and Influencing the Dynamics of Organizations

BUS ADM X498.4 • 2 semester units in Business Administration

A requirement in the Certificate Program in Leadership and Management

Learn the concepts, application, practice and strategies involved in becoming a highly effective leader. As organizational expectations continue to increase with heavy workloads, fewer staff, increased complexity and reduced resources, you explore how leadership behaviors can increase organization and employee performance. Topics include managing talent, developing teams, resolving conflicts, making decisions, working with the multigenerational workforce, tackling work-family challenges, and addressing diversity and cultural dilemmas. Learn how to move from the tactical to the strategic as a leader, as well as how to address challenges systemically. Learn concrete skills to improve your ability to lead teams and achieve business goals.

Course requirements include taking an assessment test, offered at a rate of $120, to provide insights into your natural leadership strengths and how they can be applied most successfully in your current and future leadership roles.

Sec. 003
Barbara Miller, M.A.
10 meetings
Thursdays, 6–9 pm
Jan. 9–March 13
San Francisco: Downtown Center • $750

Business Negotiating

BUS ADM X451.3 • 2 semester units in Business Administration

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

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. In this highly interactive course, you learn successful negotiation skills through role play and real-world case studies, 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. Learn techniques to overcome obstacles that prevent you from reaching your goals.

Sec. 004
Eli W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor
5 meetings
Sat/Sun, 6–9 pm
Jan. 8–March 15
San Francisco: Downtown Center • FREE

Leadership, Influence and Power in Organizations

BUS ADM 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 materials and case studies about the global economy, Silicon Valley innovation and current events provide you with the tools to develop personal leadership skills and styles.

Sec. 003
Eli W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
March 18–May 20
Belmont: Belmont Center • $750

Organizational Communication Strategies for Managers

BUS ADM X498.9 • 2 semester units in Business Administration

A requirement in the Certificate Program in Leadership and Management

Learn to communicate effectively in a complex business environment. Understand 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.

Prerequisites: Business Communication: Writing and Speaking BUS ADM X404.7 or equivalent; you must possess basic business writing, speaking and communication skills.

Sec. 003
Mary Lynn Wilson, Ph.D.
5 meetings
Thursdays, 6–9 pm
April 19–May 31 (no meetings on May 3 and 24)
San Francisco: Downtown Center • $750
Certificate Program in Leadership and Management

Become a more effective leader, manager or supervisor through practical, skill-based learning in the Certificate Program in Leadership and Management. Grounded in the practical aspects of day-to-day management, the curriculum develops knowledge and skills useful to a position of influence, even if you are not in a formal management role. 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. The curriculum is overseen by an advisory board of business and education leaders and approved by the University of California, Berkeley, Haas School of Business, ensuring your education is relevant and up to date. The certificate prepares you to take on higher-level job responsibilities, improves your current managerial performance, helps you develop a big-picture view of management and enables you to communicate more effectively.

Curriculum Requirements
The curriculum comprises 5 required courses and 2 electives for a total of 13 semester units (195 hours of instruction).

Required Courses
- Effective Leadership and Management: Understanding and Influencing the Dynamics of Organizations BUS ADM X498.4 (offered this term)
- Business Negotiating BUS ADM X451.3 (offered this term)
- Leadership, Influence and Power in Organizations BUS ADM X499.3 (offered this term)
- Managing Change and Ambiguity in the Workplace BUS ADM X411.9 (offered this term)
- Organizational Communication Strategies for Managers BUS ADM X498.9 (offered this term)

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

Gain the Skills You Want
- Effective communication
- Leadership capacity
- Ethical business practice

Get the Knowledge You Need
- Management
- Business communication
- The role of power and authority
- Business ethics and social responsibility

Learn More and View the Brochure
extension.berkeley.edu/cert/mgt.html
(510) 642-4231
business@unex.berkeley.edu
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 program encourages women to lead business teams with honesty, respect, courage and compassion.

Curriculum Requirements
The curriculum comprises 3 required courses for a total of 6 semester units (90 hours of instruction).

Required Courses
- Making Power Moves: Women and Leadership BUS ADM X454.8
- Moving on Up: Women and Leadership BUS ADM X474.1 (offered this term)
- Power and Influence: Women and Leadership BUS ADM X474.8

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

Essentials of Management
BUS ADM X475.4 • 2 semester units in Business Administration
An elective in the certificate programs in Business Administration and 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. Learn key interpersonal and managerial skills.

Sec. 005
Gene Hendrix, Ph.D., Extension Honored Instructor
10 meetings
Mondays, 6–9 pm
Jan. 6–March 24 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $750

Sec. 006
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
April 5–May 3
Belmont: Belmont Center • $750

Moving on Up: Women and Leadership
BUS ADM 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
Understand how internal barriers and institutional bias can hinder women’s advancement in the workplace. Gain skills to advance your career by learning how to create collaborative environments, be an effective coach and mentor, build teams, promote yourself with grace, engage men as allies for gender equity and use professional networking sites. Through lectures, discussions and interactive exercises, you learn strategies and techniques that help you excel and advance in today’s workplace while upholding high ethical standards and practicing compassionate leadership.

Sec. 001
Amy Levine, Ed.D.
10 meetings
Mondays, 6:30–9:30 pm
Jan. 6–March 24 (no meetings on Jan. 20 and Feb. 17)
Berkeley: Golden Bear Center • $625

Creating and Executing Strategy
BUS ADM 1047 • 2.4 ceu
Examine the specific choices you need to make to create and execute effective strategies. Understand how to adapt these strategies over the life cycle of your industry, including future mergers and acquisitions and partnerships. Refine your company’s culture, organization and infrastructure to help carry out strategy. At the end of this interactive course, you learn to quickly identify and make the critical decisions to implement strategy. Become a key contributor to your own company, and help eliminate the barriers that get in the way of successful strategic implementation.

Sec. 002
Curt Francis, M.B.A., M.S.
3 meetings
Saturdays, 8:30 am–5 pm
May 10–31 (no meeting on May 24)
Belmont: Belmont Center • $595

Diversity Awareness for Effective Leadership
BUS ADM 1014 • 1.2 ceu
Learn practical tools and concepts designed to resolve tensions, support collaboration and create more welcoming environments.
For course schedule, see p. 63.

Preventing and Resolving Conflict Using Restorative Justice Principles
BUS ADM 1010 • 1.6 ceu
Learn to resolve and leverage situations with conflict and decision coaching to create a better workplace environment and encourage more productive teams.
For course schedule, see p. 64.

Strategic Planning and Analysis
BUS ADM X417.4 • 2 semester units in Business Administration
Understand the key components required to develop a strategic plan, and learn to define and develop the concept of competitive advantage.
For course schedule, see p. 76.

Tackling Tough Issues in the Workplace
BUS ADM 1049 • 0.8 ceu
Using tools and strategies explored in this workshop, you learn to tackle and resolve long-standing issues, improve performance, strengthen relationships, and make progress even in seemingly hopeless situations.
For course schedule, see p. 64.
Introduction to Marketing
BUS ADM X460.1 • 2 semester units in Business Administration
A requirement in the certificate programs in Business Administration and in Marketing: an elective in the Certificate Program in Leadership and Management and in the Specialized Program in Professional Writing.
Learn marketing concepts, terminology and practices; examine strategies to apply them to contemporary marketing situations; and gain an understanding of how they affect your organization’s profitability. (These strategies also apply to nonprofits.) Study consumer and business marketing, marketing research, product planning, distribution, pricing and promotion. Learn how marketing integrates with other business disciplines, including social media.
Sec. 011
James Prost, M.B.A., Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Jan. 7–March 11
San Francisco: Downtown Center • $750
Sec. 012
Warren Brown, M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 9–March 13
Berkeley Campus: 3 Evans Hall • $750
Sec. 010
Woody Alexander, M.B.A.
Jan. 14–April 8
Online • $800
Marketing Research: Concepts and Techniques
BUS ADM X460.6 • 2 semester units in Business Administration
A requirement in the Certificate Program in Marketing
Explore the entire cycle of market research, from identifying objectives and planning; choosing methodology; designing questionnaires and focus group guides; collecting, analyzing and interpreting data; and presenting findings. You place special emphasis on using market research to develop and support decision-making processes to minimize risk and direct resource investment. Curriculum does not focus on statistics and numerical analysis, but rather on each of the steps, separately and together, that make up a real-world research process.
Sec. 005
Scott Worthge, B.S.
5 meetings
Saturdays, 9 am–4 pm
Jan. 11–Feb. 22 (no meetings on Jan. 18 and Feb. 15)
San Francisco: Downtown Center • $750
Sec. 004
Nicki Shovar, Ph.D.
Jan. 14–April 8
Online • $800
Marketing Strategy
BUS ADM X415 • 2 semester units in Business Administration
(Formerly Strategic Marketing)
A requirement in the Certificate Program in Marketing
Learn strategic challenges and opportunities created by the dynamic nature of markets. Study marketing strategies, and determine which ones are relevant and feasible for your organization and which ones can maximize the bottom line. Learn how corporate responsibilities (including green and social) can serve to energize the organization and foster internal cooperation and communication. Study customer value propositions; assets and competencies; and structured strategic analysis, including detailed customer, competitor, market, environmental and internal analysis.
Sec. 005
Suzanne Powers, M.B.A.
Jan. 14–April 8
Online • $800
Sec. 006
James Prost, M.B.A., Extension Honored Instructor
10 meetings
Wednesdays, 6–9 pm
March 26–May 28
San Francisco: Downtown Center • $750
Copywriting Seminar: Putting Your Words to Work
BUS ADM 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 traditional and nontraditional media, and practice conceptual thinking.
Sec. 002
Carin Capolongo, M.B.A., M.F.A.
5 meetings
Mondays, 6–9 pm
March 18–April 28
San Francisco: Downtown Center • $495

Introduction to High-Tech Product Management and Marketing
BUS ADM X448 • 2 semester units in Business Administration
An elective in the Certificate Program in Marketing
Gain the knowledge 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. Understand how to conduct competitive analyses and write marketing requirements documents.
Sec. 002
Laura Huddie, B.A., B.S.
10 meetings
Wednesdays, 6–9 pm
Jan. 15–March 19
San Francisco: Downtown Center • $750

Marketing and Communications Writing for Professionals
BUS ADM X416.3 • 1 semester unit in Business Administration
An elective in the Certificate Program in Marketing
Learn effective writing techniques to improve short- and long-form marketing and communications documents, including articles, case studies, data sheets, brochures, Web copy and email blasts. Learn to evaluate and teach yourself as you review effective and ineffective documents and develop evaluation criteria. Conceptualize, create and revise a three-document campaign; investigate and present on various marketing and communications document types; effectively present your work; and begin creating a professional portfolio.
Sec. 003
Melanie Wise, M.A.
4 meetings
Fridays, 9 am–12:45 pm
April 18–May 9
San Francisco: Downtown Center • $495

Marketing for Service Organizations
BUS ADM X463.2 • 2 semester units in Business Administration
An elective in the Certificate Program in Marketing
Learn the differences between marketing a service and marketing a tangible product. Discuss the unique skills required to profitably market services. Explore topics such as service blueprinting and the challenges inherent in promotion and pricing. Through in-class exercises, you learn how customers evaluate a service. Examine a variety of approaches that service-oriented businesses can take to increase sales and profits through improved customer satisfaction. Whether you are a new or experienced service marketer, you gain an understanding of the elements and dynamics of service marketing and learn to apply this knowledge to improve your organization’s marketing.
Sec. 003
William Hess, M.A., Ph.D., Extension Honored Instructor
10 meetings
Wednesdays, 6–9 pm
March 26–May 28
San Francisco: Downtown Center • $750

Marketing Tools for Startups
BUS ADM X419.4 • 2 semester units in Business Administration
An elective in the Certificate Programs in Marketing and in Entrepreneurship and Small Business Management
Do you have an app, product or service that you eventually want to turn into a company? Learn how to develop a face and voice for your startup; assess benefits to define target markets; and use visual design, copywriting and content creation in combination with social-networking strategies to launch your new venture. In this practical, hands-on class, learn how to define your product or service; find your target audience; assess your competition; and then develop and produce company identity, website and collateral marketing tools to sell your ideas to the marketplace or to venture capital investors.
Sec. 003
Jeri A. Berman
10 meetings
Thursdays, 6–9 pm
March 27–May 29
Berkeley: Golden Bear Center • $750

New Product Development
BUS ADM X405.8 • 2 semester units in Business Administration
An elective in the Certificate programs in Marketing and in Entrepreneurship and Small Business Management
Explore the entire product-development process, from identifying customer needs and generating concepts to designing prototypes and launching the product. Learn how to build business cases to gain venture capital or angel funding, as well as how to protect your inventions with patents and trademarks. Use the same book and many of the same techniques used in similar courses offered at Stanford and MIT. Learn best practices from the industry using case studies, and apply your knowledge in a team project. If you are aspiring to become a successful product manager, this course is ideal. Course content examples are available at www.StephanSorger.com.
Sec. 002
Stephan Sorger, M.B.A., M.S., CMC, PE, Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
April 26–May 31 (no meeting on May 24)
San Francisco: Art and Design Center • $750

Strategic Brand Management
BUS ADM X459.2 • 2 semester units in Business Administration
An elective in the Certificate Program in Marketing
Learn to define, develop and apply tactics and strategies in brand management through a systematic model and process. Focus on the concept of brand equity and its creation and growth through brand positioning, marketing programs, measurement of brand performance and strategies to sustain and build over time.
Sec. 004
Scott Worthge, B.S.
5 meetings
Saturdays, 9 am–4 pm
April 26–May 31 (no meeting on May 24)
Berkeley Campus: 109 Wheeler Hall • $750
Updated for Spring 2014

Certificate Program in Marketing

With the Certificate Program in Marketing, 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, analytics and metrics, and emerging trends in social media and other innovative technologies. The curriculum is overseen by an advisory board of business and education leaders and approved by the University of California, Berkeley, Haas School of Business, ensuring your education is relevant and up to date. 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 comprises 4 required courses and a minimum of 2 electives for a total of 12 semester units (180 hours of instruction).

Required Courses
• Introduction to Marketing BUS ADM X460.1 (offered this term)
• Marketing Research: Concepts and Techniques BUS ADM X460.6 (offered this term)
• Social Media Marketing Strategies BUS ADM X432.5 (offered this term)
• Marketing Strategy BUS ADM X415 (offered this term)

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

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A transplant from Ukraine—where she worked as a marketing manager—Nataliya Komasyuk finds that the knowledge gained in the Certificate Program in Marketing is helping her excel in her current engineering role. “In my work, all of my previous marketing skills and experience have really helped,” she says. “I decided I should take marketing classes to refresh my knowledge, learn new things. It’s also a good place to enhance my English.”
Strategic Marketing Planning
BUS ADM 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. Develop a model marketing plan that includes an analysis of competition, pricing, promotion, distribution and the value proposition. Special emphasis is placed on adopting and maintaining a customer orientation when creating marketing plans.

Sec. 005
Christina Johnson, M.B.A.
10 meetings
Thursdays, 6–9 pm
Jan. 16–March 20
San Francisco: Downtown Center  $750

Cross-Platform Story Marketing
BUS ADM 1058  1.6 ceu

Learn how to combine digital technology with social media and game mechanics to create immersive digital stories that span multiple formats and platforms. Review the steps to plan a branded, cross-platform digital story designed to market a brand or product using traditional and Web advertising, microsites and digital media, social media platforms and APIs, mobile applications, and interactive text and phone communication. Other topics include employing techniques derived from games to influence behavior and motivate action, using Web applications to integrate the pieces of digital campaigns, and implementing tools for managing production.

Sec. 002
Charles G. Hollins, B.S.
2 meetings
Friday and Saturday, 8:30 am–5 pm
March 7–8
San Francisco: Downtown Center  $525

Analytics and Social Media
Marketing Analytics I
BUS ADM X466.3  2 semester units in Business Administration

A requirement in the Professional Sequence in Marketing Metrics and ROI; an elective in the Certificate Program in Marketing

Familiarize yourself with the principles and strategic concepts of marketing analytics, a high-growth area that uses computer-based models and metrics to improve marketing decisions and return on marketing investment (ROMI). Curriculum topics include determining market share and sizing; forecasting and positioning; developing and interpreting surveys; understanding predictive analytics; understanding total, fixed and variable cost concepts; and assessing the lifetime value of the customer. In a world where senior management demands marketing accountability in measuring the effectiveness of dollars spent, you can benefit from this big-picture overview to understand the advantages and objectives of quantitative marketing.

Prerequisites: Introduction to Marketing BUS ADM X460.1 or equivalent, or consent of instructor; proficiency using Excel spreadsheets

Sec. 002
Stephan Sorger, M.B.A., M.S., CMC, PE,
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Feb. 8–March 15 (no meeting on Feb. 15)
San Francisco: Art and Design Center  $750

Marketing Analytics II
BUS ADM X466.4  2 semester units in Business Administration

A requirement in the Professional Sequence in Marketing Metrics and ROI; an elective in the Certificate Program in Marketing

Build on the knowledge and skills gained in Marketing Analytics I BUS ADM X466.3 to explore powerful advanced marketing analytics models and metrics. Learn about segmentation, regression, competitive analysis, conjoint analysis, decision trees, portfolio resource allocation, distribution channel analytics, and sales analytics and metrics. Apply models and metrics to hands-on case studies to increase revenue and drive ROI of marketing campaigns.

Prerequisite: Marketing Analytics I BUS ADM X466.3 or equivalent, or consent of instructor

Sec. 002
Stephan Sorger, M.B.A., M.S., CMC, PE,
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
March 22–April 19
San Francisco: Art and Design Center  $750

Digital Marketing
BUS ADM X464.4  1 semester unit in Business Administration

A requirement in the Professional Series in Strategic Online Marketing and in the professional sequences in Managing Marketing Communications and in Marketing Metrics and ROI; an elective in the Certificate Program in Marketing

Whether you are responsible for e-commerce or lead generation for your business, learning to use the Internet as an advertising channel can help attract new customers and retain current customers who are moving online. In this course, intended for small business owners and Internet professionals, explore how businesses of all sizes can 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.

We recommend you bring a laptop to class.

Sec. 002
Sheila Fruge, B.A.
5 meetings
Mondays, 6–9 pm
March 17–April 14
San Francisco: Downtown Center  $595

Marketing Intelligenc
BUS ADM X465.5  1 semester unit in Business Administration

A requirement in the Professional Sequence in Marketing Metrics and ROI; an elective in the Certificate Program in Marketing

Learn to use data visualization and business intelligence to support marketing decision making in a variety of enterprises. Examine strategies to turn big data into market insights. Gain proficiency in visualizing and presenting data. Understand how to tell a story using data to inform senior management’s marketing decisions in driving revenue and growth. Tie in the content learned in Marketing Analytics I BUS ADM X466.3 and Marketing Analytics II BUS ADM X466.4 to efficiently build data and analytics-driven presentations.

Prerequisites: Marketing Analytics I BUS ADM X466.3 and Marketing Analytics II BUS ADM X466.4 or equivalent, or consent of instructor

Sec. 002
Kerem Tomak, M.A., Ph.D.
5 meetings
Mondays, 6–9 pm
April 21–May 19
San Francisco: Downtown Center  $595

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG

VISIT OUR WEBSITE
Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu
Consumer Buying Behavior in an Age of Social-Media-Driven Relationships
BUS ADM 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 in corporations is declining while the influence of online communities on buyer behavior is growing. Examine buyer behavior, and learn about the role new media (online communities, Facebook, Twitter, LinkedIn, YouTube and mobile applications) have on how today’s savvy social customers glean information, connect with one another and interact with brands they trust.

Sec. 002
Kathy M. Klotz-Guest, M.A., M.B.A.
10 meetings
Tuesdays, 6–9 pm
March 25–May 27
San Francisco: Art and Design Center • $750

NEW THIS TERM
Social Media Marketing Strategies
BUS ADM X432.5 • 2 semester units in Business Administration

A requirement in the Certificate Program in Marketing

Explore social media strategies facilitated by Internet, digital and mobile technologies and platforms. Learn how to establish realistic business and performance goals; integrate new communications platforms and technologies into existing marketing plans; systematically evaluate new technologies and delivery platforms to determine an optimal marketing mix, given objectives and available resources; and evaluate in-market results. You walk away from this course with a greatly expanded ability to plan and execute a cost-effective, strategic marketing program that includes new media integrated with conventional marketing approaches to make brands and companies go viral and increase lead-to-sales conversion rates.

Sec. 001
Susan Gaide, M.B.A.
Feb. 4–April 15
Online • $800

Sec. 002
Michael Brito, M.S.
10 meetings
Thursdays, 6–9 pm
March 27–May 29
San Francisco: Downtown Center • $750

Email and Online Marketing
BUS ADM 1016 • 0.8 ceu
A requirement in the Professional Series in Strategic Online Marketing

Power up your email marketing to maximize business profits. Learn winning marketing strategies for acquiring and retaining customers in a world of crowded email inboxes and spam filters. Explore the use of social media to build email lists, registrations and sales. Learn how to implement triggered emails, craft lead-nurturing emails, design emails for mobile users and implement responsive design. Discuss opt-in and list-building techniques, and learn creative design tips to get your emails noticed and opened. Discover offer personalization and segmentation strategies that work, as well as landing page and website optimization to increase conversion to sale.

Sec. 003
Laurie Beasley, B.S.
1 meeting
Saturday, 8:30 am–5 pm
May 17
San Francisco: Downtown Center • $425

Advanced Email and Online Marketing
BUS ADM 1001 • 0.8 ceu
A requirement in the Professional Series in Strategic Online Marketing

Learn strategies and techniques to increase your email campaign click-through and conversion rates. Understand how spam filters work and how you can successfully reach potential clients. Optimize your email for preview pane. Understand how responsive design can make your emails more attractive to mobile and tablet customers. Study advanced techniques to connect email response data with your customer relationship management system. Nurture leads through triggered email campaigns. Examine how segmentation, dynamic content, and personalized email, and landing pages can help increase campaign conversion rates by 50 to 150 percent.

Sec. 003
David B. Beasley, B.S.
1 meeting
Saturday, 8:30 am–5 pm
May 31
San Francisco: Downtown Center • $425

Professional Sequence in Marketing Metrics and ROI

The Professional Sequence in Marketing Metrics and ROI is a project-driven and case-study-based curriculum focusing on quantitative methods for more effective decision making. You learn about different approaches to analytics-based marketing, ways to integrate principles and strategic concepts, and computer-based models and metrics to improve marketing decisions and return on marketing investment (ROMI). Together, the models and metrics introduced in the program can have a significant impact on increasing revenue and driving ROI of marketing campaigns. The sequence aims to provide you with a comprehensive, hands-on, practical approach to understanding the benefits and objectives of quantitative marketing.

Prerequisite
Introduction to Marketing
BUS ADM X460.1 (offered this term) or equivalent

Curriculum Requirements
The curriculum comprises 4 required courses for a total of 6 semester units (90 semester hours of instruction).

Required Courses
• Marketing Analytics I
BUS ADM X466.3 (offered this term)
• Marketing Analytics II
BUS ADM X466.4 (offered this term)
• Digital Marketing
BUS ADM X464.4 (offered this term)
• Marketing Intelligence
BUS ADM X465.5 (offered this term)

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Professional Sequence in Managing Marketing Communications

In today’s competitive business environment, organizations must deploy a wide range of interdependent marketing and promotional tools for reaching and influencing customers—especially social media. An effective marketing campaign must coordinate the advertising, direct marketing, public relations and personal selling elements of the marketing mix, as well as communicate and present a consistent image to target markets. The Professional Sequence in Managing Marketing Communications helps you develop the expertise to use these tools and produce successful results to maximize marketing effectiveness.

Curriculum Requirements
The curriculum comprises 6 required courses for a total of 7 semester units (105 hours of instruction).

Required Courses
• Managing Marketing Communications
  BUS ADM X466.1 (offered this term)
• Advertising and Social Marketing
  BUS ADM X464.7 (offered this term)
• Contemporary Direct Marketing
  BUS ADM X461.6 (offered this term)
• Digital Marketing
  BUS ADM X464.4 (offered this term)
• Marketing Public Relations
  BUS ADM X464.8 (offered this term)
• Marketing Communications Tactical Planning
  BUS ADM X467.9 (offered this term)

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Search Engine Marketing
BUS ADM 1041 • 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 to effectively incorporate SEM into your marketing efforts and enhance your career prospects.

Sec. 003
Lorrie Thomas Ross, M.A.O.M.
1 meeting
Saturday, 8:30 am–5 pm
May 10
San Francisco: Downtown Center • $395

Social Media Marketing
BUS ADM 1042 • 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 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.

Sec. 003
Lorrie Thomas Ross, M.A.O.M.
1 meeting
Friday, 8:30 am–5 pm
May 9
San Francisco: Downtown Center • $295

Understanding and Applying Google Analytics
BUS ADM 1062 • 1.5 ceu
Gain a solid grounding in Google Analytics in this hands-on, highly practical course. Learn how to ensure that the tracking code is correctly implemented, define appropriate goals for your business and create customized reports showing actionable information. Delve into the details of your website traffic to understand what questions to ask and how to spot anomalies and red flags in the data that can lead to valuable insights. Note: No previous analytics experience required.

Sec. 002
Philippa Gamse, B.A., Pg.Dip.
5 meetings
Wednesdays, 6–9 pm
Feb. 19–March 19
San Francisco: Downtown Center • $595

Marketing Strategies for Entrepreneurs and Small Business Owners
BUS ADM X475.5 • 2 semester units in Business Administration
Learn practical ways to plan and execute cost-effective and innovative marketing strategies for entrepreneurs and small business owners.

For course schedule, see p. 88.

Managing Marketing Communications

Managing Marketing Communications
BUS ADM X466.1 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Managing Marketing Communications; an elective in the Certificate Program in Marketing
Successful marketers maximize their sales opportunities by using integrated marketing communications, which include advertising, personal selling, promotion, direct marketing, public relations, customer relationship management and electronic media. Prepare an integrated marketing communications plan as part of the curriculum in this course.

Prerequisite: Introduction to Marketing BUS ADM X460.1 or equivalent, or consent of instructor

Sec. 003
Joshua Kelly, M.S.
10 meetings
Wednesdays, 6–9 pm
Jan. 8–March 12
San Francisco: Downtown Center • $750

Advertising and Social Marketing
BUS ADM X464.7 • 1 semester unit in Business Administration
A requirement in the Professional Sequence in Managing Marketing Communications; an elective in the Certificate Program in Marketing
Gain an understanding of the essential methods, strategies and terms to succeed in the modern advertising world. Learn the role of advertising in marketing; buyer behavior; the interplay of advertising options, including traditional, digital, social and mobile; media planning; measuring effectiveness; and relations between the client and the agency. Analyze real-world examples from business-to-business, consumer and nonprofit sectors to build on concepts you study in class.

Prerequisite: Managing Marketing Communications BUS ADM X466.1 or equivalent, or consent of instructor

Sec. 002
Deborah Doyle, B.A.
5 meetings
Wednesdays, 6–9 pm
March 26–April 23
San Francisco: Downtown Center • $595
Contemporary Direct Marketing
BUS ADM X461.6 • 1 semester unit in Business Administration

A requirement in the Professional Sequence in Managing Marketing Communications; an elective in the Certificate Program in Marketing

Although direct marketing has always been about the interplay between the offer and the response, the pace is now much faster, and marketers must adjust campaigns accordingly. From online, social media, viral marketing and mobile media to 3-D and postal mail, customers have the chance to respond immediately. In this course, delve into the planning, development, production, methods, techniques and management of direct marketing programs. Create, produce and manage a direct marketing program, including creating budgets, selecting media, targeting databases and lists, constructing offers, and tracking results. Apply the concepts learned to the service, industrial, consumer and nonprofit markets.

Prerequisite: Managing Marketing Communications BUS ADM X466.1 or equivalent, or consent of instructor

Sec. 002
Gwendolyn Kaplan, B.A.
5 meetings
Wednesdays, 6–9 pm
April 30–May 28
San Francisco: Downtown Center • $595

Marketing Public Relations
BUS ADM X464.8 • 1 semester unit in Business Administration

A requirement in the Professional Sequence in Managing Marketing Communications; an elective in the Certificate Program in Marketing

Get an overview of the marketing public relations (PR) process, including methods for both profit and nonprofit organizations, and learn the important distinction between traditional PR and marketing PR (MPR). Review the processes of developing an MPR campaign and integrating positive publicity into other marketing communications methods, such as event and cause sponsorships, social media and advertising.

Prerequisite: Managing Marketing Communications BUS ADM X466.1 or equivalent, or consent of instructor

Sec. 002
Michael Savod, M.B.A.
5 meetings
Wednesdays, 6–9 pm
April 30–May 28
Berkeley: Golden Bear Center • $595

NEw THiS TERm
Marketing Communications Tactical Planning
BUS ADM X467.9 • 1 semester unit in Business Administration

A requirement in the Professional Sequence in Managing Marketing Communications; an elective in the Certificate Program in Marketing

Apply the knowledge gained from previous courses to develop and refine an in-depth, integrated marketing communications strategic plan for a chosen company or brand. Collaborate with others to generate practical insights into new and more effective ways to blend the complex elements of modern marketing communications, from traditional media to digital channels such as social media and search engine marketing.

Prerequisites: Managing Marketing Communications BUS ADM X466.1, Advertising and Social Marketing BUS ADM X464.7, Contemporary Direct Marketing BUS ADM X461.6, Digital Marketing BUS ADM X464.4 and Marketing Public Relations BUS ADM X464.8 or equivalent, or consent of instructor

Sec. 001
Joshua Kelly, M.S.
5 meetings
Mondays, 6–9 pm
April 21–May 19
San Francisco: Downtown Center • $595

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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 (SEM) and optimization (SEO), 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 comprises 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 BUS ADM 1001 (offered this term)
• Advanced Email and Online Marketing BUS ADM 1016 (offered this term)
• Search Engine Marketing BUS ADM 1041 (offered this term)
• Digital Marketing BUS ADM X464.4 (offered this term)

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Professional Sequence in Sales Management

Get the tools to rise from staff member to sales manager with the Professional Sequence in Sales Management. The sales force is an integral part of the overall company organizational structure. Improve your understanding of this crucial function and its role in achieving strategic objectives. Learn to create budgets, perform SWOT (strengths, weaknesses, opportunities and threats) analysis and make effective presentations to senior management. Study compensation models and motivation techniques, and develop a successful approach to recruiting, interviewing, selecting, hiring and training new sales staff. With this program, you develop skills to handle the challenges of management and receive the academic training needed to raise your visibility and pursue a management career.

Curriculum Requirements
The curriculum comprises 3 required courses for a total of 6 semester units and one workshop for a total of 0.4 ceu (94 hours of instruction).

Required Courses and Workshops
- Introduction to Sales Management I
  BUS ADM X479.2 (offered this term)
- Introduction to Sales Management II
  BUS ADM X479.3 (offered this term)
- Budgeting and Planning for Nonfinancial Managers
  BUS ADM X415.6 (offered this term)
- Sales Management: Workshop in Ethics and Leadership
  UNEX 1063

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Sales Management

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Introduction to Sales Management I
BUS ADM X479.2 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Sales Management; an elective in the certificate programs in Leadership and Management and in Marketing

Learn the skills and strategies 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. Case method, textbooks, quizzes, lectures and in-class discussions help develop skills that can enhance your sales-management career prospects.

Sec. 003
Sharon O’Neill, M.B.A.
10 meetings
Tuesdays, 6–9 pm
Jan. 14–March 18
San Francisco: Downtown Center • $750

Introduction to Sales Management II
BUS ADM X479.3 • 2 semester units in Business Administration
A requirement in the Professional Sequence in Sales Management; an elective in the certificate programs in Marketing and in Leadership and Management

This course builds on the concepts covered in Introduction to Sales Management I BUS ADM X479.2. Develop a quantitative approach to measuring and rewarding sales staff performance. Coupled with your own experience in sales and marketing, investigate the myriad challenges that management faces when making decisions with respect to new hires, how to train them, how to motivate and reward them, and how to point them in the right direction. Learn to tie these goals together to succeed as a sales manager.

Sec. 003
Sharon O’Neill, M.B.A.
10 meetings
Thursdays, 6–9 pm
Jan. 16–March 20
San Francisco: Downtown Center • $750

Budgeting and Planning for Nonfinancial Managers
BUS ADM X415.6 • 2 semester units in Business Administration
Get an introduction to accounting practices such as financial statement management and analysis, costing methods, and budgeting techniques.

For course schedule, see p. 74.

Location Guide
For detailed information, see p. 236.

Belmont: Belmont Center
1301 Shoreway Rd., Suite 400, Belmont

Berkeley Campus
See campus map, p. 237. If no building location is given, visit extension.berkeley.edu for updated information.

Berkeley: Golden Bear Center
1995 University Ave., Berkeley

San Francisco: Downtown Center
425 Market St., 8th Floor (enter on Fremont Street), San Francisco

San Francisco: Art and Design Center
95 Third St., San Francisco

Online
Internet and email access required. Schedules displaying no dates mean you may enroll anytime and take six months to complete (unless otherwise noted on course description).

Other
Classes that are not located at Extension centers or on the UC Berkeley campus have the classroom address provided with the course information.
Personal Financial Planning

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

ONLINE COURSE INFORMATION
(510) 643-1550  extension.berkeley.edu/online

CFP EXAM PREPARATION
Information about the Certified Financial Planner™ (CFP®) examination is available on the Certified Financial Planner Board of Standards Inc. website: www.cfp.net.

FREE INFORMATION SESSION
Certificate Program in Personal Financial Planning
UNEX 1071
Meet UC Berkeley Extension instructors and staff members, and find out more about the curriculum and direction of this certificate. An opening presentation is followed by a Q&A session. For sequence details, see p. 97 or visit extension.berkeley.edu/spos/pfp.html.

Sec. 003
1 meeting
Thursday, 6:45–7:45 pm
May 22
San Francisco: Downtown Center • FREE

Survey of Personal Financial Planning
BUS ADM X433 • 2 semester units in Business Administration

A requirement in the Certificate Program 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.

Sec. 004
Catherine Bradford, M.S., CFP, ChFC
6 meetings (accelerated schedule)
Saturdays, 9 am–4 pm
Jan. 25–Feb. 8 (also Mondays, Jan. 27–Feb. 10, 6:30–9:30 pm)
San Francisco: Downtown Center • $750

Income Taxes and Personal Financial Planning
BUS ADM X433.1 • 2 semester units in Business Administration

A requirement in the Certificate Program in Personal Financial Planning
Focus on the interrelation of income tax rules and regulations 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.

Sec. 003
Sharon Kampner, M.B.A., CFP
6 meetings (accelerated schedule)
Saturdays, 9 am–4 pm
Feb. 22–March 8 (also Mondays, Feb. 24–March 10, 6:30–9:30 pm)
San Francisco: Downtown Center • $750

Insurance in Personal Financial Planning
BUS ADM X433.8 • 2 semester units in Business Administration

A requirement in the Certificate Program 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.

Sec. 002
Instructor to be announced
6 meetings (accelerated schedule)
Mondays, 6:30–9:30 pm
April 28–May 12 (also Saturdays, May 3–17, 9 am–4 pm)
San Francisco: Downtown Center • $750

Employment Benefits and Personal Financial Planning
BUS ADM X433.6 • 2 semester units in Business Administration

A requirement in the Certificate Program 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 and taxation of benefits. Enrollment is limited.

Sec. 001
Lynn Paringer, Ph.D., CFP
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–March 18
San Francisco: Downtown Center • $750

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
Investments in Personal Financial Planning: General Principles and Methods
BUS ADM X433.3 • 2 semester units in Business Administration
A requirement in the Certificate Program in Personal Financial Planning; an elective in the Certificate Program in Finance
Study topics 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.
Sec. 003
Kurt F. Carrasquilla, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–March 20
San Francisco: Downtown Center • $750

Real Estate Investments for Financial Planners
BUS ADM X433.5 • 1 semester unit in Business Administration
A requirement in the Certificate Program 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.
Sec. 002
Rich Arzaga, B.S., CFP, CCIM, CCIM
5 meetings
Thursdays, 6–9 pm
Feb. 20–March 20
San Francisco: Downtown Center • $750

Estate Planning
BUS ADM X433.2 • 2 semester units in Business Administration
A requirement in the Certificate Program in Personal Financial Planning
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 investor.
Sec. 003
Ralph Hochstein, J.D.
10 meetings
Wednesdays, 5:30–8:30 pm
March 26–May 28
San Francisco: Downtown Center • $750

Personal Financial Planning Capstone
BUS ADM X433.7 • 3 semester units in Business Administration
A requirement in the Certificate Program in Personal Financial Planning
Apply the substantive knowledge 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. Enrollment is limited.
Sec. 003
George Noceti, M.A., M.B.A., CRPSR
10 meetings
Wednesdays, 6:30–9:30 pm
March 26–May 28
San Francisco: Downtown Center • $850

Savvy Social Security Planning
BUS ADM 1040 • 0.3 ceu
Learn the basics of Social Security, and understand strategies to maximize your benefits. The decisions you make now can have a tremendous impact on the total amount of benefits you stand to receive over your lifetime. Examine the five factors to consider when deciding when to apply for benefits. Research when it makes sense to delay benefits and when it does not. Know why you should always check your earnings record for accuracy. Learn how to estimate your benefits, coordinate them with your spouse, minimize taxes and coordinate Social Security with your other sources of retirement income.
Sec. 002
George Noceti, M.A., M.B.A., CRPSR
1 meeting
Saturday, 9 am–12 pm
Feb. 22
San Francisco: Downtown Center • $95

Behavioral Finance
BUS ADM X436.7 • 2 semester units in Business Administration
Look at the financial industry and practice within the context of behavioral theory to understand the psychological aspects and reactions of individuals to financial markets and economic conditions.
For course schedule, see p. 71.

Basic Financial Mathematics and Financial Calculators
BUS ADM 1002 • 0.6 ceu
Get a one-day, hands-on introduction to the basic mathematics used in finance, as well as instruction in Microsoft Excel.
For course schedule, see p. 74.
This program has been updated to a certificate-level program, effective spring 2014. If you have already paid your application fee for the Professional Sequence and still have courses to complete, you may choose to continue with the old requirements or you may choose to pay an additional $50 to receive the certificate. Please call or email the program office with any questions about program completion.

Follow an academic path to the financial planning profession. Through this certificate, you learn to analyze and advise in all core areas of personal financial planning. Students who register for and complete this certificate are eligible to take the Certified Financial Planner™ (CFP®) Certification Examination. The curriculum is overseen by an advisory board of investment, financial planning and education leaders and taught by working professionals with many years of practical experience in financial services.

Curriculum Requirements
The curriculum comprises 8 required courses and 1 elective for a total of 18 semester units (270 hours of instruction).

Required Courses
- Survey of Personal Financial Planning
  BUS ADM X433 (offered this term)
- Employment Benefits and Personal Financial Planning
  BUS ADM X433.6 (offered this term)
- Estate Planning
  BUS ADM X433.2 (offered this term)
- Income Taxes and Personal Financial Planning
  BUS ADM X433.1 (offered this term)
- Insurance in Personal Financial Planning
  BUS ADM X433.8 (offered this term)
- Investments in Personal Financial Planning: General Principles and Methods
  BUS ADM X433.3 (offered this term)
- Behavioral Finance
  BUS ADM X436.7 (offered this term)
- Personal Financial Planning Capstone
  BUS ADM X433.7 (offered this term)

Learn More and View the Flyer
extension.berkeley.edu/cert/pfp.html
(510) 642-4231
business@unex.berkeley.edu
Project Management

BUS ADM X470 • 2 semester units in Business Administration


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. Use the tools and knowledge acquired to create your own project plan.

This course is a prerequisite for all other UC Berkeley Extension project management courses.

Sec. 031
Edmond Matevosian, B.S., PE, PMP
Jan. 2–Feb. 27
Online • $800

Sec. 036
Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor
Jan. 2–Feb. 27
Online • $800

Sec. 034
Mark Angel, B.S., M.B.A., PMP
Jan. 14–April 8
Online • $800

Sec. 048
Ali Aiyed, Ph.D., PMP
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
Berkeley: Golden Bear Center • $750

Sec. 037
Ali Aiyed, Ph.D., PMP
Jan. 21–April 15
Online • $800

Sec. 046
Anup Deshpande, B.S., PMP
7 meetings
Saturdays, 9 am–4 pm
Jan. 25–March 8 (no meeting on Feb. 15)
Belmont: Belmont Center • $750

Sec. 040
Moshe Gotesman, Ph.D., CSM, PMP
11 meetings
Tuesdays, 6:30–9:30 pm
Feb. 18–April 29
Belmont: Belmont Center • $750

Sec. 043
Jim O’Donnell, M.B.A.
5 meetings
Fridays, 9 am–4 pm
Feb. 1–March 21
San Francisco: Downtown Center • $750

Sec. 038
Robert Judd, M.S., PE, PMP
10 meetings
Mondays, 6:30–9:30 pm
Jan. 13–March 31 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $750

Sec. 042
Rick Santos, B.S., M.B.A., PMP
5 meetings
Sundays, 9 am–4 pm
March 2–30
Berkeley: Golden Bear Center • $750

Sec. 032
Alex Brown, IPMA-C, PMP
March 4–April 29
Online • $800

Sec. 033
Timothy Donahue-Bombosch, Ph.D.
March 4–April 29
Online • $800

Sec. 035
Mark Angel, B.S., M.B.A., PMP
March 4–April 29
Online • $800

Sec. 041
Robert Hull, B.S., PE, PMP
5 meetings
Saturdays, 9 am–4 pm
March 8–April 5
Belmont: Belmont Center • $750

Sec. 039
Alka Jarvis, M.B.A.
5 meetings
Saturdays, 9 am–4 pm
March 15–April 12
Belmont: Belmont Center • $750

Sec. 044
Instructor to be announced
5 meetings
Saturdays, 9 am–4 pm
April 19–May 17
San Francisco: Downtown Center • $750

Sec. 045
Instructor to be announced
5 meetings
Saturdays, 9 am–4 pm
April 19–May 17
San Francisco: Downtown Center • $750

Sec. 047
Joseph Mudd, B.S., PMP
5 meetings
Saturdays, 9 am–4 pm
May 3–June 7 (no meeting on May 24)
Berkeley: Golden Bear Center • $750

START WITH A COURSE

You do not have to apply for acceptance into UC Berkeley Extension. Courses are open to all eligible students. Our courses can help you develop career skills, meet professional certification requirements or satisfy an intellectual urge.
Certificate Program in Project Management

Demand for project management expertise in organizations continues to grow, and the UC Berkeley Extension Certificate Program in Project Management is a great way to build the skills to keep your projects on task, on time and on budget. In this highly interactive curriculum—delivered online or in class—you learn how to apply project management practices to achieve success in a wide variety of fields, including high tech, marketing, financial services, information technology, international trade, life science industries, government, construction and more.

You learn from highly qualified instructors with extensive project management experience and work in teams with classmates to develop hands-on problem-solving techniques. On completion, you earn a highly regarded credential approved by the University of California, Berkeley, Haas School of Business and an advisory board of business and education leaders. Moreover, all of our project management courses apply toward professional development units (PDUs) for the Project Management Institute (PMI®).

Curriculum Requirements
The curriculum comprises 3 required courses and 8 additional semester units of electives for a total of 14 semester units (210 hours of instruction).

Required Courses
We recommend taking these courses in the following sequence:

- Project Management BUS ADM X470 (offered this term)
- Project Leadership and Building High-Performing Teams BUS ADM X469.2 (offered this term)
- Project Execution and Control BUS ADM X471.9 (offered this term)

Required Courses
We recommend taking these courses in the following sequence:

- Project Scope and Quality Management BUS ADM X470.9 (offered this term)
- Project Schedule and Risk Management BUS ADM X440.4 (offered this term)
- Project Cost and Procurement Management BUS ADM X474.3 (offered this term)

Primary Electives
You must take at least two of the following three courses:

- Project Scope and Quality Management BUS ADM X470.9 (offered this term)
- Project Schedule and Risk Management BUS ADM X440.4 (offered this term)
- Project Cost and Procurement Management BUS ADM X474.3 (offered this term)

Primary Electives
You must take at least two of the following three courses:

- Project Scope and Quality Management BUS ADM X470.9 (offered this term)
- Project Schedule and Risk Management BUS ADM X440.4 (offered this term)
- Project Cost and Procurement Management BUS ADM X474.3 (offered this term)

Additional Electives
Find additional electives to complete 14 semester units at
extension.berkeley.edu/cert/project.html.

Additional Electives
Find additional electives to complete 14 semester units at
extension.berkeley.edu/cert/project.html.

Note: Certificate students registered before Sept. 1, 2013, must complete the three required project management courses and the three primary elective courses to receive the certificate. Course titles and content have been updated effective fall 2013.

Learn More and View the Flyer
extension.berkeley.edu/cert/project.html
(510) 642-4231
business@unex.berkeley.edu
Project Cost and Procurement Management

BUS ADM X474.3 • 2 semester units in Business Administration • 30 pdu: PMI® provider 1173

A primary elective in the Certificate Program in Project Management; an elective in the Certificate Program in Construction Management

Procuring 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. Examine a variety of contractual arrangements and fee options.

Prerequisite: Project Management BUS ADM X470

Sec. 012
Timothy Donahue-Bombosch, Ph.D.
Jan. 2–Feb. 27
Online • $800

Sec. 013
Timothy Donahue-Bombosch, Ph.D.
Jan. 14–April 8
Online • $800

Sec. 015
Catherine Pinkas, M.B.A., PMP
5 meetings
Sundays, 9 am–4 pm
Jan. 26–March 2 (no meeting on Feb. 16)
Berkeley: Golden Bear Center • $750

Sec. 016
William Teiser, M.Ch.E.
5 meetings
Saturdays, 9 am–4 pm
March 1–29
Berkeley: Golden Bear Center • $750

Sec. 014
Catherine Pinkas, M.B.A., PMP
March 4–April 29
Online • $800

Sec. 017
Evelyn Launius, M.B.A., PMP
5 meetings
Saturdays, 9 am–4 pm
March 15–April 12
Berkeley: Golden Bear Center • $750

Project Scope and Quality Management

BUS ADM X470.9 • 2 semester units in Business Administration • 30 pdu: PMI® provider 1173

A primary elective 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 BUS ADM X470

Sec. 012
Murray Millet, M.B.A., M.S.
Jan. 2–Feb. 27
Online • $800

Sec. 013
Mark Angel, B.S., M.B.A., PMP
Jan. 14–April 8
Online • $800

Sec. 015
Douglas Hawley, M.B.A.,
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Jan. 25–March 8 (no meeting on Feb. 1)
San Francisco: Downtown Center • $750

Sec. 014
Murray Millet, M.B.A., M.S.
March 4–April 29
Online • $800

Sec. 017
Douglas Hawley, M.B.A.,
Extension Honored Instructor
5 meetings
Fridays, 9 am–4 pm
March 14–April 18 (no meeting on March 28)
San Francisco: Downtown Center • $750

Sec. 016
Catherine Pinkas, M.B.A., PMP
5 meetings
Saturdays, 9 am–4 pm
March 9–April 6
Berkeley: Golden Bear Center • $750

PMI is a registered mark of the Project Management Institute, Inc.
### Project Leadership and Building High-Performance Teams

**BUS ADM X469.2** | 2 semester units in Business Administration | 30 pdu: PMI<sup>®</sup> 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 to support quality management in your organization. Through team-based projects, learn how to master the most difficult aspects of quality management. 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 BUS ADM X470

<table>
<thead>
<tr>
<th>Sec.</th>
<th>Instructor</th>
<th>Dates</th>
<th>Meeting Times</th>
<th>Location</th>
<th>Fee</th>
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</thead>
<tbody>
<tr>
<td><strong>Sec. 013</strong></td>
<td>Alex Brown, IPMA-C, PMP</td>
<td>Jan. 2–Feb. 27</td>
<td>Online</td>
<td>$800</td>
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<tr>
<td><strong>Sec. 014</strong></td>
<td>Catherine McKnight, M.A.</td>
<td>Jan. 14–April 8</td>
<td>Online</td>
<td>$800</td>
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<tr>
<td><strong>Sec. 017</strong></td>
<td>Zachary Wong, Ph.D., Extension Honored Instructor</td>
<td>5 meetings</td>
<td>Saturdays, 9 am–4 pm</td>
<td>Berkeley: Golden Bear Center</td>
<td>$750</td>
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<tr>
<td><strong>Sec. 015</strong></td>
<td>Ali Aiyed, B.S., M.A., PMP</td>
<td>March 4–April 29</td>
<td>Online</td>
<td>$800</td>
<td></td>
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<tr>
<td><strong>Sec. 018</strong></td>
<td>Jim O’Donnell, M.B.A.</td>
<td>10 meetings</td>
<td>Mondays, 6:30–9:30 pm</td>
<td>San Francisco: Downtown Center</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Sec. 020</strong></td>
<td>Lisa Baussell, M.B.A., PMP</td>
<td>5 meetings</td>
<td>Saturdays, 9 am–4 pm</td>
<td>Berkeley: Golden Bear Center</td>
<td>$750</td>
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<tr>
<td><strong>Sec. 019</strong></td>
<td>Gustav Toppenberg, M.Sc., M.B.A., PMP</td>
<td>5 meetings</td>
<td>Sundays, 12–5 pm</td>
<td>April 27–June 1 (no meeting on May 25)</td>
<td>Berkeley: Golden Bear Center</td>
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</tbody>
</table>

### Project Schedule and Risk Management

**BUS ADM X440.4** | 2 semester units in Business Administration | 30 pdu: PMI<sup>®</sup> provider 1173

A primary elective 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. However, specific techniques 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 BUS ADM X470

<table>
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<tr>
<th>Sec.</th>
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<th>Dates</th>
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<th>Location</th>
<th>Fee</th>
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<tbody>
<tr>
<td><strong>Sec. 011</strong></td>
<td>Madeleine Bronstone, MLHR, PMP</td>
<td>Jan. 2–Feb. 27</td>
<td>Online</td>
<td>$800</td>
<td></td>
</tr>
<tr>
<td><strong>Sec. 012</strong></td>
<td>Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor</td>
<td>Jan. 14–April 8</td>
<td>Online</td>
<td>$800</td>
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<tr>
<td><strong>Sec. 014</strong></td>
<td>Deann Smith, B.A., CKM, PMP</td>
<td>10 meetings</td>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>San Francisco: Downtown Center</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Sec. 013</strong></td>
<td>Madeleine Bronstone, MLHR, PMP</td>
<td>March 4–April 29</td>
<td>Online</td>
<td>$800</td>
<td></td>
</tr>
<tr>
<td><strong>Sec. 015</strong></td>
<td>Roger Warren, M.B.A., PMP</td>
<td>10 meetings</td>
<td>Wednesdays, 6:30–9:30 pm</td>
<td>San Francisco: Downtown Center</td>
<td>$750</td>
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<tr>
<td><strong>Sec. 016</strong></td>
<td>Lifang Liu, B.S., PMP</td>
<td>5 meetings</td>
<td>Saturdays, 9 am–4 pm</td>
<td>Belmont: Golden Bear Center</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Sec. 017</strong></td>
<td>Catherine Pinkas, M.B.A., PMP</td>
<td>5 meetings</td>
<td>Sundays, 9 am–4 pm</td>
<td>April 27–June 1 (no meeting on May 25)</td>
<td>Berkeley: Golden Bear Center</td>
</tr>
</tbody>
</table>

### Project Execution and Control

**BUS ADM X471.9** | 2 semester units in Business Administration | 30 pdu: PMI<sup>®</sup> provider 1173

A requirement in the Certificate Program in Project Management

A successful project manager relies on an effective management processes and a project baseline plan to monitor progress, identify variances and take action to mitigate the impact of problems. Learn how to manage project execution through completion and evaluation. You also explore the tools and techniques for project control and build on processes you learned in Project Management BUS ADM X470.

**Prerequisite:** Project Management BUS ADM X470

<table>
<thead>
<tr>
<th>Sec.</th>
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<th>Location</th>
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<tr>
<td><strong>Sec. 011</strong></td>
<td>Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor</td>
<td>Jan. 2–Feb. 27</td>
<td>Online</td>
<td>$800</td>
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</tr>
<tr>
<td><strong>Sec. 012</strong></td>
<td>Anthony Minstein, B.A., CPIM, PMP, Extension Honored Instructor</td>
<td>Jan. 14–April 8</td>
<td>Online</td>
<td>$800</td>
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<tr>
<td><strong>Sec. 014</strong></td>
<td>Sonja Koppensteiner, M.S., Ph.D., PMP</td>
<td>10 meetings</td>
<td>Mondays, 6:30–9:30 pm</td>
<td>Belmont: Golden Bear Center</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Sec. 013</strong></td>
<td>Deann Smith, B.A., CKM, PMP</td>
<td>March 4–April 29</td>
<td>Online</td>
<td>$800</td>
<td></td>
</tr>
<tr>
<td><strong>Sec. 015</strong></td>
<td>Deann Smith, B.A., CKM, PMP</td>
<td>10 meetings</td>
<td>Thursdays, 6:30–9:30 pm</td>
<td>April 3–June 5</td>
<td>Belmont: Golden Bear Center</td>
</tr>
<tr>
<td><strong>Sec. 016</strong></td>
<td>Joseph Mudd, B.S., PMP</td>
<td>5 meetings</td>
<td>Fridays, 9 am–4 pm</td>
<td>April 4–May 2</td>
<td>Belmont: Golden Bear Center</td>
</tr>
</tbody>
</table>

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Exam Preparation

**Intensive PMP/CAPM Exam Preparation**

BUS ADM 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. Topics include management of integration, scope, time, cost, quality, human resources, communications, risk, procurement and stakeholder management. The course also covers ethics and professional responsibility. In addition to in-depth coverage of the Project Management Institute A Guide to the Project Management Body of Knowledge (PMBOK® Guide) 5th Edition (Project Management, Inc., 2013) you analyze sample exam questions and learn 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.

Some classroom sections have an online component. See schedule blocks below for details.

**Sec. 008**
Cheryl Allen, M.S., PMP, Extension Honored Instructor
4 meetings
Saturdays, 9 am–4 pm
Jan. 11, Jan. 25, Feb. 8 and Feb. 22
San Francisco: Downtown Center • $1,650

**Sec. 009**
Elie W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor
8 meetings, plus 11 hours of online instruction
Mondays, 6:30–9:30 pm
Feb. 24–April 14
San Francisco: Downtown Center • $1,650

**Sec. 010**
Cheryl Allen, M.S., PMP, Extension Honored Instructor
4 meetings
Fridays, 9 am–4 pm
March 7, March 21, April 4 and April 18
Berkeley: Golden Bear Center • $1,650

**Sec. 007**
Edmond Matevosian, B.S., PE, PMP
March 4–April 29
Online • $1,650

PMI is a registered mark of the Project Management Institute, Inc.

Electives

**Managing Global Projects**

BUS ADM X474.4 • 1 semester unit in Business Administration

An elective in the Certificate Program in Project Management

Gain an understanding of the challenges that project managers face, including the need to manage diversity within projects across cultures, countries, corporate divisions and professional disciplines. Learn how to plan for a global project and to identify appropriate leadership, management, resource and control steps to keep the project on track. Examine techniques for gathering, analyzing and communicating essential information within the project team to keep the team cohesive, motivated and committed. In this highly interactive course, you contrast traditional project planning with the proper mind-set for successfully completing global projects within time, budget, and technical and political constraints while managing the risks that global projects bring.

**Sec. 003**
Gustav Toppenberg, M.B.A., M.Sc., PMP
2 meetings
Saturdays, 9 am–5 pm
April 12 and 19
San Francisco: Downtown Center • $595

**Advanced Human Factors: Improving Personal Effectiveness and Influence**

BUS ADM X496.6 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Project Human Resource Management; an elective in the Certificate Program in Project 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. Gain more self-confidence and self-direction in your business career, and 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.

**Sec. 003**
Zachary Wong, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
March 22–April 26 (no meeting on April 5)
Berkeley: Golden Bear Center • $775

**Project Portfolio Management/Leadership**

BUS ADM X438.6 • 1 semester unit in Business Administration

An elective in the Certificate Program in Project Management

Examine proven portfolio governance processes to learn to evaluate, select and track individual projects and to consistently achieve a high degree of project success. Learn strategies to avoid overcommitting scarce resources. Understand ways to make informed decisions to approve the right projects or efficiently shut down troubled projects.

**Sec. 003**
Gopal Kapur, B.S.
2 meetings
Thursdays, 9 am–5 pm
March 27 and April 3
Berkeley: Golden Bear Center • $500

**Project Economic Analysis**

BUS ADM X408.6 • 1 semester unit in Business Administration

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 economies 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.

**Sec. 003**
Sherman Luk, B.S., CBAP, CBIP, MCP, PMP
2 meetings
Saturdays, 9 am–5 pm
May 10 and 17
Berkeley: Golden Bear Center • $595

**Software Project Management**

BUS ADM X434 • 2 semester units in Business Administration

Review software project management and discuss the latest approaches, methodologies and standards of software development.

For course schedule, see p. 172.
What Students Say About UC Berkeley Extension

Despite more than 18 years’ work experience, Lana Jones recalls realizing that her four years as a stay-at-home mom left her marketing and business acumen in need of updating. Building upon her M.B.A., Jones says that the Certificate Program in Entrepreneurship and Small Business Management offered the most up-to-date financial and business knowledge required to re-enter today’s competitive workplace.

“Each course provided me with both knowledge and pragmatic ideas that resulted in building my consulting company—P2P Global Inc.—which specializes in the merger of marketing and business strategies with current best practices in IT security,” Jones says, noting that the curriculum supplied the skills to develop her 30-page business plan. “In the first class, you identify your business opportunities; then, in the capstone class, you take everything you’ve learned in the past year and put it all in one perfect package. I built the company while I was taking the classes.

“P2P Global Inc. officially launched in June 2013,” Jones continues. “From the first day of the program, I realized, I finally fit in. As entrepreneurs, we all have similar goals. We just want to get there in our own way.” Helping students realize those goals are the instructors, whom Jones describes as wonderful mentors willing to provide continued guidance after their courses end. The students also play a key role by sharing ideas and providing each other with the support and motivation to succeed. “What a great program, what wonderful people, what a career changing experience,” Jones says.

Sujatha Pakki draws from an extensive human resources background in her native India to excel in the Certificate Program in Human Resource Management. The in-depth curriculum and knowledgeable, accessible instructors are a perfect fit for her needs.

“When I analyzed similar courses at other universities, they would end either in just a couple of weekends or a few weeknights,” she says. “Here at UC Berkeley Extension, each course is extensively covered with immense focus on each topic area.” Pakki also notes that her classmates’ varied backgrounds and cultures enhance the learning process, as does the real-world knowledge that the instructors bring to each class. “With my first course, I was really impressed with the content and the instructors,” she says. “They are just a click away and are ready to extend any further help beyond the classroom.”

A May 2013 graduate of the certificate, Pakki is now working as an HR coordinator at a nonprofit, The Class Consulting Group. “The certificate helped me in my job search, and I’m sure it’s going to take me places,” she says.
UC Berkeley Extension’s construction and environmental management offerings are ideal for career changers and those seeking job-enhancing knowledge. Learn the latest developments in sustainability awareness, policy and regulatory compliance, urban planning, environmental engineering and site remediation, civil engineering, construction management, HVAC and mechanical systems, LEED, natural resources and energy options, facilities management, and safety.

Courses are offered in Berkeley, San Francisco, Belmont, online, and on-site by request. Request a one-on-one academic advising session with the department to learn more.
CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT

Free Information Session
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 Programs in Construction Management and in HVAC
Sec. 001
Tuesday, Jan. 7, 6–7 pm
Berkeley: Golden Bear Center

Construction Management

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/construction

FREE INFORMATION SESSION
Certificate Programs in Construction Management and in HVAC
UNEX 1051
Learn how these professional certificates can help you achieve your career goals. For details about the Certificate Program in Construction Management, see p. 107 or visit extension.berkeley.edu/cert/const.html. For details about the Certificate Program in HVAC, see p. 111 or visit extension.berkeley.edu/cert/hvac.html.

Sec. 001
1 meeting
Tuesday, 6–7 pm
Jan. 7
Berkeley: Golden Bear Center • FREE

Management in the Construction Industry
CIV ENG X464 • 2 semester units in Civil and Environmental Engineering
A requirement in the Certificate Program in Construction Management
Managing a small-, medium- or large-scale construction project is a complex process from beginning to end. An error can lead to cost overruns and costly delays, but good management can bring projects in on time and in line with the cost estimates. Get a practical introduction to construction management and preconstruction services. Multimedia presentations by industry experts introduce you to common management techniques. Both individually and with a group, you cover preparing a request for proposal (RFP), including an estimate with the accompanying qualifications and assumptions; conducting constructibility reviews and value engineering analyses; creating construction schedules; and developing staffing and general conditions costs for projects from the preconstruction stage through construction completion. Enrollment is limited.

Sec. 002
Henry Tooryani, M.S., Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–March 25
Berkeley: Golden Bear Center • $525

Construction Enterprise Risk Management
CIV ENG 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.

Sec. 002
David Druml, B.S., M.S.
10 meetings
Tuesdays, 6:30–9:30 pm
March 17–May 19
Berkeley: Golden Bear Center • $525

Schedule Delay Analysis and Construction Claims
CIV ENG X498.3 • 1 semester unit in Civil and Environmental Engineering
An elective in the Certificate Program in Construction Management
Understand various types of construction delay claims and dispute-resolution strategies. Learn effective methodologies in construction-schedule-delay calculation and analysis, which focus on demonstrating cause and effect. You are then able to systematically determine clear responsibility for delay impacts. Study real-world case studies and learn from hands-on practical class projects in calculation methodologies, case analysis, and cause and effect determination of construction-schedule delays. Learn how to prepare, develop and present a case for mediation.

Basic knowledge in construction and construction project management scheduling, including critical path and float and/or completion of Construction Project Scheduling and Control CIV ENG X463 is recommended.

Sec. 001
John Sims, B.S., PE
5 meetings
Mondays, 6:30–9:30 pm
April 14–May 12
San Francisco: Downtown Center • $425

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 Programs in Construction Management and in HVAC
Sec. 001
Tuesday, Jan. 7, 6–7 pm
Berkeley: Golden Bear Center

Construction Management

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/construction

FREE INFORMATION SESSION
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Jan. 21–March 25
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Certificate Program in Construction Management

The Certificate Program in Construction Management provides thorough, current preparation for effective leadership in the field, which includes light projects (residential and small office buildings) and heavy projects (large office buildings and facilities, infrastructures). Learn the regulatory, insurance, management, safety, estimating and environmental aspects of construction management necessary for overall planning and control of a project. Gain problem-solving skills to determine costs, establish schedules and apply time-value-of-money concepts to effectively evaluate alternatives. In addition to interpreting construction-material properties and standards, you acquire perspectives on emerging issues in construction management. With a curriculum overseen by an advisory board of industry and education leaders and approved by the University of California, Berkeley, College of Engineering, you are assured of a relevant, up-to-date education. Courses are taught by working professionals with many years of practical experience.

Curriculum Requirements
The curriculum comprises 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
  CIV ENG X463
- Fundamentals of Construction Law
  IDS X440
- Management in the Construction Industry
  CIV ENG X464 (offered this term)
- Managing Safety and Health in Construction Projects
  CIV ENG X452
- Preconstruction Estimating: From the Design Development Stage to the Final Bid Process
  CIV ENG X451

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

Get the Knowledge You Need
- Management in the construction industry
- Safety and health in construction projects
- Project scheduling and control
- Building commissioning for LEED

Learn More and View the Flyer
extension.berkeley.edu/cert/const.html
(510) 642-4151
course@unex.berkeley.edu
Environmental Management

**COURSE INFORMATION**

(510) 642-4151  
course@unex.berkeley.edu  
extension.berkeley.edu/construction

**Sustainability Leadership: Strategies and Paradigms**  
NAT RES X419 • 1 semester unit in Natural Resources  
A requirement in the Professional Program in Responsible Global Change Management

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. 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.

**Sec. 001**  
Miriam Karel, M.S.  
5 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 7–Feb. 4  
San Francisco: Downtown Center • $475

**Managing Sustainable Change in an Organization**  
NAT RES X417 • 1 semester unit in Natural Resources  
A requirement in the Professional Program in Responsible Global Change Management

Learn successful strategies to cultivate conditions that allow for swift implementation of sustainability projects within your company. Examine ways to integrate such conditions into an existing organizational culture. Topics include the essential roles of systems thinking, sustainability visioning, robust metric dashboards, cost-benefit analyses, community-based social marketing and strategic messaging.

**Sec. 001**  
Justine Burt, M.S.  
5 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 7–Feb. 4  
San Francisco: Downtown Center • $475

**Climate Change and Law AB32: What It Means For You**  
NAT RES X435.1 • 1 semester unit in Natural Resources  
A requirement in the Professional Program in Responsible Global Change Management

AB32 required the Air Resources Board to prepare a scoping plan to evaluate how best to reduce GHG emissions to their 1990 level by 2020. The plan must be revised every five years, and is currently in revision. These revisions highlight regulatory and policy progress toward 2020 goals; define the climate priorities for the next five years; and provide the high-level, long-term strategy to transition to post-2020 goals and implement the governor’s Vision 2050 goals. Discuss the impact of this plan and the proposed strategies on sustainable communities and sustainable freight, and evaluate the various effects of their implementations.

**Sec. 002**  
Barbara Toole O’Neil, M.S., CHMM, QEP  
2 meetings  
Friday and Saturday, 8:30 am–5 pm  
March 7–8  
Berkeley: Golden Bear Center • $445

**FIVE WAYS TO ENROLL**

1. Online: extension.berkeley.edu
2. Phone: (510) 642-4111
3. Mail:  
   Department B  
   1995 University Ave., Suite 110  
   Berkeley, CA  
   94704-7000
4. Purchase Order:  
   (510) 642-3910
5. In Person:  
   At Golden Bear Center,  
   1995 University Ave.,  
   Berkeley, Calif.
Energy

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/construction

Introduction to Photovoltaic Systems
NAT RES X440 • 2 semester units in Natural Resources
Study the basics of photovoltaic (PV) technology and systems. Acquire fundamental technical knowledge of solar electricity necessary for understanding PV technology.
Computer and online research skills expected; basic knowledge of electricity, calculus and geometry recommended but not required.
Sec. 001
Instructor to be announced
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–March 12
Belmont: Belmont Center • $595

Water Quality Monitoring Design
EL ENG 1006 • 1.5 ceu
Review the basic concepts of scientific measurements, sampling design principles and data quality management as applied to the process of generating usable, reliable, scientifically defensible and well-documented environmental data. Learn how hypothesis testing can be applied to trend monitoring, regulatory decision making and evaluation of the effectiveness of management measures implemented to reduce pollution. Understand the entire thought process that underlies the planning of an environmental monitoring effort and receive systematic planning tools, templates, checklists, labor and budget spreadsheets for use in any future monitoring work.
Sec. 002
Revital Katznelson, Ph.D.
2 meetings
Wednesday and Thursday, 9 am–4 pm
Jan. 22–23
Berkeley: Golden Bear Center • $545

Professional Program in
Responsible Global Change Management

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 sustainability issues and career options, you receive 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.
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 a manager, planner, consultant or business owner.

Curriculum Requirements
The program comprises 3 courses and 3 one-day workshops for a total of 3 semester units and 2.1 ceu (66 hours of instruction).

Required Courses
- Climate Change and Law AB 32: What It Means for You NAT RES X431.5 (offered this term)
- Introduction to Natural Capital and Ecological Asset Management NAT RES X444.3
- Introduction to Environmental Management NAT RES 1004
- Introduction to Sustainability Management NAT RES 1003
- Managing Sustainable Change in an Organization NAT RES X417 (offered this term)
- Sustainability Leadership: Strategies and Paradigms NAT RES X419 (offered this term)

Learn More and View the Flyer
extension.berkeley.edu/spos/globalchange.html
(510) 642-4151
course@unex.berkeley.edu

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.

Required Courses
- Environmental Law and Regulation CIV ENG X440
- Environmental Management Systems: ISO 14000 NAT RES X422
- Introduction to Climate Change, Environment and Sustainability NAT RES X444
- Sustainability Leadership: Strategies and Paradigms NAT RES 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 Flyer
extension.berkeley.edu/spos/sustman.html
(510) 642-4151
course@unex.berkeley.edu
CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT

Professional Series in Smart Grid Technology

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 additional 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 new or advanced opportunities in public utilities, renewable energy, commercial construction or electric transportation.

Curriculum Requirements
The curriculum comprises 4 required courses for a total of 4 semester units (60 hours of instruction).

Required Courses
Choose any 4 of the 7 required courses.

• Smart Grids: Introduction EL ENG X423 (offered this term)
• Smart Grids: Command and Control EL ENG X423.2 (offered this term)
• Smart Grids: Energy-Efficient Buildings EL ENG X423.6
• Smart Grids: Energy-Efficient Transmission EL ENG X423.1 (offered this term)
• Smart Grids: Internet of Things EL ENG X423.4
• Smart Grids: Metering and Home Area Networks EL ENG X423.3 (offered this term)
• Smart Grids: Microgrids EL ENG X423.5

Learn More and View the Flyer
extension.berkeley.edu/spos/smartgrid.html
(510) 642-4151
course@extension.berkeley.edu

Smart Grid Technology

Smart Grids: Introduction
EL ENG 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 today’s green-energy initiatives. Study real-world value propositions, business perspectives and solution scenarios from business, economics and technical 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.

Sec. 002
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8 am–4:30 pm
Feb. 22 and March 1
Belmont: Belmont Center • $475

Smart Grids: Energy-Efficient Transmission
EL ENG 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 surrounding energy transmission. Learn about the challenges of high-power interconnections, and review quality considerations. 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.

Sec. 002
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8 am–5 pm
March 8 and 15
Belmont: Belmont Center • $475

Smart Grids: Command and Control
EL ENG 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 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. 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.

Sec. 003
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8 am–5 pm
March 22 and 29
Belmont: Belmont Center • $475

Smart Grids: Metering and Home Area Networks
EL ENG X423.3 • 1 semester unit in Electrical Engineering
A requirement in the Professional Series in Smart Grid Technology

Today’s utility industry delivers 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, as well as a contemporary overview for technical staff.

Sec. 003
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8 am–5 pm
April 12 and 19
Belmont: Belmont Center • $475
Certificate Program in HVAC

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 a structured approach to learning the in-depth technical principles and applications you need to design new and retrofit existing HVAC systems. Upon completion of UC Berkeley Extension’s certificate, you may receive a certificate of accomplishment from the Golden Gate Chapter of the American Society for Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), the industry’s leading professional organization. The curriculum is overseen by an advisory board of industry and education leaders and approved by the University of California, Berkeley, College of Engineering, ensuring your education is relevant and up to date. Courses are taught by working professionals with many years of practical experience.

Curriculum Requirements
This curriculum comprises 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 MEC ENG X473 (offered this term)
• HVAC Ductwork and Piping Systems MEC ENG X470 (offered this term)
• HVAC System Design Considerations MEC ENG X472
• HVAC System Load Calculations and Psychrometry MEC ENG X469

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

Get the Knowledge You Need
☐ Control and energy management
☐ Ductwork and piping systems
☐ Indoor air quality, HVAC and green building
☐ Building commissioning for LEED
☐ Load calculations
☐ Energy audits
☐ System design
☐ Air conditioning systems
☐ HVAC systems for biotech

Learn More and View the Flyer
extension.berkeley.edu/cert/hvac.html
(510) 642-4151
course@unex.berkeley.edu

Gail Brownell is using the Certificate Program in HVAC for her next career phase. “The UC Berkeley Extension HVAC certificate allows me to expand upon my interests and experience,” she 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.”
HVAC

HVAC Control and Energy Management Systems
MEC ENG X473 • 2 semester units in Mechanical Engineering
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. You learn 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.

Sec. 001
Steven Taylor, M.S., PE,
Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
March 26–May 28
San Francisco: Downtown Center • $715

HVAC Ductwork and Piping Systems
MEC ENG 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. The emphasis is on commercial applications in the greater Bay Area. Enrollment is limited.

Sec. 001
Steven Taylor, M.S., PE,
Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–March 12
San Francisco: Downtown Center • $715

Indoor Air Quality, HVAC and Green Building
MEC ENG X410 • 2 semester units in Mechanical Engineering
An elective in the Certificate Program in HVAC
Acquire state-of-the-art knowledge concerning indoor air quality; indoor air-related environmental health issues; the role of heating, ventilation and air-conditioning systems; and the role of indoor air quality in green buildings and LEED certification. In-class presentations address topics such as sick-building syndrome, building-related illnesses, investigation of indoor air-quality complaints and concerns, and techniques to resolve such issues. You also examine topics such as environmental sampling and analysis, data interpretation and risk management. Discuss specific issues required for LEED certification, including the advantages and disadvantages of indoor air-quality testing as part of this process. Course curriculum also covers concerns about chemical migration into the built environment from subsurface contamination and chemical off-gassing from building materials and products.

Sec. 002
Jeff Hicks, M.P.H., CIH
10 meetings
Mondays, 6:30–9:30 pm
Jan. 27–April 7 (no meeting on Feb. 17)
San Francisco: Downtown Center • $595

HVAC Mechanical Design Codes
CIV ENG X415 • 1 semester unit in Civil and Environmental Engineering
Learn the myriad and varied skills to successfully lead a facilities team. Examine strategies to combine your technical knowledge with more intuitive people skills to get the outcomes you desire. To that end, you work collaboratively with fellow students to develop those hard and soft management skills.

Sec. 002
Howard Birnberg, M.B.A.
5 meetings
Sat., March 21–April 18, Saturdays, 9:30 am–4:30 pm
San Francisco: Downtown Center • $525

Facilities

Introduction to Facilities Management
ARCH X420 • 2 semester units in Architecture
A requirement in the Professional Sequence in Facilities Management
Gain the knowledge and skills needed for facilities management. Understand the decision-making processes and functions of a facilities manager within the total organization.

Sec. 002
5 meetings
Saturdays, 9:30 am–4:30 pm
Jan. 11–Feb. 22 (no meetings on Jan. 18 and Feb. 15)
Belmont: Belmont Center • $575

Managing the Facilities Team and Process
CIV ENG X420.4 • 2 semester units in Civil and Environmental Engineering
Learn the myriad and varied skills to successfully lead a facilities team. Examine strategies to combine your technical knowledge with more intuitive people skills to get the outcomes you desire. To that end, you work collaboratively with fellow students to develop those hard and soft management skills.

Sec. 002
Richard Paillon, B.S., LEED AP, PE
10 meetings
Tuesdays, 6:30–9:30 pm
March 4–May 6
San Francisco: Downtown Center • $495
NEW THIS TERM
Facilities Management: Risk and Business Continuity
ARCH X462 • 2 semester units in Architecture
Expand your understanding of the planning processes, and learn to recognize the attributes of an effective business continuity plan. In-class exercises teach you how to create a variety of facilities plans. Guest speakers include representatives from Bay Area contracting, architectural and facilities management firms.
Prerequisite: Introduction to Facilities Management ARCH X420, or equivalent academic and professional experience
Sec. 001
Steven Greenwood, M.B.A., CFM
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–March 12
Berkeley: Golden Bear Center • $625

Facilities Management: Operations and Maintenance
ARCH X420.1 • 2 semester units in Architecture
A requirement in the Professional Sequence in Facilities Management
Facilities managers must understand how a facility and its equipment operate and are serviced and maintained to serve its occupants. Receive an overview of the skills and methods facilities managers use in areas such as budgeting, staffing, alterations and building-systems operations.
Prerequisite: Introduction to Facilities Management ARCH X420
Sec. 001
Steven Greenwood, M.B.A., CFM
5 meetings
Saturdays, 9 am–4 pm
March 22–April 19
Belmont: Belmont Center • $625

Facilities Management: Systems and Technology
ARCH X412.3 • 2 semester units in Architecture
An elective in the Certificate Program in HVAC
Focus on the role of a facilities management systems manager by understanding the impacts of technology and reviewing successful case studies. You review systems such as telecom and cable management; basic information technology; uninterrupted power supply; computer-aided facilities management; computer-assisted drawing or drafting; computerized maintenance management system; energy management systems; heating, ventilation and air conditioning; geographic information systems; computer-integrated facilities management; project management; asset management; and cost management.
Sec. 001
Steven Greenwood, M.B.A., CFM
5 meetings
Saturdays, 9 am–4 pm
April 26–May 31 (no meeting on May 24)
Belmont: Belmont Center • $595

BUILD A CAREER
Turn your talents into a new career. UC Berkeley Extension professional certificates and specialized programs of study can help you advance in your current position or start your dream career.
Program details at extension.berkeley.edu/cert.

BUILD A CAREER
Turn your talents into a new career. UC Berkeley Extension professional certificates and specialized programs of study can help you advance in your current position or start your dream career.
Program details at extension.berkeley.edu/cert.

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 a facilities manager’s critical business-decision-making process. The sequence provides teaching methods and techniques that are consistent with accepted facilities management practices.

Curriculum Requirements
The curriculum comprises 4 required courses for a total of 8 semester units (120 hours of instruction).

Required Courses
• Introduction to Facilities Management ARCH X420 (offered this term)
• Facilities Construction and Project Management ARCH X420.2
• Facilities Management: Operations and Maintenance ARCH X420.1 (offered this term)
• Facilities Management: Strategic Planning Leadership and the Organization ARCH X420.3

Learn More
extension.berkeley.edu/spos/facmgmt.html
(510) 642-4151
course@unex.berkeley.edu
Molly Tyson is not interested in retiring. Instead, she’s putting her professional background as a writer and personal experience of traveling as a child into a new career: teaching English as a second language. A friend’s research into the subject—determining that UC Berkeley Extension’s Certificate Program in Teaching English as a Second Language is the most substantial and prestigious curriculum available—brings her to this new adventure.

Jumping right into the curriculum, Tyson believes that getting professional experience is key to succeeding in the coursework. “Volunteering is essential because it makes the courses that much more valuable,” she says. “You can suddenly relate what you’re learning to real people.” Starting as a volunteer at San Francisco’s Arriba Juntos, a nonprofit employment and training organization, Tyson is now a full-time employee, teaching English to those needing help with job placement.

Tyson also brings her experiences at Arriba Juntos to the Extension classroom, extracting new skills and engaging with fellow classmates. “Students from my class have come to volunteer at Arriba Juntos,” Tyson says. “We sit and debrief after our classes and give each other ideas. Volunteering is huge: You find out what you need to know.”

extension.berkeley.edu/education
Whether you’re already a teacher or want a career in education, UC Berkeley Extension has the program to prepare you for your next step.

Fulfill requirements for a California teaching credential in adult education or career technical education. Take a class for professional growth, or complete a certificate enabling you to teach English as a second or foreign language (ESL/EFL) or to become a college admissions adviser. Study the theoretical knowledge and practical approaches to teaching Mandarin Chinese as a foreign language. Enhance your teaching skills with courses on successful reading techniques, inclusion of students with special needs, strategies for teaching health concepts, integrating technology into the classroom and other essential topics.

Most courses are held in Berkeley, San Francisco, Belmont and online.
Free Information Sessions
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 College Admissions and Career Planning and Professional Program in College Admission Counseling
Sec. 003
Thursday, March 6, 5:30–7 pm
Berkeley: Golden Bear Center

Sec. 004
Wednesday, March 12, 5:30–7 pm
Belmont: Belmont Center

Certificate Program in Teaching English as a Second Language
Sec. 002
Tuesday, Jan. 14, 5:30–7 pm
Berkeley: Golden Bear Center

Designated Subjects Adult Education and Career Technical Education Teaching Credentials
Sec. 003
Thursday, May 15, 5:30–7 pm
Berkeley: Golden Bear Center

Teaching Credential Programs

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/education

Designated Subjects Adult Education and Career Technical Education
UC Berkeley Extension’s Designated Subjects Adult Education and Career Technical Education teaching credentials open classroom doors in a range of academic and career technical subject areas, whether you already hold a teaching position or desire to enter the field. To learn more or to begin a credential program, call the Education department at (510) 642-1171 or email askeducation@unex.berkeley.edu.

UC Berkeley Extension’s teaching credential programs are accredited by the California Commission on Teacher Credentialing (CTC) as meeting the requirements for teacher training.

FREE INFORMATION SESSION
Designated Subjects Adult Education and Career Technical Education Teaching Credentials
UNEX 1054
Find out how you can succeed in a teaching career with a credential in adult education or career technical education. For more information about adult education, see p. 117 or visit extension.berkeley.edu/spos/dsae.html. For more information about career technical education, see p. 118 or visit extension.berkeley.edu/spos/dscte.html.

Sec. 003
1 meeting
Thursday, 5:30–7 pm
May 15
Berkeley: Golden Bear Center • FREE

Early Orientation
EDUC X366.13 • 1 semester unit in Education
A requirement in the Designated Subjects Adult Education and Designated Subjects Career Technical Education teaching credentials; an elective in the professional programs in Adult Education and in Career Technical Education

Get the theoretical background and skills essential for success as a beginning career technical or adult educator. You receive an overview of teaching methods, learning styles, lesson planning, 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. 006
Susan Benz, M.A.
2 meetings
Sundays, 9 am–5:30 pm
Jan. 5 and 12
Berkeley: Golden Bear Center • $305

Sec. 007
Anu Suresh, M.S.
2 meetings
Sundays, 9 am–5:30 pm
March 16 and 23
Berkeley: Golden Bear Center • $305

Sec. 008
Glen Sparks, M.A.
2 meetings
Saturdays, 9 am–5:30 pm
May 31 and June 7
Berkeley: Golden Bear Center • $305

Instructional Strategies
EDUC X366.14 • 2 semester units in Education
A requirement in the Designated Subjects Adult Education and Designated Subjects Career Technical Education teaching credentials, and in the professional programs in Adult Education and in Career Technical Education

Study instructional strategies that are consistent with theories of pedagogy, andragogy and learning, including activities and materials appropriate for learners with diverse needs, skills and abilities. Learn how to plan and present instruction clearly, as well as how to maintain an effective educational classroom climate. Cover basic principles of language acquisition, approaches to teaching students whose primary language is not English, and techniques and materials to assist students with limited English proficiency. Additional topics include learning strategies to encourage interaction between different language groups and incorporating assessment data into instructional planning.

Prerequisite: Early Orientation EDUC X366.13 or consent of instructor and program director
Sec. 004
James Iler, M.A.
4 meetings
Sundays, 9 am–5:30 pm
Feb. 9–March 9 (no meeting on Feb. 16)
Berkeley: Golden Bear Center • $499
Designated Subjects Adult Education Teaching Credential

UC Berkeley Extension’s three-year Designated Subjects Adult Education Teaching Credential (DSAE)—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.

Note: If you are currently registered in the five-year DSAE program, please contact the Education department at (510) 642-1171 or askeducation@unex.berkeley.edu for completion requirements.

Required Courses
- Early Orientation EDUC X366.13 (offered this term)
- Instructional Strategies EDUC X366.14 (offered this term)
- Integrating Technology Into Education EDUC X366.15 (offered this term)
- Curriculum Design and Assessment EDUC X366.16 (offered this term)
- Foundations of Adult Education EDUC X366.22 (offered this term)
- Adult Education Instructor Practicum EDUC X366.21 (offered this term)

Curriculum Requirements
The curriculum comprises 6 required courses for a total of 9 semester units (135 hours of instruction).

Learn More and View the Brochure
extension.berkeley.edu/spos/dsae.html
(510) 642-1171
askeducation@unex.berkeley.edu

Contact the Education department for registration information.

Professional Program in Adult Education

Skilled, knowledgeable teachers are always in demand for many adult education positions. 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.

Curriculum Requirements
The curriculum comprises 3 required courses and 1 approved elective for a total of 6–9 semester units (90–120 hours of instruction).

Required Courses
- Instructional Strategies EDUC X366.14 (offered this term)
- Curriculum Design and Assessment EDUC X366.16 (offered this term)
- Integrating Technology Into Education EDUC X366.15 (offered this term)

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

Learn More and View the Brochure
extension.berkeley.edu/spos/adulted.html
(510) 642-1171
askeducation@unex.berkeley.edu

Integrating Technology Into Education
EDUC X366.15 • 1 semester unit in Education
A requirement in the Designated Subjects Adult Education and Designated Subjects Career Technical Education teaching credentials 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.

Prerequisite: Early Orientation EDUC X366.13 or consent of instructor and program director

Sec. 002
James Iler, M.A.
2 meetings
Sundays, 9 am–5:30 pm
April 27 and May 4
Berkeley: Golden Bear Center • $305

Curriculum Design and Assessment
EDUC X366.16 • 2 semester units in Education
A requirement in the Designated Subjects Adult Education and Designated Subjects Career Technical Education teaching credential, and in the professional programs in Adult Education and in Career Technical Education

Study 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 EDUC X366.13 or consent of instructor and program director

Sec. 003
Vicki Pontius, Ed.D.
4 meetings
Sundays, 9 am–5:30 pm
March 30–April 20
Berkeley: Golden Bear Center • $499

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

EDUCATION
Designated Subjects Career Technical Education Teaching Credential

UC Berkeley Extension’s Designated Subjects Career Technical Education (DSCTE) Teaching Credential, accredited 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 EDUC X366.13 (offered this term)
- Instructional Strategies EDUC X366.14 (offered this term)
- Integrating Technology Into Education EDUC X366.15 (offered this term)
- Curriculum Design and Assessment EDUC X366.16 (offered this term)
- SDAIE/Special Needs for Career Technical Education EDUC X366.17 (offered this term)
- Career Technical Education Foundations EDUC X366.18 (offered this term)
- Advanced Preparation Portfolio for Career Technical Education EDUC X366.23 (offered this term)

Curriculum Requirements
The curriculum comprises 7 required courses for a total of 14 semester units (210 hours of instruction).

Learn More and View the Brochure
extension.berkeley.edu/spos/dscte.html
(510) 642-1171
askeducation@unex.berkeley.edu

Contact the Education department for registration information.

SDAIE/Special Needs for Career Technical Education

EDUC X366.17 • 2 semester units in Education
A requirement in the Designated Subjects Career Technical Education Teaching Credential; an elective in the professional programs in Adult Education and in Career Technical Education

Explore current research-based theories of second-language acquisition and the differences between first- and second-language acquisition and literacy development. Topics include cognitive and linguistic 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, which promotes both language development and academic achievement.

Prerequisite: Early Orientation EDUC X366.13 or consent of instructor and program director

Sec. 002
Rodney McLean, M.A.
4 meetings
Saturdays, 9 am–5:30 pm
March 8–29
Berkeley: Golden Bear Center • $499

Career Technical Education Foundations

EDUC 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 California. 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 EDUC X366.13 or consent of instructor and program director

Sec. 002
Donna Wyatt, M.S., RN
4 meetings
Saturdays, 9 am–5:30 pm
Jan. 4–Feb. 1 (no meeting on Jan. 18)
Berkeley: Golden Bear Center • $499
Advanced Preparation Portfolio for Career Technical Education
EDUC X366.23 • 4 semester units in Education
A requirement in the Designated Subjects Career Technical Education Teaching Credential

Learn strategies to develop a complete curriculum plan, including goals, objectives, daily lesson plans, classroom materials, teaching strategies and student assessment materials. Design lessons to help each student maximize his or her performance with respect to academic content standards. Assess student information literacy, and learn problem-solving skills to adapt subsequent lessons. Coursework emphasizes the use of electronic research strategies and technology to access and evaluate information, as well as the integration of technology into curriculum-based lessons.

Prerequisites:
- Early Orientation EDUC X366.13
- Instructional Strategies EDUC X366.14
- Integrating Technology Into Education EDUC X366.15
- Curriculum Design and Assessment EDUC X366.16
- SDAIE Special Needs for Career Technical Education EDUC X366.17
- Career Technical Education Foundations EDUC X366.18

Sec. 002
Daniele Marciano, Ed.D.
8 meetings
Sundays, 9 am–5:30 pm
April 27–June 22 (no meeting on May 25)
Berkeley: Golden Bear Center • $998

Foundations of Adult Education
EDUC X366.22 • 2 semester units in Education
A requirement in the Designated Subjects Adult Education Teaching Credential; an elective in the professional programs in Adult Education and in Career Technical Education

Explore essential themes and concepts related to the adult education teaching profession, including history, funding, and governance and its role in public education, as well as contemporary education issues. Understand the role of adult education in serving those least likely to be served in other areas of education. Learn strategies for modeling respect and promoting interpersonal relationships to create a positive and inclusive learning environment, including motivation, group facilitation and conflict-resolution skills. Understand how to foster openness and trust among students in the classroom and facilitate the development of clear expectations for social interaction in the classroom. Learn to recognize students’ personal and academic challenges and refer students to appropriate resources to support learning.

Prerequisite:
- Early Orientation EDUC X366.13 or consent of instructor and program director

Sec. 002
Vicki Pontius, Ed.D.
4 meetings
Saturdays, 9 am–5:30 pm
Jan. 4–Feb. 1 (no meeting on Jan. 18)
Berkeley: Golden Bear Center • $499

NEW THIS TERM

Adult Education Instructor Practicum
EDUC X366.21 • 1 semester unit in Education
A requirement in the Designated Subjects Adult Education Teaching Credential

Learn to apply adult learning theory concepts and skills to your curriculum planning and classroom instruction. Learn to apply effective teaching strategies to multiple domains of instruction. Examine best practices for implementing a variety of standards-based andragogical strategies and instruction planning. Select materials appropriate to student needs, including similarities and differences in learning style, literacy, numeracy and language.

Prerequisites:
- Early Orientation EDUC X366.13
- Instructional Strategies EDUC X366.14
- Integrating Technology Into Education EDUC X366.15
- Curriculum Design and Assessment EDUC X366.16
- Foundations of Adult Education EDUC X366.22

Sec. 001
Daniele Marciano, Ed.D.
2 meetings
Sundays, 9 am–5:30 pm
March 16 and 23
Berkeley: Golden Bear Center • $305

Credentia Fulfillment

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/education

U.S. Constitution History Requirement

Introduction to American Politics
POLI SCI XBW1 • 4 semester units in Political Science
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. 135.

Introduction to the History of the United States: From Colonial Settlement to the Civil War
HISTORY XBW7A • 4 semester units in History
Sharpen your understanding of the people, institutions and ideologies that shaped the formation of the United States.
For course schedule, see p. 134.

Introduction to the History of the United States: From the Civil War to the Present
HISTORY XBW7B • 4 semester units in History
Survey U.S. history from the 1870s to the new millennium.
For course schedule, see p. 134.

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.
CTC-Approved Courses

Fostering Wellness
EDUC X345.4 • 1 semester unit in Education
Fulfills the Health Education requirement for California teaching credentials
An elective in the professional programs in Adult Education and in Career Technical Education
Part of the educational process at all grade levels is helping students learn to care for their bodies and make healthy emotional adjustments to the demands and pressures of a fast-paced society. Learn effective strategies for teaching health concepts in elementary, secondary and adult classes. Topics include fitness and nutrition, stress and depression, sexuality, and use and abuse of drugs and alcohol.
Sec. 003
Donna Wyatt, M.S., RN
2 meetings
Sundays, 9 am–5:30 pm
Feb. 2 and 9
Berkeley: Golden Bear Center • $365

Sec. 004
Peter Niloufari, M.D.
2 meetings
Saturdays, 9 am–5:30 pm
May 10 and 17
Berkeley: Golden Bear Center • $365

Introduction and Use of Computer Technology (Level I)
EDUC X354 • 2 semester units in Education
Fulfills the Computer Education Level 1 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.
Sec. 002
James Iler, M.A.
4 meetings
Sundays, 9 am–5:30 pm
May 11–June 8 (no meeting on May 25)
Berkeley: Golden Bear Center • $525

Inclusion of Students With Special Needs in Regular Education
EDUC X370.4 • 2 semester units in Education
Fulfills the Special Education or “mainstreaming” requirement for California teaching credentials
An elective in the professional programs in Adult Education and in Career Technical Education
Develop teaching and management skills in the regular education classroom that facilitate learning by students with disabilities. Learn about special education history, legislation, programs, services and trends; 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.
Sec. 003
Nina Ghiselli, Psy.D.
4 meetings
Saturdays and Sundays, 9 am–5:30 pm
Jan. 25–Feb. 2
Berkeley: Golden Bear Center • $525

Classroom-Tested Reading Techniques, K–12
EDUC X330.3 • 3 semester units in Education
Fulfills the Teaching and Reading requirement for California teaching credentials
An elective in the professional programs in Adult Education and in Career Technical Education
Develop an understanding of the reading process, and learn to assess the strengths and needs of readers. Learn how to design appropriate instructional plans based on effective strategies that meet the needs of individual students.
Sec. 002
Eugenia Kaw, M.A., Ph.D.
6 meetings
Sundays, 9 am–5:30 pm
Feb. 23–March 30
Berkeley: Golden Bear Center • $625

CLAD Through CTEL

CTELO: Orientation: Clad Through CTEL
EDUC 804.1 • 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.
Sec. 005
Eugenia Kaw, M.A., Ph.D.
1 meeting
Thursday, 6–9 pm
Jan. 16
Berkeley: Golden Bear Center • $30

CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction, SDAIE
EDUC X374.0 • 4 semester units in Education
A requirement in the CLAD Through CTEL program and in the Professional Program in English Learner Pedagogy; an elective in the professional programs in Adult Education and in Career Technical Education
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. You can also learn the 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, as well as research-based approaches and methods for English-language development in the areas of listening, speaking, reading and writing as they relate to communicative competence.
Sec. 002
Donna Altes, B.A.
8 meetings
Saturdays, 9 am–5:30 pm
Jan. 25–March 22 (no meeting on Feb. 15)
Berkeley: Golden Bear Center • $609

Location Guide  For detailed information, see p. 236.

Berkeley: Golden Bear Center  1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus  See campus map, p. 237. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center  1995 University Ave., Berkeley
San Francisco: Downtown Center  425 Market St., 8th Floor (enter on Fremont Street), San Francisco
San Francisco: Art and Design Center  95 Third St., San Francisco
Online  Internet and email access required. Schedules displaying no dates mean you may enroll anytime and take six months to complete (unless otherwise noted on course description).
Other  Classes that are not located at Extension centers or on the UC Berkeley campus have the classroom address provided with the course information.
CTEL 3: Assessment of English Learners
EDUC 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 identifying students’ strengths and needs in English language and literacy development and academic achievement.

Because the foundation for CTEL 3: Assessment of English Learners EDUC X374.C is provided in CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction EDUC X374.D, you should take CTEL 4 before taking CTEL 3.

Sec. 002
Eugenia Kaw, M.A., Ph.D.
4 meetings
Saturdays, 9 am–5:30 pm
April 5–26
Berkeley: Golden Bear Center • $483

CTEL P: Portfolio
EDUC 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.

Prerequisites: Completion of all courses in the CLAD Through CTEL program

Sec. 004
Eugenia Kaw, M.A., Ph.D.
2 meetings
Saturday and Sunday, 9 am–5:30 pm
May 3–4
Berkeley: Golden Bear Center • $340

CLAD Through CTEL

Gain effective skills and knowledge to teach English learners, or students whose native language is not English. Accredited 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 O: Orientation: CLAD Through CTEL EDUC 804.I (offered this term)
• CTEL 1: Culture and Inclusion EDUC X374.A
• CTEL 2: Language and Language Development EDUC X374.B
• CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction, SDAIE EDUC X374.D (offered this term)
• CTEL 3: Assessment of English Learners EDUC X374.C (offered this term)
• CTEL P: Portfolio EDUC X374.P (offered this term)

Curriculum Requirements
The curriculum comprises an orientation and 5 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.

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 O: Orientation: CLAD Through CTEL EDUC 804.I (offered this term)
• CTEL 1: Culture and Inclusion EDUC X374.A
• CTEL 2: Language and Language Development EDUC X374.B
• CTEL 4: Foundations and Methods of English Language/Literacy Development and Content Instruction, SDAIE EDUC X374.D (offered this term)
• CTEL 3: Assessment of English Learners EDUC X374.C (offered this term)

Curriculum Requirements
The curriculum comprises 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
(510) 642-1171
askeducation@unex.berkeley.edu
### Cross-Cultural Communication

**EDUC X339.4** • 2 semester units in Education  
A requirement in the Certificate Program in Teaching English as a Second Language and in Teaching Chinese as a Heritage/Foreign Language  
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 students and to explain how conversational and classroom behavior differs from culture to culture.  
**Sec. 003**  
Steven West, Ph.D.  
11 meetings  
Wednesdays, 6–9 pm  
Jan. 22–April 2  
Berkeley: Golden Bear Center • $550

### Teaching Pronunciation as a Communicative Skill

**EDUC 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. Examine American English pronunciation, including stress, rhythm, intonation, consonants and vowels. You also explore the linguistic and psychological factors affecting communicative clarity. Coursework includes hands-on experience as a tutor.  
**Sec. 005**  
5 meetings  
Saturdays, 10 am–1 pm  
March 1–29  
Berkeley: Golden Bear Center • $395

### Second-Language Acquisition

**EDUC X334** • 3 semester units in Education  
A requirement in the Certificate Program 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. Focus on language structure, use and development, and build skills in contrasting languages and linguistic errors. Extend your understanding of broad sociocultural theory.  
**Prerequisite:** Fundamentals of Linguistics for ESL Teachers LINGUIS X416  
**Sec. 003**  
Sedique Popal, Ed.D., Extension Honored Instructor  
13 meetings  
Mondays, 6–9:30 pm  
Jan. 27–April 28 (no meeting on Feb. 17)  
Berkeley: Golden Bear Center • $575

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### Teaching English as a Second or Foreign Language (TESL/TEFL)

#### COURSE INFORMATION

(415) 284-1083  
tesol-unex@berkeley.edu  
extension.berkeley.edu/education

#### FREE INFORMATION SESSION  
Certificate Program in Teaching English as a Second Language  
UNEX 1049  
Learn how UC Berkeley Extension’s certificate can prepare you for diverse job opportunities—in education, business, travel and more—both in the United States and around the world. For certificate details, see p. 123 or visit extension.berkeley.edu/education.

**Sec. 002**  
1 meeting  
Tuesday, 5:30–7 pm  
Jan. 14  
Berkeley: Golden Bear Center • FREE

#### Fundamentals of Linguistics for ESL Teachers

**LINGUIS 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.  
**Sec. 003**  
Steven West, Ph.D.  
15 meetings  
Mondays, 6–9 pm  
Jan. 27–May 12 (no meeting on Feb. 17)  
Berkeley: Golden Bear Center • $575  

**Sec. 004**  
Carol Lethaby, M.A., Extension Honored Instructor  
15 meetings  
Mondays, Jan. 27–April 14, 6–9 pm  
(also Thursdays, Jan. 30–Feb. 20, 6–9 pm; no meeting on Feb. 17)  
San Francisco: Art and Design Center • $575

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Certificate Program in Teaching English as a Second Language

The increasing use of English throughout the world means career opportunities for teachers of English as a second language (ESL) in education, as well as professionals in fields such as business, hospitality, entertainment and more. But teaching ESL well requires more than fluency in English and a lesson plan. UC Berkeley Extension’s Certificate Program in Teaching English as a Second Language provides a foundation in linguistics and second-language acquisition—along with classroom methodologies and curriculum-design skills—so that you can be an effective teacher in a variety of environments. You receive training in language pedagogy, materials development, assessment and evaluation, and cross-cultural communication. The certificate curriculum is overseen by an advisory board of TESL and education leaders and approved by the University of California, Berkeley, Graduate School of Education, ensuring your education is relevant and up to date. This certificate does not award a California teaching credential, but all courses in the curriculum apply toward a master’s degree at St. Mary’s College and the University of San Francisco.

Curriculum Requirements
The curriculum comprises 7 required courses for a total of 17 semester units (255 hours of instruction).

Required Courses
• Cross-Cultural Communication
  EDUC X339.4 (offered this term)
• Fundamentals of Linguistics for ESL Teachers
  LINGUIS X416 (offered this term)
• Grammar Fundamentals for ESL Teachers
  EDUC X338 (offered this term)
• Methods and Materials for Teaching English as a Second Language
  EDUC X339.1A (offered this term)
• Second-Language Acquisition
  EDUC X334 (offered this term)
• Teaching Pronunciation as a Communicative Skill
  EDUC X339.7 (offered this term)
• Practicum in Course Design for ESL/EFL Teachers
  EDUC X327.1 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/cert/tesl.html
(415) 284-1083
tesol-unex@berkeley.edu

Derek Merrill thinks back to when he was teaching at the Georgia Institute of Technology’s School of Literature, Communication and Culture (Atlanta) as a defining point in pursuing a career in teaching English as a second language. “I had a lot of students from India and Korea, and I didn’t know how to help them,” he says. “They were really well-meaning and bright students, but they came in with such weak writing and speaking skills.” Now an instructor in the University of California, Merced’s Merritt Writing Program, Merrill’s career aspirations are that much stronger. With a class of 20 students, only six of whom are native English speakers, Merrill turns to the Certificate Program in Teaching English as a Second Language to hone his craft.
Methods and Materials for Teaching English as a Second Language
EDUC 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 to teach listening, speaking, reading and writing skills to speakers of English as a second language.
Sec. 005
Carol Lethaby, M.A., Extension Honored Instructor
13 meetings
Tuesdays, 6–9 pm
Jan. 28–April 8 (also Saturdays, Feb. 1 and 8, 10 am–4:30 pm)
San Francisco: Art and Design Center • $575

Practicum in Course Design for ESL/EFL Teachers
EDUC X327.1 • 3 semester units in Education
A requirement in the Certificate Program in Teaching English as a Second Language
Build on prior coursework 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, lesson and material development, and evaluation. You also perform exercises in teaching techniques, classroom management, and testing and assessment.
Before the course begins, you are responsible for working with the program administration to find a mentor ESL teacher whom you observe in class during a minimum of five 1-hour visits. You then teach four 1-hour lessons for this class under the guidance of your mentor teacher. Email the Education department if you already have a mentor teacher in mind or if you would like guidance in finding an appropriate one. Locations include nonprofits, community colleges, adult schools and private language schools. K–12 schools may be appropriate if there is a dedicated ESL class that you can observe. Contact the department on your enrollment to received related practicum documents.
Prerequisites: Completion of all other coursework for the Certificate Program in Teaching English as a Second Language
Sec. 005
Gabriella Megyesi, M.A.
13 meetings
Tuesdays, 6–9 pm
Jan. 28–April 8 (also Saturdays, Feb. 1 and 8, 10 am–4:30 pm)
San Francisco: Art and Design Center • $990

FIVE WAYS TO ENROLL
1. Online:
extension.berkeley.edu
2. Phone:
(510) 642-4111
3. Mail:
Department B
1995 University Ave., Suite 110
Berkeley, CA
94704-7000
4. Purchase Order:
(510) 642-3910
5. In Person:
At Golden Bear Center,
1995 University Ave., Berkeley, Calif.

Teaching Chinese as a Heritage/Foreign Language
COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/education

Second-Language Acquisition
EDUC X334 • 3 semester units in Education
Review the theories of first- and second-language acquisition.
For course schedule, see p. 122.

Cross-Cultural Communication
EDUC X339.4 • 2 semester units in Education
Examine the values, customs, mores and communication styles of cultural groups, with emphasis on their implications for teaching.
For course schedule, see p. 122.

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/static/about/jobs.
UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO
Certificate Program in Teaching Chinese as a Heritage/Foreign Language

With interest in learning to read and speak Mandarin Chinese increasing, the demand for qualified Chinese-language teachers—with dedication to pedagogical craft—is growing rapidly. The UC Berkeley Extension Certificate Program in Teaching Chinese as a Heritage/Foreign Language prepares fluent Mandarin Chinese speakers with minimal teaching experience to teach Chinese as a foreign language and gives experienced teachers formalized training in Chinese-language pedagogy. Developed in cooperation with the National Center for K–16 Chinese Language Pedagogy at the Institute of East Asian Studies, UC Berkeley, the certificate meets the highest standards. You learn contemporary language-acquisition theory combined with practical approaches for classroom success, based on standards of the American Council on the Teaching of Foreign Languages. Heightened pedagogical skills and expertise enable you to work in a variety of settings, including charter schools, dedicated language schools, and after-school and weekend language programs. If you wish to work in a K–12 public school, you must acquire a separate California teaching credential.

Prerequisites for Admission
One of the following prerequisites is required to register 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 comprises 5 required courses for a total of 14 semester units (210 hours of instruction).

Required Courses
• Cross-Cultural Communication EDUC X339.4 (offered this term)
• Linguistics for Chinese-Language Teachers EDUC X393.3 (offered this term)
• Methods and Materials for Teaching Chinese I EDUC X392.8
• Methods and Materials for Teaching Chinese II EDUC X396.8
• Second-Language Acquisition EDUC X334 (offered this term)

Find the Quality You Want
☐ Advisory board of UC Berkeley faculty and international experts
☐ Developed with the National Center for K–16 Chinese Language Pedagogy

Get the Knowledge You Need
☐ Teach communicative competency
☐ Develop student-focused curricula
☐ Understand culturally embedded teaching methodologies
☐ Use applied linguistics and psycholinguistics

Learn More and View the Flyer
extension.berkeley.edu/cert/teachingchinese.html
(510) 642-1171
askeducation@unex.berkeley.edu
Professional Program in
College Admission Counseling

College-counseling expertise is in growing demand, and you can increase your marketability as a school counselor by gaining the skills in this program. To apply, you must provide evidence of your Pupil Personnel Services (PPS) credential or master's degree in counseling.

Curriculum Requirements
The curriculum comprises 2 required courses for a total of 8 semester units (120 hours of instruction).

Required Courses
- College Admissions Advising A EDUC X369.3 (offered this term)
- College Admissions Advising B EDUC X369.4 (offered this term)

Learn More
extension.berkeley.edu/spos/admission.html
(510) 642-1171
askeducation@unex.berkeley.edu

College Admissions Advising A
EDUC 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.

Sec. 002
Peggy Hock-McCalley, Ph.D., and Catherine Murphy, M.A.
11 meetings
Saturdays, 9 am–5:30 pm
April 26–May 31 (also Tuesdays, April 29–June 3, 6–9 pm; no meeting on May 24)
Berkeley: Golden Bear Center • $970

College Admissions Advising B
EDUC 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 EDUC 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 underrepresented students.

Prerequisite: College Admissions Advising A EDUC X369.3

Sec. 002
Peggy Hock-McCalley, Ph.D., and Catherine Murphy, M.A.
10 meetings
Saturdays, 9 am–5 pm
Jan. 4–Feb. 8 (also Tuesdays, Jan. 7–21 and Feb. 4 and 11, 6–9 pm; no meeting on Jan. 18)
Belmont: Belmont Center • $970

Career Planning for College Admissions
EDUC X369.5 • 4 semester units in Education
A requirement in the Certificate Program in College Admissions and Career Planning

Choosing a college major and exploring career options is of critical importance for high school students who face a changing workforce after graduation. Understand how career assessments and internship/job search tools (including professional and social networking) can help students and clients of all ages explore and choose college majors and career options.

Sec. 004
Steven Pantell, Ph.D.
8 meetings
Saturdays, 9 am–5:30 pm
Feb. 22–April 12
Berkeley Campus: 20 Wheeler Hall • $985

Sec. 005
Judith Garcia, B.S.
8 meetings
Saturdays, 9 am–5 pm
March 22–May 17 (no meeting on April 26)
Belmont: Belmont Center • $985
Certificate Program in College Admissions and Career Planning

As the need for advisers to meet the diverse needs of today’s students continues to grow, the Certificate Program in College Admissions and Career Planning provides the in-depth knowledge and technical skills necessary to help students 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; planning for college admissions tests, essays and recommendation letters; and uses of technology in college and career planning. The curriculum—overseen by an advisory board and approved by the University of California, Berkeley, Graduate School of Education—gives special attention to training in the college admissions process while emphasizing the connection to the working world, including field site observations and a comprehensive practicum. With training from Extension, you are prepared to help others while advancing your own career advising.

Curriculum Requirements
The curriculum comprises 5 required courses for a total of 15 semester units (216 hours of instruction).

Required Courses
• Career Planning for College Admissions
  EDUC X369.5 (offered this term)
• College Admissions Advising A
  EDUC X369.3 (offered this term)
• College Admissions Advising B
  EDUC X369.4 (offered this term)
• Counseling Techniques for Educators
  EDUC X365.6 (offered this term)
• Practicum in College Admission Advising
  EDUC X361.9 (offered this term)

Find the Quality You Want
□ Undertake a curriculum designed according to the National Association for College Admission Counseling (NACAC) principles of good practice
□ Qualify for Associate-level membership with the Independent Education Consultants Association

Get the Knowledge You Need
□ Admission requirements
□ Financial aid
□ Specialized populations
□ Counseling skills
□ Professional and ethical issues
□ Field experience

Stacey Ho holds a master’s degree in education and is a graduate of the Certificate Program in College Admissions and Career Planning. “It has been, hands down, the best professional development I have ever received,” she says. “The lessons that my instructors prepared were so timely! I honestly can’t say that about so many different professional development courses I’ve sat through.”

Learn More and View the Brochure
extension.berkeley.edu/cert/college.html
(510) 642-1171
askeducation@unex.berkeley.edu
Counseling Techniques for Educators
EDUC X365.6 • 2 semester units in Education
Gain familiarity with counseling approaches that counselors, teachers, administrators and others can use in K–12 and university settings. 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. 008
Maureen Casey, M.A.
4 meetings
Saturdays, 9 am–5 pm
Feb. 22–March 15
Belmont: Belmont Center • $485

Sec. 009
Suzy Thomas, M.A., Ph.D., PPS, and Aubrey Uresti, M.A., PPS
4 meetings
Sundays, 9 am–5:30 pm
Feb. 23–March 16
Berkeley: Golden Bear Center • $485

Practicum in College Admission Advising
EDUC X361.9 • 1 semester unit in Education
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. Fieldwork is accompanied by classroom guidance and collaboration with fellow students and the instructor. Before the course begins, you are responsible for working with the program administration to find a mentor adviser in a school or nonprofit setting who serves as a guide through the completion of the required hours. Email the Education department if you already have a mentor opportunity in mind or if you would like guidance in finding an appropriate one. Contact the department upon enrollment to receive related practicum documents.

Prerequisites: Completion of coursework for the Certificate Program in College Admissions and Career Planning

Sec. 002
Mark van Warmerdam, M.S., PPS
3 meetings
Thursdays, 6–9 pm
Jan. 30, March 13 and May 29
Berkeley: Golden Bear Center • $395

Specialized Courses in College Advising

College Admissions Essays: The Role of the Counselor as Mentor and Editor
EDUC 1007 • 0.8 ceu
The college essay and supplements form the critical components of a college application for moderately and highly selective colleges; these are usually the pieces of the application that high school students find most stressful. In this course, teachers, counselors or others who help students with essay writing learn the components of common essay questions, techniques for helping students find a great essay topic, and strategies for providing critical feedback and revision techniques that maintain the integrity of the writer and the student’s story. Participants also assess their own strengths as an essay reviewer and editor.

This class is not intended for students writing their own essay.

Sec. 002
Elizabeth Stone, Ph.D.
4 meetings
Thursdays, 6–9 pm
Jan. 30–Feb. 20
Belmont: Belmont Center • $215

Sec. 003
Elizabeth Stone, Ph.D.
2 meetings
Sundays, 9 am–1 pm
March 2 and 9
Berkeley: Golden Bear Center • $215

Professional Development for Educators

COURSE INFORMATION
(510) 642-1171
askeducation@unex.berkeley.edu
extension.berkeley.edu/education

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)
EDUC X354 • 2 semester units in Education
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. 120.

Integrating Technology Into Education
EDUC X366.15 • 1 semester unit in 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.

For course schedule, see p. 117.

BUILD A CAREER
Turn your talents into a new career. UC Berkeley Extension professional certificates and specialized programs of study can help you advance in your current position or start your dream career.
Program details at extension.berkeley.edu/cert.
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 and pay for tuition and materials at makingmathreal.org or by calling (510) 527-0720. For optional academic credit, register and pay separate fees to UC Berkeley Extension. If you have questions regarding academic credit from UC Berkeley Extension, contact the Education department at (510) 642-1171.

If you have questions about Making Math Real courses, contact the institute at (510) 527-0720.

Making Math Real: Overview

EDUC X381.1 • 1 semester unit in Education

Get an overview of the pedagogical foundations and practical applications of implementing and maintaining a comprehensive, multisensory-structured methodology in mathematics for pre-K through calculus. Learn how and why this prescriptive and developmental 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. Register online at makingmathreal.org or call (510) 527-0720 for a registration packet.

Sec. 003
David Berg, ET
2 meetings
Saturday and Sunday, 9 am–5 pm
Jan. 11–12
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: The 9 Lines Intensive

EDUC X307.7 • 1 semester unit in Education

This two-day course provides comprehensive instruction for acquiring the specific language, sequencing, assessment points, applied practice and daily maintenance for correctly and successfully applying the 9 Lines. The 9 Lines symbol-imaging mental organizer connects elementary content to higher-level mathematics through algebra and calculus. Learn how to apply the 9 Lines to multiplication, division, fractions, number theory, whole-number factoring and factoring polynomials. In addition to symbol-imaging development, the 9 Lines organizing system is designed to image and connect lowest terms, equivalent fractions and greatest common factor.

Tuition fee paid directly to Making Math Real Institute: $349. Fee for academic credit option paid to UC Berkeley Extension: $175. Register online at makingmathreal.org or call (510) 527-0720 for a registration packet.

Prerequisite: Making Math Real: Overview EDUC X381.1

Sec. 001
David Berg, ET
2 meetings
Saturday and Sunday, 9 am–5 pm
Jan. 25–26
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: Prealgebra

EDUC X326.1 • 4 semester units in Education

The cognitive demands of algebra require a strong and comprehensive developmental foundation including recognizing and extending patterns, generalizing, sequential processing and detail analysis. The specific outcome of a successful prealgebra experience is the establishment and full integration of algebraic law that defines and supports all algebraic processes of simplifying and solving. The most critical component of successful instruction and learning is to include all of the incremental connections in every algebraic development. Therefore, course emphasis is on 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. Topics include units on the four operations with integers and rational numbers, probability, number theory, ratio, proportion and percent, simplifying expressions, solving equations and inequalities, and linear graphing.

Tuition fee paid directly to Making Math Real Institute: $394. Fee for academic credit option paid to UC Berkeley Extension: $360. Register online at makingmathreal.org or call (510) 527-0720 for a registration packet.

Prerequisite: Making Math Real: Overview EDUC X381.1

Sec. 001
David Berg, ET
8 meetings
Saturdays and Sundays, 9 am–5 pm
Feb. 22–23, March 8–9 and 22–23, and April 5–6
Berkeley: Black Pine Circle School, 2016 Seventh St. • $360

Making Math Real Time and Money

EDUC X303.9 • 1 semester unit in Education

Learn to successfully teach students to tell time and work with money using Making Math Real’s multisensory structured methods. Instruction for the “Time” unit includes modifying and utilizing appropriate manipulatives; multisensory instruction for telling time to the hour, half-hour and minute; and word problem applications. Instruction for the “Money” unit includes strategies to support students’ integration for identifying coins and values and counting mixed coins systematically.

Tuition fee paid directly to Making Math Real Institute: $349. Fee for academic credit option paid to UC Berkeley Extension: $175. Register online at makingmathreal.org or call (510) 527-0720 for a registration packet.

Prerequisite: Making Math Real: Overview EDUC X381.1

Sec. 001
David Berg, ET
2 meetings
Saturday and Sunday, 9 am–5 pm
Feb. 8–9
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: Games

EDUC X381.1

In this fun and hands-on course, you learn how to create, implement and play high-interest games to provide practice and development for the learning of any math content. You focus on learning to turn any math content into a game across all grade levels. In addition, you learn to configure these games for a whole class, a small group and individual students.

Tuition fee paid directly to Making Math Real Institute: $349. Fee for academic credit option paid to UC Berkeley Extension: $175. Register online at makingmathreal.org or call (510) 527-0720 for a registration packet.

Prerequisite: Making Math Real: Overview EDUC X381.1

Sec. 001
David Berg, ET
2 meetings
Saturday and Sunday, 9 am–5 pm
May 17–18
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175
For teachers, the key to engaging the minds of children is to expand on the information already included in the required textbooks. With that in mind, middle-school teacher Liz Bodle seeks new ideas to bring to her students. Each term, Bodle and her husband (also a teacher) scan UC Berkeley Extension’s catalog to find courses that will give them extra nuggets of information to bestow upon their classes.

“You need to know the latest research and findings in ancient history to keep the kids in the know—textbooks cannot stay current,” Bodle says. “But if you only read the sixth-grade book, they can see right through that. It’s getting that extra piece for the kids, to go a little bit higher.”

To keep her edge, Bodle enrolls in Humanities courses, enjoying the evening and weekend classes that fit her tight schedule. And being in a classroom with adults also has its perks. “You could just read the book, but then you don’t have the ability to sit with someone and discuss it,” she says. “It’s always fun to keep learning. With education changing so much, the demands of what you need to know have risen. Teachers need to stay current.”

extension.berkeley.edu/humanities
Broaden your intellectual perspective with UC Berkeley Extension, and change the way you view the world. Courses in history, literature, philosophy, culture, cuisine and personal development provide options to suit your interests. Explore the historical context of the classics, gain a greater appreciation of diverse religions, or develop your communication skills.

You can also study a language to enrich your social, cultural and professional experiences. Whether you want to brush up on 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.
Oxford Berkeley Program

For 45 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 2014, and become part of this exciting intellectual tradition.

2014 Seminars

- The Art of the English Garden
- Brave New Worlds: The International Economy Since Bretton Woods
- Castles and Country Houses: A Social, Economic and Architectural Study
- Courtiers, Conspirators and Adventurers: the Elizabethan and Jacobean Age
- English Cathedrals and Monasteries in the Middle Ages
- The Great Families of Britain
- Jane Austen in Context
- Science, Technology and Medicine: History of Their Interaction
- Shakespeare's Kings and Queens
- Tales of Place: The Impact of Houses and Landscapes on English Life and Fiction
- The War to End Wars: The Causes, Course and Consequences of the Crisis of 1914–1919 (FULL)

Learn More

extension.berkeley.edu/oxford
(510) 642-3824
travel@unex.berkeley.edu

Humanities

COURSE INFORMATION
(510) 643-1110
humanit@unex.berkeley.edu
extension.berkeley.edu/humanities

ONLINE COURSE INFORMATION
(510) 643-4957
extension.berkeley.edu/online

Literature, History and Culture

Homer's The Iliad

UNEX 1155
The Iliad—Homer’s stirring epic of warriors, gods and intrigue—marks the beginning of Western literature. Although its heroes—the Greeks and Trojans “armed in bronze”—inhabit a world vastly different from today’s, you can recognize the humanity of characters like the “swift-footed” Achilles and the “tamer of horses” Hector. Even the Olympian gods offer a glimpse into human motivation. In this course, study the historical context of the epic and its rich evocation of themes such as honor, authority, family and religion. Many great questions and puzzles confront readers of The Iliad; in this course, you have an opportunity to explore them at an easy pace and in great detail.

You should read the first three books of The Iliad prior to the first class.

Sec. 001
Gaius Stern, Ph.D.
5 meetings
Wednesdays, 6:30–9:30 pm
Feb. 19–March 19
Berkeley Campus: 70 Evans Hall • $295

Culture and Counterculture

PHILOS X477 • 2 semester units in Philosophy

Examine the flowering of countercultures in various civilizations, including Socrates’ nonconformity in ancient Greece, Taoism, the hippies of the Sixties and rave and cybercultures of the present. Reflect on what cultures and countercultures have in common, as well as where they remain distinctive, with regard to the proliferation of Bohemias in modern material civilization.

Sec. 001
Josef Chytry, D.Phil. (Oxford), Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
March 6–May 8
Berkeley Campus: 203 Wheeler Hall • $425

NEW THIS TERM

Ancient Egyptian Hieroglyphs II

ANTHRO X403 • 2 semester units in Anthropology

In this continuation of Ancient Egyptian Hieroglyphs I ANTHRO X402, you expand your knowledge of the writing system, vocabulary and grammar of the Egyptian language. Course materials cover common formulae found on steleai, offering tables and coffins; artifacts found in the Hearst Museum of Anthropology provide some tangible examples. Read and discuss brief excerpts from literary and historical texts dating from two of the most brilliant periods of Egyptian civilization: the 12th and early 18th dynasties.

Sec. 001
Teresa Moore, Ph.D.
10 meetings
Saturdays, 9:30 am–12:30 pm
Feb. 1–April 5
Berkeley: Golden Bear Center • $425

NEW THIS TERM

Reading the Memoir

ENGLISH X483 • 2 semester units in English

Examine a century’s worth of autobiographies and personal essays, tracing how the memoir form has evolved through time.

For course schedule, see p. 196.

The Craft of Reading

ENGLISH X7 • 2 semester units in English

Learn to read widely, respond deeply and turn any piece of writing into your own best teacher.

For course schedule, see p. 192.

The Development of World Civilization: The Neolithic Age to the Renaissance

HISTORY 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.

Sec. 001
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770
The LASER series, chaired by cultural historian Piero Scaruffi, is a local forum for art and science projects that are creative, original and interdisciplinary in nature. Each evening program features a medley of four artists, scientists, philosophers, historians, inventors and scholars who are working on projects that expand existing paradigms.

**Moderator**

**Piero Scaruffi** is a cognitive scientist who was the manager of the Olivetti Artificial Intelligence Center in Silicon Valley, held visiting scholarships at several academic centers, lectured in three continents, and published several books on artificial intelligence and cognitive science. As a music historian, he has published 10 books, including *A History of Rock Music* (iUniverse, 2009) and *A History of Jazz Music* (Omnipress, 2007). He has also written extensively about cinema, literature and the visual arts on scaruffi.com. His latest book of poems and meditations is *Synthesis* (Omniware, 2009). *A Brief History of Knowledge* (Amazon Digital Services, 2011), has been published as an Amazon e-book. An avid traveler, he has visited more than 140 countries of the world.

**Panelists for Feb. 11**

**Curt Frank** is a chemical engineering professor at Stanford University and the senior associate dean for faculty and academic affairs in the School of Engineering. From 1994 to 2010, he was the founding director of the Center on Polymer Interfaces and Macromolecular Assemblies. He was also chair of the Department of Chemical Engineering from 2001 to 2006. He currently teaches an introductory seminar titled Art, Chemistry and Madness: The Science of Art Materials.

**Bernie Lubell**’s interactive installations have evolved from his studies in psychology and engineering. As participants play with his whimsical wood machines, they become actors in a theater of their own imagining. Since the early 1980s, his installations have been shown throughout the San Francisco Bay Area, Los Angeles, Florida, China and Europe. He is the recipient of numerous awards.

**Eric Paulos** is the director of the Living Environments Lab and an assistant professor in the Berkeley Center for New Media at UC Berkeley. Previously, he conducted research at the Human-Computer Interaction Institute and at the Robotics Institute of Carnegie Mellon University. Paulos is a frequent collaborator with Mark Pauline of Survival Research Laboratories.

**Katherine Sherwood** teaches painting and drawing in UC Berkeley’s Department of Art Practice. Her acclaimed mixed-media paintings investigate the essential intersection of art, medicine and disability. Her work has been exhibited nationwide. Sherwood has also co-curated the exhibition, and accompanying conference for, *Blind at the Museum* at the Berkeley Art Museum.

**Panelists for April 2**

**Jim Crutchfield** is professor of physics at the University of California, Davis, where he is helping found the new Center for Computational Science and Engineering. Until recently, he was research professor at the Santa Fe Institute (SFI), where Crutchfield ran the Dynamics of Learning Group, and adjunct professor of physics in the Department of Physics and Astronomy, University of New Mexico, Albuquerque. He was a research physicist in the Department of Physics at the University of California, Berkeley, from 1985 until his arrival at the SFI in 1997.

**Johanna Drucker** is the inaugural Martin and Bernard Breslauer Professor of Bibliographical Studies in the Department of Information Studies at UCLA. She has extensively published and lectured on topics concerning digital humanities and aesthetics, visual forms of knowledge production, book history and future designs, graphic design, historiography of the alphabet and writing, and contemporary art.

**Ceci Moss** is a writer, musician, DJ and curator based in Oakland, Calif. She is currently pursuing a doctorate in comparative literature at New York University, where she studies contemporary Internet-based art practices. She works as the assistant curator of visual arts at the Yerba Buena Center for the Arts in San Francisco.

**Shan Shan Sheng** has had artwork installed in four of the world’s tallest buildings, as well as other architectural landmarks. In 1989, she was an official artist for the Asian Art Festival in Chicago. She has completed more than 25 large-scale projects in several parts of the U.S., Shanghai, Beijing, Taipei, Hong Kong, London and Venice. Her *Open Wall* project was included in the 53rd Venice Biennale and later exhibited at the Shanghai World Expo.

**Sec. 004**

1 meeting
Tuesday, 6:30–8:30 pm
Feb. 11
Berkeley Campus: 240 Mulford Hall • FREE

**Sec. 005**

1 meeting
Wednesday, 6:30–8:30 pm
April 2
Berkeley Campus: 240 Mulford Hall • FREE
FREE PUBLIC EVENT
Obama in the World: The President and Foreign Policy
UNEX 1211
President Obama has governed during a turbulent era in American foreign policy. The administration has dealt with the winding down of war in Iraq, the escalation of war in Afghanistan, the continued campaign against terrorism, the convulsions of the Arab Spring and Syria, the tensions of a frayed relationship with Russia, the disclosure of secret surveillance programs, and more. How has the president, who took office as a young man with relatively little foreign policy experience, met these challenges? Has Obama worked his will upon the world? Has he stumbled because of his own mistakes? Has he been overwhelmed by events beyond his control? A panel of experts examines the president’s record on issues of global importance.

Sec. 001
1 meeting
Monday, 7:30–9 pm
April 7
Berkeley Campus: Wheeler Hall • FREE
Room to be scheduled later; please check the website for updated location.

The Development of World Civilization: 1500 to the Present
HISTORY 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 organizations 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.

Sec. 001
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
HISTORY XBW7A • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 230 for details.
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.

Sec. 001
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
HISTORY XBW7B • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 230 for details.
Survey U.S. history from the 1870s to the new millennium, and increase your knowledge of events, institutions and prominent historic figures while developing your 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.

Sec. 001
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

The Culture of India: Roots of Tradition and Change
S,SEASN X11 • 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.

Sec. 001
Alice W. Clark, Ph.D.
Enroll anytime
Online, proctored final exam • $595

History of Islam
EA LANG X21 • 3 semester units in Southeast Asian Studies
Recipient of the Distinguished Course Award from the University Professional and Continuing Education Association (UPCEA)
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.

Sec. 001
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $715

Principles of Sociology: A Multicultural Perspective
SOCIOL 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.

Sec. 001
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $760
Introduction to American Politics

POLI SCI XBW1 • 4 semester units in Political Science

Important: Special academic policies apply to XBW courses. See p. 230 for details.

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, and social spending.

Sec. 001
Nina Clark, Ph.D.
Enroll anytime
Online, proctored final exam • $760

Shakespeare

ENGLISH 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. 230 for details.

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.

Sec. 001
Mary Ann Koory, Ph.D., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $770

Contemporary Environmental Issues

ENV SCI X70 • 4 semester units in Environmental Science, Policy and Management

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. Examine the roles played by governments, businesses, scientists, advocacy groups and individual citizens in shaping solutions to environmental problems and managing resources.

Sec. 001
Douglas Greenberg, Ph.D.
Enroll anytime
Online, proctored final exam • $770

American Environmental and Cultural History

ESPM XBW160AC • 4 semester units in Environmental Science, Policy and Management

Important: Special academic policies apply to XB and XBW courses. See p. 230 for details.

Winner of UC Berkeley’s Educational Initiatives Award

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 UC Berkeley campus. For more information regarding the breadth requirement, visit americancultures.berkeley.edu.

Sec. 001
Douglas Greenberg, Ph.D.
Enroll anytime
Online, proctored final exam • $770

The Art of Film

FILM X20 • 3 semester units in Film Studies

Learn the techniques of evaluating and appreciating films.

For course schedule, see p. 14.

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

HUMANITIES, LANGUAGES AND PERSONAL DEVELOPMENT
History of Western Philosophy From the Pre-Socratic Period to the End of the Middle Ages

PHILOS 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.

Sec. 001
Eric Fletcher, Ph.D.
Enroll anytime
Online, proctored final exam • $715

Views of the Absolute in World Religions

RELIGST X10 • 3 semester units in Religious Studies
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.

Sec. 001
Instructor to be announced
Enroll anytime
Online, proctored final exam • $730

Culture and Counterculture

PHILOS X477 • 2 semester units in Philosophy
Examine the flowering of countercultures in various civilizations, including Socrates’ nonconformity in ancient Greece, Taoism, the hippies of the Sixties and rave and cybercultures of the present.

For course schedule, see p. 132.

ENROLL EARLY
UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.

Personal Development

COURSE INFORMATION
(510) 643-1110
humanit@unex.berkeley.edu
extension.berkeley.edu/humanities

NEW THIS TERM
Finding Good Work
BUS ADM 1076
Standard job-seeking methods are no longer enough on their own. In this interactive workshop, learn about important tools that you can use to find and secure good work. Topics include key content for your résumé and LinkedIn profile; an ahead-of-the-pack cover letter; a 30-second story; a professional LinkedIn photo; and solid interviewing techniques, including honest, chemistry-building responses to interviewers’ probing questions. You also practice advanced strategies for networking and for persuading employers to create positions or temporary projects for you.

Sec. 001
Marty Nemko, Ph.D.
1 meeting
Saturday, 9 am–5 pm
Feb. 1
Berkeley Campus: 103 Wheeler Hall • $225

NEW THIS TERM
Meditation
UNEX 1209
Feel better. Relieve stress. Manage your worry, doubt and uncertainty. Meditation is one of the easiest, most enjoyable things you can do for your physical and mental health. Led by a long-time meditator and designed for students of all ages, the course explores three forms of a simple, powerful meditative breathing technique that can focus the mind and produce greater inner peace, clarity and presence. As time permits, you also learn how to couple meditation with visualization, releasing doubts and fears while actively resetting your frame of mind.

Sec. 001
Instructor to be announced
2 meetings
Tuesdays, 6:30–9 pm
March 4 and 11
Berkeley Campus: 30 Wheeler Hall • $145

Using Your Voice as a Sales Tool

UNEX 1129
Cover the basics of good speech: vocal health, volume, pace, articulation, relaxation and breath control. Learn the value of more advanced practices of emphasis, pausing and inflection, as well as the importance of silent messages. Learn skills that add polish and professionalism to your vocal image.

Sec. 002
Deborah Biron, B.A.
6 meetings
Thursdays, 6–9 pm
Jan. 30–March 6
San Francisco: Art and Design Center • $395

Sec. 003
Deborah Biron, B.A.
6 meetings
Mondays, 6–9 pm
March 10–April 14
Belmont: Belmont Center • $395

How Relationships Work

UNEX 1176
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.

Sec. 001
Instructor to be announced
Enroll anytime
Online, proctored final exam • $175

Christian Perspectives

PHILOS X104 • 3 semester units in Philosophy
Explore the principal aspects of Christian ethics, including the need to love God and one’s neighbor, the rejection of violence and the rights of minorities. The course also examines moral issues in the context of contemporary world events.

Sec. 001
Instructor to be announced
Enroll anytime
Online, proctored final exam • $715

ENROLL EARLY
UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.

For course schedule, see p. 132.
Wine and Food Studies

COURSE INFORMATION
(510) 643-1110
humanit@unex.berkeley.edu
extension.berkeley.edu/humanities

Fundamentals of Wine Studies I: Wines of California and Europe
UNEX 1072 • 2.4 ceu
Explore the characteristics of different wine types, the methods of production and aging, and the history of California’s wine industry. Learn tasting techniques with emphasis on comparing Californian and European wines of similar varietals and the proper care and serving of wine. Tastings of representative Californian, French, German, Italian, Spanish and Portuguese wines follow the lectures. Note: Bring six wineglasses to each session. You must be at least 21 years old to enroll in this course.

Sec. 004
Christopher Greene, B.A.
8 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–Feb. 26
San Francisco: Art and Design Center • $545

Sec. 003
David Lee, B.S., CSW
8 meetings
Thursdays, 6:30–9:30 pm
April 17–June 5
San Francisco: Art and Design Center • $545

The Country Wines of France
UNEX 1125 • 1.5 ceu
Many famous regions of France are making top-flight wines that are not yet the household names that Bordeaux, Burgundy and Champagne are. Learn about the food-friendly wines of Alsace, the bone-dry white wines of the Loire Valley and the powerful red wines of the Rhône. Explore the wines of France’s southern region, from Provence to the border with Spain. Discover dessert wine gems from throughout the country.

Sec. 001
Christopher Greene, B.A.
5 meetings
Wednesdays, 6:30–9:30 pm
March 5–April 2
San Francisco: Art and Design Center • $325

Languages

COURSE INFORMATION
(510) 643-1110
lang@unex.berkeley.edu
extension.berkeley.edu/humanities

Chinese

Mandarin I
EA LANG X22 • 2 semester units in East Asian Languages and Cultures
Learn basic pronunciation, sentence patterns, and reading and writing characters. Learn 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. Learn to read and write 135 simplified characters and their corresponding pinyin romanization. Enrollment is limited.

Sec. 003
Baocai Jia, M.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Feb. 19–May 28
Berkeley Campus: 109 Wheeler Hall • $565

Mandarin II
EA LANG X23 • 3 semester units in East Asian Languages and Cultures
This continuation of Mandarin I EA LANG X22 is designed to 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.

Sec. 002
Instructor to be announced
15 meetings
Thursdays, 6–9 pm
Jan. 30–May 8
Berkeley: Golden Bear Center • $565

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
For students 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, such as 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 tenses. 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
For students who have good speaking and reading knowledge of the language and can engage in spontaneous conversations and discussions.
**Mandarin III**  
EA LANG X24 • 2 semester units in East Asian Languages and Cultures  
Learn oral expression in idiomatic Mandarin. By the end of the course, you should be able to use vocabulary and idiomatic phrases appropriate for some formal occasions. You should also be able to read and write 475 simplified characters and their corresponding pinyin romanization.  
*Enrollment is limited.*  
**Sec. 002**  
Baocai Jia, M.A.  
15 meetings  
Thursdays, 6:30–9:30 pm  
Feb. 20–May 29  
Berkeley Campus: 103 Wheeler Hall • $425  

**French**  

**French I**  
FRENCH 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.*  
**Sec. 003**  
Catherine Philippon, M.A.,  
Extension Honored Instructor  
10 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 14–March 18  
Berkeley: Golden Bear Center • $425  

**French II**  
FRENCH 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.*  
**Sec. 002**  
Marie-Claude Le Gall, M.A.  
10 meetings  
Thursdays, 6:30–9:30 pm  
Jan. 30–April 3  
San Francisco: Art and Design Center • $425  

**Greek**  

**Attic Greek I**  
CLASSIC 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 course, 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 instructor supervision.  
**Sec. 002**  
Rali Christo, Ph.D.  
15 meetings  
Saturdays, 10 am–1 pm  
Jan. 25–May 3  
Berkeley Campus: 221 Wheeler Hall • $565  

**Korean**  

**Korean I**  
EA LANG X401 • 3 semester units in East Asian Languages and Cultures  
Get an introduction to beginning-level Korean, including han’gul (the Korean alphabet). Learn the fundamentals of grammar and pronunciation, and study Korean customs and culture. Master the vocabulary and grammar structure to talk about yourself, your family and friends, your studies and work, and other topics. By the end of the course, you should be able to ask questions and give short answers, use han’gul characters, and write basic sentences.  
**Sec. 002**  
Hyok Oh, M.A.  
15 meetings  
Mondays, 6:30–9:30 pm  
Feb. 3–May 19 (no meeting on Feb. 17)  
Berkeley Campus: 221 Wheeler Hall • $565  

**Spanish**  

**Spanish I**  
SPANISH X15 • 3 semester units in Spanish  
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.*  
**Sec. 002**  
Instructor to be announced  
15 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 14–May 6 (no meetings on Feb. 18 and April 15)  
Berkeley Campus: 221 Wheeler Hall • $565  

**Spanish II**  
SPANISH X16 • 3 semester units in Spanish  
In this continuation of Spanish I SPANISH 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.*  
**Sec. 002**  
Pamela Lim-McAlister, M.A.,  
Extension Honored Instructor  
15 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 14–May 6 (no meetings on Feb. 18 and April 15)  
Berkeley Campus: 221 Wheeler Hall • $565  

**Spanish III**  
SPANISH X17 • 3 semester units in Spanish  
Continue to develop your speaking and listening skills in everyday spoken Spanish while developing your writing and reading skills. Get an introduction to the conditional and subjunctive tenses and, by the end, possess a solid grammatical foundation in the language.  
*Enrollment is limited.*  
**Sec. 001**  
Pamela Lim-McAlister, M.A.,  
Extension Honored Instructor  
15 meetings  
Mondays, 6:30–9:30 pm  
Jan. 27–May 19 (no meetings on Feb. 17 and April 14)  
Berkeley Campus: 221 Wheeler Hall • $565  

**Latin**  

**Latin II**  
CLASSIC X21 • 3 semester units in Classics  
Complete your introductory study of grammar, syntax and vocabulary of classical Latin while expanding the linguistic foundations covered in Latin I CLASSIC X20. Focus on the structure of complex sentences and the poetry and prose of the Classical Age. Continue mastering etymological analysis and English derivatives, and gain a more extensive understanding and appreciation of the Roman world of history and legend.  
*Enrollment is limited.*  
**Sec. 001**  
Rali Christo, Ph.D.  
15 meetings  
Saturdays, 2–5 pm  
Jan. 25–May 3  
Berkeley Campus: 221 Wheeler Hall • $565
English as a Second Language (ESL)

Academic Writing for ESL
COLWRIT X400.1 • 2 semester units in College Writing Program
This course is designed for intermediate to advanced nonnative English speakers who are proficient in English but need to improve their academic writing skills. Strengthen your writing by learning how to develop your voice, write for different purposes, produce drafts, revise your work and more. Structured exercises and instructor feedback teach you to assess your own writing and that of your peers. Upon completion, you have a deeper understanding of the writing process and noticeable improvements in your writing.

Sec. 003
Ben Feinbaum, M.Ed.
10 meetings
Mondays, 6:30–9:30 pm
Jan. 27–April 7 (no meeting on Feb. 17)
Berkeley Campus: 30 Wheeler Hall • $500

Sec. 004
Instructor to be announced
10 meetings
Thursdays, 6:30–9:30 pm
Feb. 20–April 24
Berkeley Campus: 221 Wheeler Hall • $500

Advanced Grammar Skills in ESL
COLWRIT X402 • 2 semester units in College Writing Program
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.

Sec. 003
Jeffrey Croft
10 meetings
Tuesdays, 6–9 pm
Feb. 4–April 8
San Francisco: Art and Design Center • $550

Sec. 002
Steven West, Ph.D.
10 meetings
Thursdays, 6–9 pm
Feb. 6–April 10
Berkeley: Golden Bear Center • $550

Business English for ESL Students
COLWRIT X411 • 2 semester units in College Writing Program
Develop the fluency, accuracy and communication skills you need to work confidently in the English-speaking business world. Focus on improving your English proficiency in core skill areas such as reading, writing, speaking and listening as you review key areas of business. You also learn how to effectively communicate in business meetings, give presentations, negotiate, and express yourself in a confident and assertive manner.

Sec. 003
Wayne Macedo, M.A. in TESOL
10 meetings
Mondays, 6:30–9:30 pm
Feb. 3–April 14 (no meeting on Feb. 17)
Berkeley Campus: 3 Evans Hall • $550

Sec. 004
Ben Feinbaum, M.Ed.
10 meetings
Tuesdays, 6:30–9:30 pm
Feb. 4–April 8
Berkeley Campus: 203 Wheeler Hall • $550

Pronunciation Improvement for Effective Communication in ESL
COLWRIT X404 • 2 semester units in College Writing Program
Learn how to improve your intonation, rhythm and stress patterns to speak more clearly. Work closely with the instructor to correct individual errors, and learn strategies to help improve your accent. Become a better communicator in English through intensive classroom practice and structured activities. You also become aware of your own pronunciation and learn to monitor yourself for continued improvement.

Sec. 003
Amy Loewen
10 meetings
Wednesdays, 6 am–9 pm
Jan. 22–March 26
San Francisco: Art and Design Center • $500

Sec. 004
Amy Loewen
10 meetings
Saturdays, 9 am–12 pm
Jan. 25–April 15 (no meeting on Feb. 15)
Berkeley Campus: 203 Wheeler 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 and 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 questions prior to enrollment, contact the Education department at (415) 284-1083 or email questions to tesol-unex@berkeley.edu.
Despite a slew of odd jobs—waitressing, working at a casino, assisting at mental health clinics—Victoria R. Williams strives to fulfill her dream of practicing podiatry. Learning about UC Berkeley Extension’s Post-Baccalaureate Health Professions Program through a family friend, Williams knows she’s on the path to making that dream into reality.

“When I met with program director Dr. Patrick Brown, I liked the structure of the program and the guidance he gave me,” she says. “He’s really accessible, very encouraging and candid. I never got that type of encouragement from anyone outside of my family.” Williams feels the one-on-one advising really helps in keeping her on track, “especially when I questioned my ability,” she says. “Advisers are your lifelines. If it weren’t for my family and my faith, I wouldn’t be where I am.”

Working as a rehabilitation aide and administrative assistant at Skilled Therapies Inc. while taking courses, Williams is ready to take the next step toward being a podiatrist: studying for the Medical College Admission Test (MCAT) to be accepted at the California School of Podiatric Medicine at Samuel Merritt University.

extension.berkeley.edu/sciences
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NEW COURSES
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Free Information Sessions

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.

All Life Science Industries Professional Certificates and Specialized Programs of Study

Sec. 004
Tuesday, Jan. 7, 4–6 pm
Berkeley: Golden Bear Center

Sec. 005
Thursday, May 22, 6–8 pm
San Francisco: Downtown Center

Clinical Laboratory Scientist Preparatory Program

Sec. 002
Monday, Jan. 6, 4–5:30 pm
Berkeley: Golden Bear Center

Post-Baccalaureate Health Professions Program

Sec. 007
Wednesday, Jan. 29, 6–7:30 pm
Berkeley: Golden Bear Center

Health Professions Preparation

COURSE INFORMATION
(510) 643-6901
science@unex.berkeley.edu
extension.berkeley.edu/sciences

FREE INFORMATION SESSION
Post-Baccalaureate Health Professions Program

UNEX 1057
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. 143 or visit the Post-Baccalaureate Health Professions Program at extension.berkeley.edu/spos/premed.html.

Sec. 007
1 meeting
Wednesday, 6–7:30 pm
Jan. 29
Berkeley: Golden Bear Center • FREE

Sec. 010
1 meeting
Tuesday, 6:30–8 pm
Feb. 25
Belmont: Belmont Center • FREE

Health Careers Seminar I

UNEX 1074 • 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 Post-Baccalaureate Health Professions Program.

Sec. 003
Shoshana Katzman, Ph.D.
1 meeting
Sunday, 1–5 pm
Jan. 12
San Francisco: Art and Design Center • $315

Health Careers Seminar II

UNEX 1075 • 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. 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. Classroom experience includes lectures, in-class interactive presentations, group work with fellow students, and opportunities for private and semiprivate meetings with instructors.

Prerequisites: Health Careers Seminar I UNEX 1074. You must be officially accepted into the Post-Baccalaureate Health Professions Program.

Sec. 002
Juhn Verano, M.S., and Shoshana Katzman, Ph.D.
5 meetings
Sundays, 10 am–1 pm
Jan. 26–March 2 (no meeting on Feb. 16)
San Francisco: Art and Design Center • $600

Science Writing

ENGLISH X463.5 • 2 semester units in English

Get a practical introduction to the diversity of science-writing opportunities, including those for news organizations, magazines, institutions and websites.

For course schedule, see p. 197.

Expository Writing: Crafting the Graduate Admission Essay

ENGLISH 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.

For course schedule, see p. 197.
Biology

COURSE INFORMATION
(510) 643-6901
science@unex.berkeley.edu
extension.berkeley.edu/sciences

ONLINE COURSE INFORMATION
(510) 642-7345
science-online-unex@berkeley.edu
extension.berkeley.edu/online

General Biology I
MCELLBI 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 prehealth 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. Develop laboratory skills such as instrumentation, data analysis and observation. This course is associated with General Biology I MCELLBI X15A.

Sec. 004
Nidhi Ahuja, Ph.D.
15 meetings
Tuesdays, 1–5 pm
Jan. 21–May 6 (no meeting on April 1)
Berkeley: Golden Bear Center • $980

Sec. 006
Aung Chein, M.D.
15 meetings
Tuesdays, 6–10 pm
Jan. 22–May 7 (no meeting on April 2)
Berkeley: Belmont Center • $980

Sec. 005
Medora Huseby, Ph.D.
15 meetings
Tuesdays, 6–10 pm
Jan. 21–May 6 (no meeting on April 1)
Berkeley: Golden Bear Center • $980

General Biology Laboratory I
MCELLBI X15.1A • 2 semester units in Molecular and Cell Biology
An elective in the Post-Baccalaureate Health Professions Program

Get an introduction to fundamental concepts in biology, including cell structure and function; metabolism; molecular and organismal genetics; classification; and animal development, form and function. Designed for biology majors and premedical and prehealth 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. Develop laboratory skills such as instrumentation, data analysis and observation. This course is associated with General Biology I MCELLBI X15A.

Sec. 005
Sima Bahadori, M.S.
15 meetings
Saturdays, 1–5 pm
Jan. 25–May 17 (no meetings on Feb. 15 and April 19)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 204 • $980

Sec. 006
Justine Walsh, Ph.D.
15 meetings
Saturdays, 10 am–2 pm
Jan. 25–May 17 (no meetings on Feb. 15 and April 5)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 16, Room 212 • $980

FIVE WAYS TO ENROLL
1. Online:
extension.berkeley.edu

2. Phone:
(510) 642-4111

3. Mail:
Department B
1995 University Ave., Suite 110
Berkeley, CA 94704-7000

4. Purchase Order:
(510) 642-3910

5. In Person:
At Golden Bear Center, 1995 University Ave., Berkeley, Calif.

Post-Baccalaureate Health Professions Program
Get the science education required for advanced study in medicine and other health professions. 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 coupled 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 comprises 2 required courses and a varied number of electives (depending on specific courses needed) for a total of 24 semester units of electives and 1.9 ceu of required courses.

Required Courses
• Health Careers Seminar I UNEX 1074 (offered this term)
• Health Careers Seminar II UNEX 1075 (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) 643-6901
science@unex.berkeley.edu

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extension.berkeley.edu/locations

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
General Biology II
INTEGBI X15B • 3 semester units in Integrative Biology

An elective in the Post-Baccalaureate Health Professions Program

Learn fundamental concepts in biology, including prokaryotes; protists; fungi and plant development, form and function; population genetics; ecology; conservation; the origin of life; evolution; and classification. Designed for biology majors and premedical and prehealth 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 II INTEGBI X15B. The lecture may be taken without the laboratory.

High school chemistry is recommended.

Sec. 007
Justine Walsh, Ph.D.
15 meetings
Tuesdays, 6–10 pm
Jan. 14–April 29 (no meeting on April 1)
Berkeley: Golden Bear Center • $980

Sec. 005
Ritin Bhaduri, Ph.D.
15 meetings
Saturdays, 2–6 pm
Jan. 25–May 17 (no meetings on Feb. 15 and April 19)
Berkeley: Golden Bear Center • $980

General Biology Laboratory II
INTEGBI X15.1B • 2 semester units in Integrative Biology

An elective in the Post-Baccalaureate Health Professions Program

Learn fundamental concepts in biology, including prokaryotes; protists; fungi and plant development, form and function; population genetics; ecology; conservation; the origin of life; evolution; and classification. Designed for biology majors and premedical and prehealth 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. Develop laboratory skills such as instrumentation, data analysis and observation.

Prerequisite: General Biology II INTEGBI X15B must be completed with a C or better or taken concurrently.

Sec. 007
Yvette Alva-Campbell, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 15–April 30 (no meeting on April 2)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 16, Room 212 • $980

Sec. 006
Judith Dwiti, Ph.D.
15 meetings
Saturdays, 9 am–1 pm
Jan. 25–May 17 (no meetings on Feb. 15 and April 19)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 252 • $980

Introductory Biology With Lab, Part A
MCELLBI 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 relation between biological issues and current topics in experimental research, biotechnology and medicine.

Familiarity with basic chemistry is recommended but not required.

Sec. 001
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online, proctored final exam • $875

Introductory Biology With Lab, Part B
MCELLBI 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. You pay particular attention 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.

Sec. 001
Susan Parkinson, Ph.D.
Enroll anytime
Online, proctored final exam • $875
**General Human Anatomy**

INTEGBI 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 gross and microscopic examination. Topics include the cardiovascular, respiratory, gastrointestinal, nervous and musculoskeletal 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. 011**
James Smiley, B.A., D.C.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 21–April 29
Belmont: Belmont Center • $880

**Sec. 010**
Kathleen Azevedo, MSN, RN
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 15–April 23
Berkeley: Golden Bear Center • $880

**Sec. 009**
James Smiley, B.A., D.C.
15 meetings
Tuesdays, 2–5 pm
Jan. 21–May 6 (no meeting on March 25)
Berkeley: Golden Bear Center • $880

**Sec. 001**
Kashif Ahmad, M.B.B.S., M.Sc., Ph.D.
Enroll anytime
Online, proctored final exam • $850

**Sec. 006**
James Smiley, B.A., D.C.
Enroll anytime
Online, proctored final exam • $850

**Human Anatomy Laboratory**

INTEGBI X108 • 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 nervous, endocrine, cardiovascular and reproductive systems. Understand 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 prehealth students, and those looking for a career change or to refresh their biological knowledge can benefit greatly from this course.

**Prerequisite:** General Human Anatomy INTEGBI X104 must be completed with a C or better or taken concurrently.

**Sec. 007**
James Smiley, B.A., D.C.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–April 29
Hayward: Life Chiropractic College, 25001 Industrial Blvd., Room 16-005 • $855

**Sec. 006**
Em Segmen, M.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 22–May 7 (no meeting on April 16)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 210 • $855

**Mammalian Systemic Physiology**

INTEGBI X109 • 3 semester units in Integrative Biology

An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program

Study fundamental concepts of mammalian (primarily human) physiology, including neural, muscular, cardiovascular, respiratory, renal, endocrine, digestive and reproductive physiology. Explore in detail homeostasis; molecular and cellular physiology; and the functions of tissues, organs and organ systems. At the end of the course, you understand current topics and key concepts of experimental research. Biology majors, premedical and prehealth students, and those looking for a career change or to refresh their physiological knowledge can benefit greatly from this course.

**Sec. 003**
Jennifer Wade, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
San Francisco: Downtown Center • $880

**Human Nutrition**

NUSCTX X444 • 3 semester units in Nutritional Sciences and Toxicology

An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program

Understand the role that nutrition plays in human health and development through topics such as digestion and metabolism; variations in caloric and nutrient needs and calculations; recording of diet and evaluation of macro- and micronutrient content in relation to dietary reference intakes; phytochemicals and nutrients and their role in health and illness, especially in endocrine diseases such as type 2 diabetes, obesity, hypertension and cardiovascular disease; disorders related to nutrient deficiency and excess, and medical nutrition therapy; and biological variations related to diet, food safety and food-borne illnesses.

**Sec. 002**
Peter Niloufari, M.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
Berkeley: Golden Bear Center • $880

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**Introduction to Human Physiology**

MCELLBI XB32 • XBW32 for online sections

3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program

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

**Sec. 005**
Lawrence Basso, M.S., M.D.
15 meetings
Wednesdays, 6–9 pm
Jan. 15–April 23
Belmont: Belmont Center • $880

**Sec. 004**
Peter Niloufari, M.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 23–May 8 (no meeting on March 27)
San Francisco: Downtown Center • $880

**Sec. 007**
Jennifer Wade, Ph.D.
Enroll anytime
Online, proctored final exam • $850

**Sec. 008**
Keith Earnshaw, Ph.D.
Enroll anytime
Online, proctored final exam • $850

**Sec. 009**
Christina Morales, Ph.D.
Enroll anytime
Online, proctored final exam • $850

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**Human Physiology Laboratory**

MCELLBI X406.1 • 1 semester unit in Molecular and Cell Biology

An elective in the Post-Baccalaureate Health Professions Program

Study the fundamental concepts of human physiology—including reproductive, neural, muscular, cardiovascular, respiratory, renal, endocrine and sensory systems—using hands-on experiments and computer simulations. Measure and analyze student EKG, blood pressure, respiratory volume and reflexes.

**Prerequisite:** Introduction to Human Physiology MCELLBI XB32 or Mammalian Systemic Physiology INTEGBI X109 must be completed with a C or better or taken concurrently.

**Sec. 005**
Miguel Angeles, M.P.H., M.D.
15 meetings
Saturdays, 9 am–12 pm
Jan. 25–May 17 (no meetings on Feb. 15 and April 19)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 210 • $855

**Sec. 006**
Peter Niloufari, M.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 27–May 12 (no meeting on Feb. 17)
Hayward: Life Chiropractic College, 25001 Industrial Blvd., Building 16, Room 005 • $855

**Physiology of the Cardiac and Respiratory Systems**

MCELLBI X449.5 • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program

Get an introduction to the human cardiovascular and respiratory systems, 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

**Sec. 002**
Miguel Angeles, M.P.H., M.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 13–May 5 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $880

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**Medical Microbiology**

MCELLBI X134 • 3 semester units in Molecular and Cell Biology

An elective in the Clinical Laboratory Scientist Preparatory Program; an elective in the Post-Baccalaureate Health Professions Program and in the Advanced Biosciences Program

Gain familiarity with important microbial pathogens, including bacteria, viruses, fungi and parasites, and understand their biological characteristics, epidemiology, mechanisms and routes of transmission, pathogenesis and immunity, host response, control and prevention.

**Prerequisites:** One year of college-level general biology for majors and chemistry

**Sec. 007**
Srinivas Garlapati, Ph.D.
15 meetings
Mondays, 2–5 pm
Jan. 13–May 5 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $880

**Sec. 006**
Aung Chein, M.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
San Francisco: Downtown Center • $880

**Sec. 005**
Rajeev Banerjee, M.S., Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–April 24
Berkeley: Golden Bear Center • $880

**Sec. 008**
Rachael Webster, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–April 24
Belmont: Belmont Center • $880

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**ENROLL EARLY**

UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.
### Microbiology Laboratory

MCELLBI X136 • 1 semester unit in Molecular and Cell Biology

*An elective in the Post-Baccalaureate Health Professions Program*

Get an introduction to medical microbiology and general laboratory techniques in this course designed for students who have some background in biology and chemistry.

**Prerequisite:** General Microbiology or Medical Microbiology MCELLBI X134 lecture must be taken concurrently or taken previously.

**Sec. 002**
- Edwin Ochong, Ph.D.
- Mondays, 6:30–9:30 pm
- Jan. 14–April 22
- 15 meetings
- San Francisco: Downtown Center • $880

**Sec. 001**
- Srinivas Garlapati, Ph.D.
- Saturdays, 9:30 am–12:30 pm
- Jan. 14–April 22
- 15 meetings
- Oakland: Merritt College, 12500 Campus Dr., Building D, Room 205 • $855

### Cell Biology

MCELLBI X116 • 3 semester units in Molecular and Cell Biology

*An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program*

Understand 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 the mechanism underlying cellular events.

**Prerequisite:** One year of college-level general biology for majors

**Sec. 003**
- Sophia Maund, Ph.D.
- Tuesdays, 6:30–9:30 pm
- Jan. 14–April 22
- 15 meetings
- San Francisco: Downtown Center • $880

**Sec. 002**
- Nidhi Ahuja, Ph.D.
- Enroll anytime
- Online, proctored final exam • $880

### Developmental Biology

MCELLBI X138 • 3 semester units in Molecular and Cell Biology

*An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program*

How does a single cell, the fertilized egg, give rise to a complex organism that contains many different cell types, tissues and organs? How do the organs develop to the right size and in the right place to give rise to a functional animal? Developmental biology seeks to answer these questions by studying cellular behavior and molecular pathways that control patterning in the developing embryo. Study different model organisms, with an emphasis on vertebrates, and cover the most recent advances and techniques in developmental biology.

**Prerequisites:** One year of college-level general biology for majors and chemistry

**Sec. 002**
- Kimberly Mulligan, Ph.D.
- Wednesdays, 6:30–9:30 pm
- Jan. 15–April 23
- Berkeley: Golden Bear Center • $880

### Marine Biology

INTEGBI 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 nonlab course, you also consider human use of the marine environment and the resulting problems and issues, including pollution, habitat modification and exploitation of resources.

**Sec. 001**
- Stephen Shaner, Ph.D.
- Online, proctored final exam • $850

### 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/static/about/jobs.

UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO

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Introductory Biochemistry
MCELLBI X105 • 3 semester units in Molecular and Cell Biology

A Core Course in the Clinical Laboratory Scientist Preparatory Program; an elective in the Advanced Biosciences Program

Understand the basic chemistry and overall structure of the most important biological macromolecules presented in this nonlab course, 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. 001
Nidhi Ahuja, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 002
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 003
Rebekah Marsh, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 004
Paul Tarr, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 005
Veronica Ardi-Pastores, Ph.D.
Enroll anytime
Online, proctored final exam • $850

NEW THIS TERM
Genomic Medicine
MCELLBI X413 • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program

Learn about current and future applications of genomics in medical practice. Understand the scientific basis of genomic tests and the challenges in their clinical implementation. This course is suitable for prehealth professionals and life scientists interested in the practical applications in genomics.

One year of college-level genetics is recommended.

Sec. 001
Jeanette McCarthy, Ph.D., and Bayly Wheeler, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
Berkeley: Golden Bear Center • $880

Genetics
MCELLBI X143 • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program 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

Sec. 008
Mary Alice Yund, Ph.D.,
Extension Honored Instructor
14 meetings
Tuesdays, 6:30–9:45 pm
Jan. 14–April 22 (no meeting on April 8)
Berkeley Campus: 103 Genetics and Plant Biology • $880

Sec. 009
Srinivas Garlapati, Ph.D.
15 meetings
Fridays, 2–5 pm
Jan. 17–May 2 (no meeting on March 28)
San Francisco: Downtown Center • $880

Sec. 003
John Placyk, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 004
Christina Morales, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 006
Paul Tarr, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Principles of Molecular Biology
MCELLBI X107A • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and 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.

Prerequisite: College chemistry and general biology required. Some background in genetics and cell biology is helpful.

Sec. 002
Elena Rodriguez, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
San Francisco: Downtown Center • $880

Principles and Techniques of Molecular Cell Biology
MCELLBI X121 • 3 semester units in Molecular and Cell Biology

45 hours CE credit: BRN provider 00226

An elective in the Advanced Biosciences Program and in the Clinical Laboratory Scientist Preparatory Program

Learn how cells function in this nonlab course 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

Sec. 001
Susan Parkinson, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Neuroscience
MCELLBI X108 • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program 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. Examine experimental approaches from anatomy to molecular biology, and critically evaluate papers from the primary scientific literature. This course is a foundation for advanced study in the neurosciences.

Prerequisite: One year of college-level general biology for majors

Sec. 009
Julia Scott, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–April 24
San Francisco: Downtown Center • $880
Epigenetics of Human Development and Disease
MCELLBI X423 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences 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). 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.
Some background in molecular biology and genetics is helpful.
Sec. 001 Rebekah Marsh, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Current Topics in the Biosciences
MCELLBI X427 • 2 semester units in Molecular and Cell Biology
Learn about recent scientific advances and emerging technologies in molecular and cell biology, neurobiology, genomics, immunology and infectious disease.
For course details, see p. 150.

NEW THIS TERM
Principles of Toxicology
MCELLBI X419 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program
Study the health effects of drugs, chemicals and natural substances on biological systems and the environment. Learn about the properties of toxic substances, the toxic mechanisms of chemicals, the fate and reactions of foreign chemicals in people’s bodies, the identification and evaluation of toxicity, and health risk assessment methodologies.
Sec. 001 Rainbow Vogt, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–April 22
Berkeley: Golden Bear Center • $880

Virology
MCELLBI X126 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program
Get an introduction to modern medical virology, with an 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
Sec. 004 Rajeev Banerjee, M.S., Ph.D.
15 meetings
Sat., Jan. 25–May 10 (no meeting on Feb. 15)
Berkeley: Golden Bear Center • $880

Immunology
MCELLBI X110 • 3 semester units in Molecular and Cell Biology
A CoreCourse in the Clinical Laboratory Scientist Preparatory Program; an elective in the Advanced Biosciences Program 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. 004 Amy Morgan, Ph.D.
15 meetings
Thu., Jan. 16–April 24
San Francisco: Downtown Center • $880

The Biology of Human Cancer
MCELLBI X124 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program
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.
Prerequisites: One semester of general biology, some molecular biology background is recommended
Sec. 003 Kedar Hastak, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–April 24
San Francisco: Downtown Center • $880

The Biology of Cancer
MCELLBI X26 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program
Examine the molecular, cellular and genetic basis for the 270 diseases called cancer. Topics in this nonlab course 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.
A background in high school or college-level biology is recommended.
Sec. 001 David Lieu, M.D., Ph.D.
Enroll anytime
Online, proctored final exam • $850

Introduction to Biostatistics
MCELLBI X71 • 3 semester units in Molecular and Cell Biology
Gain the statistical skills to read scientific articles in your field, understand the statistical methods used and interpret the results on your own.
For course schedule, see p. 150.

Hematology
MCELLBI 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.
For course schedule, see p. 151.
Advanced Biosciences Program

Advance your career, start a new project or update your knowledge of current topics and emerging technologies with the Advanced Biosciences Program. The required course, Current Topics in the Biosciences, orients you to the program and gives you an overview of recent advances in modern biological research. You then tailor the remainder of the program to meet your specific needs. Whether you are returning to graduate school, retooling your career or learning new skills for your current employer, you can choose from a variety of elective courses in advanced biosciences, biology or chemistry. Online and classroom courses are available in the basic sciences, as well as in specialized topics such as stem cell biology, hematology and biostatistics. New courses are continually being developed to keep pace with this evolving field.

Curriculum Requirements
The curriculum comprises 1 required course and 8 units of electives for a total of 10 semester units (150 hours of instruction).

Required Course
• Current Topics in the Biosciences

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

Learn More and View the Flyer
extension.berkeley.edu/spos/advanced_biosciences.html
(510) 642-8108
science@unex.berkeley.edu

Introduction to Biostatistics
MCELLBI X471 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions 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
Sec. 002
Candace Low
15 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–April 22
San Francisco: Downtown Center • $880

NEW THIS TERM
Genomic Medicine
MCELLBI X413 • 3 semester units in Molecular and Cell Biology
Learn about current and future applications of genomics in medical practice.
For course schedule, see p. 148.

NEW THIS TERM
Principles of Toxicology
MCELLBI X419 • 3 semester units in Molecular and Cell Biology
Study the health effects of drugs, chemicals and natural substances on biological systems and the environment.
For course schedule, see p. 149.

Hematology
MCELLBI 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.
For course schedule, see p. 151.

Immunology
MCELLBI X110 • 3 semester units in Molecular and Cell Biology
45 hours CE credit: BRN provider 00226
Examine the basic principles of immunology, and study the tissues and cells that make up the immune system.
For course schedule, see p. 149.
Clinical Laboratory
Science

COURSE INFORMATION
(510) 642-8108
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extension.berkeley.edu/sciences

FREE INFORMATION SESSION
Clinical Laboratory Scientist Preparatory Program

UNEX 1053
Attend a free, no-obligation event to learn more about the new Clinical Laboratory Scientist Preparatory Program at UC Berkeley Extension. For details, see this page or visit extension.berkeley.edu/spos/cls_prep.html.

Sec. 002
1 meeting
Monday, 4–5:30 pm
Jan. 6
Berkeley: Golden Bear Center • FREE

Hematology
MCELLBI X499.4 • 3 semester units in Molecular and Cell Biology
A Core Course in the Clinical Laboratory Scientist Preparatory Program; an elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program

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

Sec. 005
Luis Fernandez, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 13 – May 5 (no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $880

Sec. 004
Miguel Angeles, M.P.H., M.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15 – April 23
Belmont: Belmont Center • $880

Clinical Laboratory Scientist Preparatory Program

Clinical laboratory scientists are increasingly in demand as the need grows for professionals to perform sophisticated clinical diagnostic tests with a high degree of skill and knowledge. This specialized career offers exciting and rewarding job opportunities that combine advanced laboratory skills with front-line health care delivery. Clinical laboratory scientists work mainly in hospital laboratories but can apply their expertise in management, biotechnology, medical device sales and education. Enhance your background in the biological or chemical sciences with the Clinical Laboratory Scientist (CLS) Preparatory Program, and gain the required course credit needed to apply to certified CLS training programs. The CLS Preparatory Program offers all of the required coursework, as well as many elective courses, to strengthen your application to competitive CLS training programs.

Curriculum Requirements

The curriculum comprises 2 core courses (6 semester units) and 1–2 electives or an additional core course (3 semester units) for a total of 9 semester units (at least 135 hours of instruction).

Core Courses (choose 2)

Biochemistry MCELLBI X115A
Hematology MCELLBI X499.4
Immunology MCELLBI X110
Medical Microbiology MCELLBI X134

For a complete list of Core Courses available this term, visit extension.berkeley.edu/spos/cls_prep.html.

Electives

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

Learn More and View the Flyer
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Quantitative Analysis: Applications in Clinical Chemistry
CHEM X116 • 3 semester units in Chemistry
A Core Course in the Clinical Laboratory Scientist Preparatory Program; an elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program
Explore the principles, techniques and instrumentation involved in quantitative analysis, with special emphasis on clinical applications. Learn the basic physiology, analytical procedures and clinical (normal and disease state) correlations to systems such as carbohydrates, proteins, lipids, enzymes, nonprotein nitrogen, acid-base metabolism, hormones, vitamins, electrolytes, body fluids and others. Study organ system function (normal and abnormal) and associated laboratory testing methods. Learn proper laboratory safety and regulations, statistical methods, and quality assurance and management. This course is especially useful for students looking to transition into a career in the clinical laboratory setting or other health-related fields.
Prerequisites: One year of college-level biology and one year of college-level chemistry
Sec. 002
Deborah French, Ph.D., DABCC
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–April 23
San Francisco: Downtown Center • $880

Virology
MCELLBI X126 • 3 semester units in Molecular and Cell Biology
Get an introduction to modern medical virology, with an emphasis on structure, molecular biology, viral replication, mutations, evolution of viruses, host cell interactions and pathogenesis.
For course schedule, see p. 149.

Immunology
MCELLBI X110 • 3 semester units in Molecular and Cell Biology
45 hours CE credit: BRN provider 00226
Examine the basic principles of immunology, and study the tissues and cells that make up the immune system.
For course schedule, see p. 149.

Biochemistry
MCELLBI X115A • 3 semester units in Molecular and Cell Biology
Understand molecular processes and chemical reactions that underlie diverse life forms.
For course schedule, see p. 147.

Medical Microbiology
MCELLBI X134 • 3 semester units in Molecular and Cell Biology
Gain familiarity with important microbial pathogens, including bacteria, viruses, fungi and parasites, and understand their biological characteristics, epidemiology, mechanisms and routes of transmission, pathogenesis and immunity, host response, control and prevention.
For course schedule, see p. 146.

Genetics
MCELLBI X143 • 3 semester units in Molecular and Cell Biology
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.
For course schedule, see p. 148.

Mammalian Systemic Physiology
INTEGBI X109 • 3 semester units in Integrative Biology
Study fundamental concepts of mammalian physiology (primarily human), including neural, muscular, cardiovascular, respiratory, renal, endocrine, digestive and reproductive physiology.
For course schedule, see p. 145.

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General Chemistry Laboratory I
CHEM 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 CHEM X19A.

Prerequisite: General Chemistry I CHEM X19A must be completed with a C or better or taken concurrently.

Sec. 007
Valeria Martinovic, Ph.D.
15 meetings
Thursdays, 6:30–10 pm
Jan. 16–May 1 (no meeting on April 3)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 18, Room 305 ● $915

Sec. 006
Gregory Wilson, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Jan. 22–May 7 (no meeting on March 26)
Berkeley Campus: 202 Latimer Hall ● $915

Sec. 005
Christian Canlas, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Jan. 22–May 7 (no meeting on March 26)
Berkeley Campus: 201 Latimer Hall ● $915

General Chemistry II
CHEM 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. This course is aimed at biology, premedical and prehealth students. It 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 II CHEM X19.1B.

Prerequisite: General Chemistry I CHEM X19A completed with a C or better

Sec. 003
Richard Samuelson, Ph.D.
15 meetings
Mondays, 2:30–5:30 pm
Jan. 13–May 12 (no meetings on Jan. 20 and Feb. 17)
Berkeley: Golden Bear Center ● $880

Sec. 004
Zoran Kurtovic, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Jan. 13–May 12 (no meetings on Jan. 20, Feb. 17 and March 24)
Berkeley: Golden Bear Center ● $880

Sec. 005
Jay Parrish, M.B.A., Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–May 1 (no meeting on April 3)
Belmont: Belmont Center ● $880

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General Chemistry Laboratory II
CHEM 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. Develop laboratory skills such as instrumentation, data analysis and observational skills. This course is aimed at biology majors and prehealth students. 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 CHEM X19B.

Prerequisites: General Chemistry I CHEM X19A and General Chemistry Laboratory I CHEM X19.1A must be completed with a C or better. General Chemistry II CHEM X19B must be completed with a C or better or taken concurrently.

Sec. 006
Valeria Martinovic, Ph.D.
15 meetings
Mondays, 6:30–10 pm
Jan. 13–May 12 (no meetings on Jan. 20, Feb. 17 and March 31)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 18, Room 311 ● $915

Sec. 003
Gurnam Singh, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Jan. 22–May 7 (no meeting on March 26)
Berkeley Campus: 220 Latimer Hall ● $915

Sec. 004
Volodymyr Gelfand, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Jan. 22–May 7 (no meeting on March 26)
Berkeley Campus: 205 Latimer Hall ● $915

Sec. 005
Zoran Kurtovic, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Jan. 22–May 7 (no meeting on March 26)
Berkeley Campus: 209 Latimer Hall ● $915

Introduction to Chemistry
CHEM X16 ● 3 semester units in Chemistry

This nonlab course introduces you to the 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, you are required to have a basic knowledge of math, including algebra.

Sec. 001
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam ● $850
Introductory Organic Chemistry
CHEM X18 • 3 semester units in Chemistry
Examine the compounds that comprise most living mass. Following an introduction to covalent bonding and isomerism, you 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
Sec. 001
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Organic Chemistry I
CHEM 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. Study the organic chemistry of alkanes, acids and bases, alkenes, alkynes, alcohols, ethers, sulfides and epoxides. This course is aimed at science majors; premedical, prehealth and returning students; and professionals interested in chemistry.
Prerequisite: One year of college-level general chemistry class with a C or better
Sec. 005
Siatoslav Inyushin, M.S.
15 meetings
Mondays, 6–10 pm
Jan. 15–April 30 (no meeting on March 26)
Berkeley Campus: 321 Latimer Hall • $980

Organic Chemistry Laboratory I
CHEM 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, prehealth and returning students; and professionals interested in chemistry. It is associated with Organic Chemistry I CHEM X36A.
Prerequisites: One year of college-level general chemistry class with laboratory. Organic Chemistry I CHEM X36A must be taken concurrently or already completed with a C or better.
Sec. 009
Jean Dupon, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Jan. 15–April 30 (no meeting on April 2)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 18, Room 311 • $980

Organic Chemistry II
CHEM X36B • 3 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Prepare to study reactions of functional groups and interactions of polyfunctional compounds, infrared spectroscopy, nuclear magnetic resonance, mass spectrometry and ultraviolet-visible spectroscopy. You also get an introduction to biochemistry, lipids, carbohydrates, proteins and nucleic acids. This course is designed for science majors; premedical and prehealth students, and professionals interested in chemistry.
Prerequisite: Organic Chemistry I CHEM X36A with a C or better
Sec. 007
Kristen Aramthanapon, M.S.
15 meetings
Wednesdays, 6–10 pm
Jan. 22–May 7 (no meeting on March 26)
Berkeley Campus: 225 Latimer Hall • $980

Organic Chemistry Laboratory II
CHEM X36.1B • 2 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
You cover 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, prehealth and returning students; and professionals interested in chemistry. It is associated with Organic Chemistry II CHEM X36B.
Prerequisites: Organic Chemistry I CHEM X36A and Organic Chemistry Laboratory I CHEM X36.1A with a C or better. Organic Chemistry II CHEM X36B must be completed with a C or better or taken concurrently.
Sec. 005
Marcus Strawn, Ph.D.
15 meetings
Mondays, 6–10 pm
Jan. 13–May 12 (no meetings on Jan. 20, Feb. 17 and March 24)
Berkeley Campus: 322 Latimer Hall • $980

ENROLL EARLY
UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.
### Alternative Assessment Tools for Choosing Safer Chemicals, Material and Products

**CHEM X415** • 2 semester units in Chemistry

Understand the basic ideas of materials science, and learn to apply the principles of green chemistry to materials and processing design. Explore microstructure, property and processing, as well as their environmental impacts for different types of materials. Learn to integrate pollution-prevention and resource-conservation strategies into the development of more ecologically and economically sustainable product systems using the Life Cycle Assessment (LCA) methodology. Through relevant case studies, build a foundation in designing and discovering the next generation of materials.

**Sec. 001**
Heather Kimmel, Ph.D.
Jan. 14 – April 8
Online • $585

### Business and Financial Planning for Green Chemistry Innovation

**BUS ADM X413.8** • 2 semester units in Business Administration

Get an introduction to the core principles of economics, finance and accounting to 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.

**Sec. 002**
Jane Talkington, M.B.A.
Jan. 14 – April 8
Online • $585

### Quantitative Analysis: Applications in Clinical Chemistry

**CHEM X416** • 3 semester units in Chemistry

Explore the principles, techniques and instrumentation involved in quantitative analysis, with special emphasis on clinical applications.

For course schedule, see p. 152.

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### Physics

**COURSE INFORMATION**

(510) 643-5901
science@unex.berkeley.edu
extension.berkeley.edu/sciences

**ONLINE COURSE INFORMATION**

(510) 642-7345
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extension.berkeley.edu/online

**Concepts of Physics**

**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. Study the concepts of physics with a minimum of mathematics.

**Sec. 001**
Raja Almukahhal, Ph.D.
Enroll anytime
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**Physics I**

**PHYSICS X3A** • 3 semester units in Physics

A Core Course in the Clinical Laboratory Scientist Preparatory Program; an elective in the Post-Baccalaureate Health Professions Program

Study the fundamental concepts of physics, including forces, properties of matter, kinetics, thermodynamics, heat, wave motion, fluids and sound. This class is designed for biology, premedical, prehealth and architecture students. In addition, it is 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 I PHYSICS X3A.

**Prerequisite:** Physics I PHYSICS X3A must be completed with a C or better or taken concurrently.

**Sec. 005**
Minhua Zhu, Ph.D.
15 meetings
Thursdays, 6:30 – 9:30 pm
Jan. 23 – May 8 (no meeting on March 27)
Berkeley Campus: 211 LeConte Hall • $855

**Sec. 006**
Austin Hedeman, M.A.
15 meetings
Thursdays, 6:30 – 9:30 pm
Jan. 23 – May 8 (no meeting on March 27)
Berkeley Campus: 231 LeConte Hall • $855

**Sec. 007**
Minhua Zhu, Ph.D.
15 meetings
Saturdays, 10 am – 1 pm
Jan. 25 – May 17 (no meetings on Feb. 15 and April 5)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 16, Room 106 • $855

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### Physics Laboratory I

**PHYSICS 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 and sound and other topics of interest. This course is associated with Physics I PHYSICS X3A.

**Prerequisite:** Physics I PHYSICS X3A must be completed with a C or better or taken concurrently.

**Sec. 005**
Minhua Zhu, M.S.
15 meetings
Thursdays, 6:30 – 9:30 pm
Jan. 23 – May 8 (no meeting on March 27)
Berkeley Campus: 211 LeConte Hall • $855

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Clinical Research

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Introduction to Clinical Research: Clinical Trial Phases and Design
PB HLTH X400.2 • 3 semester units in Public Health
A requirement in the Certificate Program in Clinical Research Conduct and Management

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. 005
Peter Dubinsky, B.S.
Jan. 2–Feb. 27
Online • $1,895

Sec. 007
Marianna Lenoci, M.A.
4 meetings
Saturdays, 9 am–5 pm
Jan. 11–March 1 (no meetings on Jan. 18, and Feb. 1, 15 and 22)
San Francisco: Downtown Center • $1,825

Sec. 006
Peter Dubinsky, B.S.
March 4–April 29
Online • $1,895

Location Guide
For detailed information, see p. 236.

Belmont: Belmont Center 1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus See campus map, p. 237. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center 1995 University Ave., Berkeley
San Francisco: Downtown Center 425 Market St., 8th Floor (enter on Fremont Street), San Francisco
San Francisco: Art and Design Center 95 Third St., San Francisco
Online Internet and email access required. Schedules displaying no dates mean you may enroll anytime and take six months to complete (unless otherwise noted on course description).
Other Classes that are not located at Extension centers or on the UC Berkeley campus have the classroom address provided with the course information.
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—available in either an online or hybrid online/classroom format—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. The curriculum is overseen by an advisory board of life-science and education leaders and approved by the University of California, Berkeley, College of Letters and Science, ensuring your education is relevant and up to date. Courses are taught by working professionals with many years of practical experience. Coursework in this certificate also meets continuing education requirements for nurses and clinical research professionals.

Curriculum Requirements
The curriculum comprises 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 PB HLTH X400.2 (offered this term)
- Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities PB HLTH X400.3 (offered this term)
- Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting PB HLTH X400.4 (offered this term)
- Clinical Trial: Data Analysis, Regulatory Audits, Vendor Selection and Project Management PB HLTH X400.5 (offered this term)

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Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities
PB HLTH X400.3 • 3 semester units in Public Health
A requirement in the Certificate Program in Clinical Research Conduct and Management

Learn the procedures to plan clinical trials, including protocol development, case report form design, institutional review board (IRB) submission, presudy visits and more.

Prerequisite: Successful completion of Introduction to Clinical Research: Clinical Trial Phases and Design PB HLTH X400.2

Sec. 004
Karen Henry, M.P.H.
Jan. 2–Feb. 27
Online • $1,895

Sec. 006
Marianna Lenoci, M.A.
5 meetings
Saturdays, 9 am–5 pm
March 15–May 17 (no meetings on March 22 and 29, April 12 and 26, and May 10)
San Francisco: Downtown Center • $1,825

Sec. 005
Karen Henry, M.P.H.
March 4–April 29
Online • $1,895

Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting
PB HLTH X400.4 • 3 semester units in Public Health
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 PB HLTH X400.2 and Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities PB HLTH X400.3

Sec. 005
Jan. 2–Feb. 27
Online • $1,895

Sec. 004
Marianna Lenoci, M.A.
4 meetings
Saturdays, 9 am–5 pm
Jan. 25–March 8 (no meetings on Feb. 8 and 15, and March 1)
San Francisco: Downtown Center • $1,825

Sec. 006
March 4–April 29
Online • $1,895

Clinical Trial: Data Analysis, Regulatory Audits, Vendor Selection and Project Management
PB HLTH X400.5 • 3 semester units in Public Health
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 PB HLTH X400.2, Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities PB HLTH X400.3, and Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting PB HLTH X400.4

Sec. 004
Daniel Redline, B.A., CCRP
Jan. 2–Feb. 27
Online • $1,895

Sec. 006
Marianna Lenoci, M.A.
4 meetings
Saturdays, 9 am–5 pm
March 22–May 10 (no meetings on March 29, April 12 and 26, and May 3)
San Francisco: Downtown Center • $1,825

Sec. 005
Daniel Redline, B.A., CCRP
March 4–April 29
Online • $1,895

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Life Sciences Business

COURSE INFORMATION
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Sec. 004
1 meeting
Tuesday, 4–6 pm
Jan. 7
Berkeley: Golden Bear Center • FREE

Sec. 005
1 meeting
Thursday, 6–8 pm
May 22
San Francisco: Downtown Center • FREE

Venture Funding and Due Diligence: Financing a Biotechnology Company
BUS ADM X436.8 • 1 semester unit in Business Administration
A requirement in the Professional Program in Life Sciences 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.

Sec. 002
Frank Eeckman, M.D., Ph.D.
5 meetings
Saturdays, 9 am–12 pm
April 15–May 17
San Francisco: Downtown Center • $575

Professional Program in Life Sciences Business

Learn the specific business needs of the life science industries. Focusing on the aspects of business and development unique to biotechnology, medical devices, vaccines and pharmaceuticals, the Professional Program in Life Sciences Business provides the knowledge to start, develop and operate a successful business in the life science industries. Electives cover other areas within the life science 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 from bioscience electives that apply to multiple programs, allowing you to earn credit while tailoring the program to meet your needs.

Curriculum Requirements
The curriculum comprises 5 required courses and a minimum of 2 electives for a total of 6 semester units (at least 125 hours of instruction).

Required Courses
- The Drug Development Process: An Intensive Seminar PB HLTH 1023 (offered this term)
- Life Sciences Business and Marketing: Their Integral Role for Success BUS ADM X442.4 (offered this term)
- Life Sciences Business Development BUS ADM X440.8
- Life Sciences Product Marketing: It’s All in the Plan BUS ADM X442.5
- Venture Funding and Due Diligence: Financing a Biotechnology Company BUS ADM X436.8 (offered this term)

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

Learn More and View the Flyer
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(510) 642-1062
science@unex.berkeley.edu

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intellectual property. 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.

Sec. 001
Rohita Bansal, J.D.
10 meetings
Wednesdays, 6–9 pm
Feb. 5–April 9
Belmont: Belmont Center • $895

Life Sciences Product Marketing: It’s All in the Plan
BUS ADM X422.5 • 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. The course is appropriate for professionals at all levels in life sciences marketing research, product planning and management, product sales, promotion, business development and licensing, public and corporate relations, as well as other company functions involved in the development and commercialization of a product and its clinical and regulatory labeling. Throughout the course, you and the other students act as members of a class-based product team that replicates a company-based team. Through that pedagogical method, you gain an understanding of what goes into successful tactical marketing and promotional programs, and gain insights into what it takes to gain management approval and resources for implementation.

See Web for expanded course description.

Guest Instructors

Sec. 001
Audrey Erbes, Ph.D.
7 meetings
Thursdays, 6–9 pm
Feb. 13–March 27
San Francisco: Downtown Center • $695

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Intellectual Property and Biopharmaceutical Patent Law
BUS ADM X413.9 • 2 semester units in Business Administration
An elective in the Professional Program in Life Sciences Business

SCIENCES, MATHEMATICS AND BIOTECHNOLOGY
Life Sciences Business and Marketing: Their Integral Role for Success

BUS ADM X442.4 • 1 semester unit in Business Administration
A requirement in the Professional Program in Life Sciences Business

The life science industry presents very different challenges found in other industries and requires specialized knowledge and skills to navigate the unique regulatory path requirements, lengthy development times, expensive clinical trial process, FDA control of advertising and labeling, and impact of managed care on reimbursement and pricing. This course conveys the foundational research and analysis skills needed on the job to make good marketing and business recommendations and decisions across company functions.

This course includes two days of intensive classroom work and mentoring by the instructor, who is available for the balance of the term while completing the term project. Learn how to research and analyze markets and environments for making recommendations and decisions useful for all professional functions in bioscience companies. Understand how to complete typical business and marketing assignments common to the workplace and receive templates and outlines for documents. In the process, you develop a basic understanding of the roles and benefits of various business and marketing functions involved in the company’s success. Identify challenges and opportunities critical to the success of a company and its products. Complete a business investment analysis of a company and its technology and products of your choice for the term project.

You receive an extensive reader with lecture slides for note taking, lists of Internet-accessible information resources and free access to otherwise paid subscription databases to assist in researching your term project.

You are experienced and newer business and marketing professionals — as well as scientific, clinical, regulatory and legal professionals — can benefit from this introduction to the important business and marketing aspects of the life science industries and how to research and develop solutions to handle its challenges.

Instructor
Audrey Erbes, Ph.D., principal, Erbes & Associates, has 30 years of life science management experience in global marketing and business development. She is a recognized industry consultant, educator, speaker and blogger. Erbes was vice president and co-founder of Kowa Research Institute and director in various marketing departments at Syntex Corporation in the United States and overseas.

Guest Speakers

Joyce L. Chiarenza, Chiarenza Consulting, L.L.C., is a regulatory affairs, labeling expert and clinical-compliance-certified professional with more than 40 years of pharmaceutical and biotech experience. She has held managerial positions in quality control, quality assurance, compliance and regulatory affairs. After more than 18 years at Genentech Inc., Chiarenza became a regulatory affairs consultant, specializing in labeling, advertising and promotion, and clinical compliance. Prior to Genentech, she worked in quality with Abbott Laboratories, and for three years worked in area of vitamins, food supplements and cosmetics. In 2010, Chiarenza received her certification as a Clinical Compliance Professional.
Topic: Operating in the U.S. Regulatory Environment: Is Product Approvable

Linda L. Schock is the director of Commercial Compliance & Government Programs at Compliance Implementation Services (CIS) and is responsible for opening the CIS West Coast office in Burlingame, Calif. She brings more than 20 years of industry experience ranging from distribution, pricing, commercial and government contracting, reimbursement and patient support programs. Prior to joining CIS, Schock worked at NeurogesX as director, commercial operations from 2009–2011 and CV Therapeutics from 2005–2009.
Topic: Building Effective and Compliant Commercial and Government Contracting Operations: A Case Study

Bev Hudson, M.B.A., is the senior vice president, Business Development, Omnicomm Systems Inc., a Web-based electronic data capture (EDC) and eClinical software and services company with products that streamline the clinical research process.
Topic: The Impact of the U.S. Health Care System on Marketing Biotech Products

Julie Tompkins, M.B.A., is senior vice president at Timely Data Resources, a health care market research and consulting firm. She has more than 30 years of experience in the pharmaceutical and biotech arenas, including industry and market research consulting, and has worked with pharmaceuticals, diagnostics and drug delivery systems.
Topic: The Role of Market Research in Product Planning, Development and Marketing

Sec. 001
2 meetings
Thursday and Friday, 8:30 am–5 pm
April 10–11
San Francisco: Downtown Center • $795
### Bioscience Essentials for Industry Professionals: An Intensive Seminar

**MCBBLB 1001 • 3.5 ceu**

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. This course is for marketing, business development, legal and scientific professionals working in the bioscience arena. Entrepreneurs can also benefit from this interactive course.

**Guest instructors** are scientists and experienced teachers with the proven ability to make scientific concepts comprehensible and relevant. Breakfast, lunch and course materials are included in the course fee.

**Lead Instructor**

Mary Alice Yund, Ph.D., Extension Honored Instructor, has more than 15 years of experience in developmental genetics research at the University of California, Berkeley. She also has 10 years of experience in technology assessment and market research, consulting for the biopharmaceutical industry. Yund has taught genetics at UC Berkeley; California State University, East Bay; and Mills College. She also has taught genetics, developmental biology, biochemistry, functional genomics and introductory biotechnology courses at UC Berkeley Extension.

### The Drug Development Process: An Intensive Seminar

**PB HLTH 1023 • 3.6 ceu**

A requirement in the Professional Program in Life Sciences Business

Get a detailed picture of all aspects of the complex and highly interrelated activities involved in bringing a pharmaceutical discovery to approval and market. While the focus is on pharmaceuticals, seminar discussions also integrate biologics, diagnostics and devices. This course is designed for executives, disciplinary experts who wish to broaden and advance their career, nontechnical professionals, investors and others interested in fully understanding the biopharmaceutical industry.

Class discussions are guided by experts with years of hands-on experience with large and small pharmaceutical, biotechnology and related companies. Seminar topics include industry environment, discovery and pharmacology, chemistry manufacturing and controls (CMC), toxicology, pharmacokinetics, program management, FDA inspections, biologics, assays and devices, clinical trial design and conduct, clinical trial statistics, pharmacogenomics, FDA compliance regulations, patents and intellectual property, and commercial development.

**How You Can Benefit From This Course**

Understand the processes that are vital to successfully bringing a biotechnology product to market. Recognize the critical roles of each company unit, and gain insight into the integrated and multifunctional nature of drug development. Interact with experts and colleagues from a wide range of disciplines in the biopharmaceutical industry. Leave with knowledge of the entire process, enabling you to understand industry terminology and work more effectively in multidisciplinary teams.

**Course Director**

Velimir Kufince, Ph.D., M.B.A., Extension Honored Instructor, has extensive experience in the pharmaceutical, biotechnology, medical instruction and medical diagnostic markets. He is an expert in business development and licensing, global strategic planning and worldwide marketing.

**Guest Speakers**

Barbara H. Bowman, Ph.D., teaches molecular cell biology and general biology at Mills College, and has taught biochemistry and molecular biology at UC Berkeley Extension and UC Berkeley. Previously, she was a postdoctoral fellow and senior scientist at Roche Molecular Systems.

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 focuses on pharmacology, pharmacokinetics and toxicology in support of biotechnology development.

**Sec. 002**

5 meetings

- **Monday, April 7, 12–5:30 pm (lunch is 12–1 pm)**
- **Tuesday–Thursday, April 8–10, 8:30 am–5:30 pm (lunch is 12–1 pm)**
- **Friday, April 11, 8:30 am–4:30 pm (lunch is 12–1 pm)**

San Francisco: Downtown Center • $1,575

Breakfast, lunch and course materials are included in the course fee.
Professional Program in
Project Management in the Life Science Industries

Learn life-science-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 comprises 6 required two-day courses for a total of 6 semester units (90 hours of instruction). Choose 6 of the 7 required courses below.

Required Courses
- Project Management in Preclinical Development BUS ADM X478.5 (offered this term)
- Project Management in Clinical Development BUS ADM X484.2
- Ensuring Successful Commercialization of Life Sciences Products BUS ADM X484.3
- Opportunities and Challenges in Managing Global Projects BUS ADM X484.4 (offered this term)
- Alliance Management in the Life Science Industry BUS ADM X484.5
- Best Practices in Project Management for the Life Science Industries BUS ADM X484.6 (offered this term)
- Project Management for Effective CMC Planning BUS ADM X484.7

Learn More and View the Flyer
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Project Management in
Preclinical Development
BUS ADM X478.5 • 1 semester unit in Business Administration
15 pdu: PMI provider 1172
A requirement in the Professional Program in Project Management in the Life Science Industries
Understanding project management processes and methodology is critical to achieving preclinical project success. Gain a detailed understanding of the preclinical development processes, including transitioning from discovery to the preclinical phase, developing the target profile plan (TPP) and preclinical critical path, forming teams and developing budgets. Examine good laboratory practices (GLP), resource management such as subject-matter experts and outsourcing, and preparing for investigational new drug application (IND) filing.

Prerequisites: One year of experience in drug development and project planning or completion of the following courses: Bioscience Essentials for Industry Professionals: An Intensive Seminar MCELLBI 1001 and The Drug Development Process: An Intensive Seminar PB HLTH 1023

Sec. 002
Instructor to be announced
2 meetings
Friday and Saturday, 8:30 am–5 pm
Jan. 24–25
San Francisco: Downtown Center • $995

Opportunities and Challenges in Managing Global Projects
BUS ADM X484.4 • 1 semester unit in Business Administration
A requirement in the Professional Program in Project Management in the Life Science Industries; an elective in the Professional Program in Life Sciences Business
This two-day intensive course provides life sciences industry professionals with the necessary project management tools and techniques to capitalize on the growing opportunities in managing global projects. Examine new areas of clinical trial opportunity, and prepare for the challenges of conducting trials outside of the U.S. Learn to design a global-investigator and patient-recruitment strategy, implement a quality control system and ensure high-quality data results from global trials. You also research global clinical regulations and learn how to manage resources across borders.

Sec. 002
Julie Bukar, B.S., M.B.A.
2 meetings
Saturdays, 8:30 am–5 pm
March 15 and 22
Belmont: Belmont Center • $995

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Best Practices in Project Management for the Life Science Industries

BUS ADM X484.6 ● 1 semester unit in Business Administration

A requirement in the Professional Program in Project Management in the Life Science Industries

Hone your project management tools and techniques as they specifically apply to biopharmaceuticals, medical devices, blood testing and vaccines. Understand and learn to execute project management best practices for practical and clinical projects in life-cycle assessment and management and in regulatory compliance. You are encouraged to use this course and the expertise of the instructors and of the other students to work on real-world projects.

Prerequisites: One year of experience in drug development and project planning or completion of the following courses: Bioscience Essentials for Industry Professionals, An Intensive Seminar MCELLBI 1001 and The Drug Development Process: An Intensive Seminar PB HLTH 1023

Sec. 002
Elie W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor, and David Mish, M.B.A.
2 meetings
Saturdays, 8:30 am–5 pm
Feb. 8 and 22
San Francisco: Downtown Center ● $995

Certificate Program in Project Management

Acquire the skills you need to complete high-quality projects on task, on time and within budget.

See p. 99 for complete certificate details.

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

Regulatory Sciences

COURSE INFORMATION

PB HLTH X401.6 ● 1 semester unit in Public Health

A requirement in the Professional Program in Quality and Compliance for Biotechnology; an elective in the professional programs in Life Sciences Business and in Regulatory Affairs

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.

Sec. 002
Peter Calcott, B.Sc., D.Phil.
2 meetings
Friday and Saturday, 9 am–5 pm
June 6–7
Berkeley: Golden Bear Center ● $575

Quality and Compliance

Principles of Quality and Compliance

PB HLTH X401.6 ● 1 semester unit in Public Health

A requirement in the Professional Program in Quality and Compliance for Biotechnology; an elective in the professional programs in Life Sciences Business and in Regulatory Affairs

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.

Sec. 02
Peter Calcott, B.Sc., D.Phil.
2 meetings
Friday and Saturday, 9 am–5 pm
June 6–7
Berkeley: Golden Bear Center ● $575

Good Manufacturing Practices (GMP): Quality Assurance (QA) in Practice

PB HLTH X401.4 ● 2 semester units in Public Health

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 plants that make materials for clinical trials and commercial operations. Understand the role of quality assurance in a functional Good Manufacturing Practices (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.

Sec. 003
Peter Calcott, B.Sc., D.Phil.
4 meetings
Fridays and Saturdays, 9 am–5 pm
Feb. 7, 9 and 28, and March 1
Berkeley Campus: 30 Wheeler Hall ● $875

Good Manufacturing Practices (GMP): Quality Control (QC) in Quality and Compliance

PB HLTH X401.7 ● 1 semester unit in Public Health

A requirement in the Professional Program in Quality and Compliance for Biotechnology

Gain an understanding of the quality control function and the difference between quality assurance (QA) and quality control (QC) and the role and function of the QC department. Learn to critically understand what industry regulations require and how to apply them. As a biopharmaceutical and device professional, you learn to apply the current best practices and project management tools and techniques to the pharmaceutical, medical device and biologics industries, with particular attention to chemistry, manufacturing, and controls planning and implementation.

Prerequisite: One year of college-level biology, biochemistry, chemistry or engineering

Sec. 003
Peter Calcott, B.Sc., D.Phil.
2 meetings
Fridays, 9 am–5 pm
April 11 and 18
Berkeley: Golden Bear Center ● $575

CMC Regulatory Compliance for Pharmaceutical Products

PB HLTH X401.1 ● 2 semester units in Public Health

An elective in the professional programs in Quality and Compliance for Biotechnology and in Regulatory Affairs

Get an introduction to pharmaceutical product development and the concomitant chemistry, manufacturing and controls (CMC) requirements by regulatory agencies. As drug development moves from concept to commercialization, the breadth and depth of CMC information required in submissions increases in parallel. It is important to understand the level of CMC compliance expected. You examine the CMC elements of drug substance and drug product—and, in particular, which elements are required and in what detail—at each stage of development. You also survey FDA guidelines and Points to Consider.

Sec. 002
Hossein Khoshkhou, Ph.D.
4 meetings
Fridays and Saturdays, 9 am–5 pm
Feb. 22–March 15
Berkeley: Golden Bear Center ● $875
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); and practical procedural guidelines and ethical considerations covering the manufacture of drugs.

Curriculum Requirements
The curriculum comprises 5 required courses and a minimum of 2 electives for a total of 10 semester units (150 hours of instruction). Because the discipline requires a broad understanding of various aspects of the industry, the electives include courses from related and interfacing disciplines.

Required Courses
• Principles of Quality and Compliance PB HLTH X401.6 (offered this term)
• Good Manufacturing Practices (GMP): Quality Assurance (QA) in Practice PB HLTH X401.4 (offered this term)
• Good Manufacturing Practices (GMP): Quality Control (QC) in Quality and Compliance PB HLTH X401.7 (offered this term)
• Inspections and Audits for Quality and Compliance PB HLTH X401.5
• Validation and Interfacing With Quality Assurance (QA) PB HLTH X401.8

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

Learn More and View the Flyer extension.berkeley.edu/spos/compliance.html.

Principles of Product and Process Development

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 (GXP) 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. Many required courses apply to multiple programs, allowing you to earn credit while you find the curriculum that’s right for you.

Curriculum Requirements
The curriculum comprises 6 required courses and a minimum of 2 electives for a total of 9 semester units (135 hours of instruction).

Required Courses
• Principles of Regulatory Affairs PB HLTH X401.3 (offered this term)
• BLA/INDA/MAA Submissions and Commercialization PB HLTH X402.2 (offered this term)
• Harmonization Across Worldwide Applications PB HLTH X402.1
• IND/CTA Enabling Studies and Agency Interfaces PB HLTH X402.4 (offered this term)
• IND/CTA Preparation and Submission PB HLTH X402.3 (offered this term)
• Post-Approval Activities PB HLTH X403.1 (offered this term)

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

Learn More and View the Flyer extension.berkeley.edu/spos/regulatory.html.

Principles of Regulatory Affairs

PB HLTH X401.3 • 1 semester unit in Public Health

A requirement in the Professional Program in Regulatory Affairs; an elective in the professional programs in Life Sciences Business and in Quality and Compliance for Biotechnology

Get an introduction to the regulatory authorities whose regulations and requirements must be 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.

Sec. 003
Ronald Carlson, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Feb. 22 and March 1
Berkeley: Golden Bear Center • $575
IND/CTA Enabling Studies and Agency Interfaces

PB HLTH 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 investigational new drug/clinical trial application (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

Sec. 001
Donna S. Kato, M.B.A.
4 meetings
Saturdays, 9 am–5 pm
April 12 and 26
Berkeley: Golden Bear Center • $575

Post-Approval Activities

PB HLTH 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.

Sec. 001
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
March 1 and 8
Berkeley: Golden Bear Center • $575

BLA/NDA/MAA Submissions and Commercialization

PB HLTH 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 interact 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.

Sec. 001
Linda Yang, Ph.D.
4 meetings
Fridays and Saturdays, 9 am–5 pm
March 21–22 and April 4–5
Berkeley: Golden Bear Center • $575

IND/CTA Preparation and Submission

PB HLTH 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, including the roles of project management professionals. 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 a trial.

Sec. 001
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Feb. 8 and 22
Berkeley: Golden Bear Center • $575

Mathematics and Statistics

Mathematics Refresher

MATH 1003 • 2.8 ceu
Brush up on essential math skills, including selected topics in algebra, geometry, trigonometry, probability and statistics.

Sec. 003
Dieter Jurkat, M.S., Extension Honored Instructor
4 meetings
Saturday, 9 am–5 pm
March 1, 8 and 15 (also Sunday, March 2, 9 am–5 pm)
San Francisco: Downtown Center • $350

Math for Management

MATH X402 • 2 semester units in Mathematics
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program

Get an introduction to quantitative and statistical techniques needed to address business coursework, and gain a working knowledge of concepts you can apply to other math and statistics courses. Learn basic mathematical principles, and apply them to the study of economics, statistics, probability, finance and decision making. Key topics from probability and descriptive statistics include measures of central tendency, probability distributions, correlation, and regression and statistical hypothesis testing. Topics from finance include mathematical analysis of investments and financial decision making. An emphasis is placed on using mathematics as a means to develop the intuition and understanding necessary to apply concepts to business decisions and other courses.

Sec. 001
Steven Pon, Ph.D.
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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/static/about/jobs.

UC Berkeley Extension is committed to diversity in its staff, faculty and student body and invites all qualified people to apply. AA/EEO
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 MTH XP-S, satisfy the math prerequisite for the Haas School of Business Evening and Weekend M.B.A. Program.

Algebra and Trigonometry
MATH XP-S • 1–2 semester units in Mathematics
Prerequisite: Two years of high school math or equivalent

Precalculus
MATH X32-S • 1–4 semester units in Mathematics
Prerequisite: Three years of high school math with one year of algebra

Analytic Geometry and Calculus
MATH X16A-S • 1–3 semester units in Mathematics
Prerequisite: Analytic Geometry and Calculus MATH X16A-S or MATH X16A or equivalent

Analytic Geometry and Calculus
MATH X16B-S • 1–3 semester units in Mathematics
Prerequisite: Analytic Geometry and Calculus MATH X16A-S or MATH X16A or equivalent

Calculus
MATH 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

Instructor: Flor Feldman, M.Sc., Extension Honored Instructor
14 meetings
Wednesdays, 6:30–10 pm
Jan. 15–March 26 (also Saturdays, Jan. 25, March 1 and March 29, 10 am–1:30 pm; no meeting on March 19)
Berkeley Campus: 9 Evans Hall • $675 per course

For detailed information about the course structure and refund policy, call (510) 642-1061, visit extension.berkeley.edu/sciences or email mathstat@unex.berkeley.edu.

Analytic Geometry and Calculus-A
MATH XB16A • 3 semester units in Mathematics
An elective in the Post-Baccalaureate Health Professions Program

Review the function concept and basic graphing techniques for simple functions in this introductory course in calculus. Study 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.

Sec. 003
Dieter Jurkat, M.S., Extension Honored Instructor
12 meetings
Mondays, 6–10 pm
Jan. 6 –March 17 (also Sundays, Feb. 2 and March 9, 9 am–12 pm and Saturday, Feb. 22, 9 am–12 pm; no meetings on Jan. 20 and Feb. 17)
San Francisco: Downtown Center • $650

Precalculus
MATH X9 • 2 semester units in Mathematics

Gain exposure to concepts in basic and advanced algebra and some trigonometry. Explore topics such as logarithms, solving or graphing linear equations, and factoring a polynomial at a more advanced level than that of a beginning or intermediate algebra class. 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, visit mymathlab.com/system-requirements.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

Sec. 001
Flor Feldman, M.Sc., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $720
Calculus X1A
MATH 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. Note: If you are looking to fill Haas prerequisites, you must be in the online course for three months before you can take the final exam.

Prerequisite: Three-and-a-half years of high school mathematics, including trigonometry and analytic geometry

Sec. 001
Merlin Miller, M.A.
Enroll anytime
Online, proctored final exam • $860

Sec. 002
Steven Pon, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Sec. 003
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Calculus X1B
MATH X1B • 4 semester units in Mathematics
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program

This continuation of Calculus MATH 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 MATH X1A or equivalent

Sec. 001
Merlin Miller, M.A.
Enroll anytime
Online, proctored final exam • $860

Sec. 002
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Sec. 003
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Statistics
Introduction to Statistics
XB2 • XBW2 for online sections
4 semester units in Statistics

An elective in the Advanced Bioscience Program, in the Clinical Laboratory Scientist Preparatory Program 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. 230 for details.

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.

Prerequisite: Two years of high school algebra. A recent course in college algebra is recommended.

Sec. 005
Michael Quigley, Ph.D.
15 meetings
Tuesdays, 6–10 pm
Jan. 14–March 25 (also Sundays, Jan. 26–Feb. 9 and March 2, 9 am–1 pm)
San Francisco: Downtown Center • $720

Sec. 006
Dieter Jurkat, M.S., Extension Honored Instructor
15 meetings
Tuesdays, 6–10 pm
Jan. 7–March 18 (also Sundays, March 2–23, 9 am–12:30 pm)
San Francisco: Downtown Center • $720

Sec. 001
Dieter Jurkat, M.S., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $860

Sec. 002
Guohua Pan, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Sec. 003
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $860
Every day, Sean Haq takes a lesson learned in his database classes and puts it to use. Working in technology software sales at Oracle—focusing on a baker’s dozen of Fortune 500 companies—Haq is confident that he can intelligently speak to his clients about the products he’s selling.

Registered in both the Post-Baccalaureate Certificate in Information Systems and Management and the Certificate Program in Leadership and Management, Haq is just beginning his educational relationship with UC Berkeley Extension. “I have a more personal interest in the leadership and management program while information systems and management is more applicable to my job,” Haq says. “The information systems and management courses were eye-opening because after I sell a product that companies invest a lot of money into, I understand why it’s being used and, most importantly, I understand the struggles my customers experienced previously. This has been the best hands-on training I have received.

“I went to Cal,” Haq continues, noting why Extension is his choice for continuing education. “I knew there were other options, but I didn’t even bother looking at them. Some of my classes are in walking distance from work—what more could you ask for?”

extension.berkeley.edu/technology
UC Berkeley Extension’s programs and courses in technology and information management provide the innovative training you need to thrive in today’s dynamic market. Get the latest approaches in enterprise solutions and leadership, integrated technical and business process management, business analysis, quantitative-based analysis and decision making, business intelligence and information administration, databases and applications development, computer languages, operating systems, electrical engineering and technology fundamentals.
Leadership, Systems and Technology Management

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

FREE INFORMATION SESSION
Certificates and Professional Programs in Technology and Information Management

Sec. 001
Wednesday, Jan. 8, 6–7 pm
Berkeley: Golden Bear Center • FREE

Sec. 002
Wednesday, May 14, 5:30–6:30 pm
Berkeley: Golden Bear Center • FREE

Leadership, Systems and Technology Management

Introduction to Information Systems Analysis and Design
COMPSCI X422 • 3 semester units in Computer Science
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management; an elective in the Professional Program in Data Administration and Management
Study information analysis and logical specification of the system development process in an organizational context. Explore the interactive nature of the analysis and design process.

Sec. 005
Patrick McDermott, B.A., M.S.
6 meetings
Saturdays, 9 am–5 pm
Jan. 4–Feb. 22 (no meetings on Jan. 18 and Feb. 15)
Berkeley: Golden Bear Center • $845

Sec. 004
Mark Angel, B.S., M.B.A., PMP
Jan. 14–April 8
Online • $820

Applied Business Process and System Analysis
COMPSCI X423 • 3 semester units in Computer Science
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management; an elective in the Professional Program in Data Administration and Management
Hone your end-to-end analysis skills in this case study–driven course, starting with classical business process modeling and resulting in an enhanced database-assisted, automated system. Business goals include higher performance, improved quality, ease of use and reduced costs. Topics include needs analysis, system requirements, data modeling, process modeling, feasibility analysis, system proposal, application architecture, user interface design, systems construction, implementation, commissioning and life-cycle support. Hands-on projects include creating your own flow diagrams, developing process models, evaluating alternatives, developing a prioritization schema and performing return on investment analysis.

Sec. 003
Todd Landreneau, Ph.D., CHC, CPHQ
Jan. 14–April 8
Online • $820

Sec. 004
Hari Hirani, B.Tech., M.S.
6 meetings
Saturdays, 9 am–5 pm
March 1–April 5
Berkeley: Golden Bear Center • $795

Leadership, Systems and Technology Management

FREE INFORMATION SESSION
Certificates and Professional Programs in Technology and Information Management

Sec. 001
Wednesday, Jan. 8, 6–7 pm
Berkeley: Golden Bear Center
Sec. 002
Wednesday, May 14, 5:30–6:30 pm
Berkeley: Golden Bear Center

Leadership, Systems and Technology Management

FREE INFORMATION SESSION
Certificates and Professional Programs in Technology and Information Management

UNEX 1052
Find out how UC Berkeley Extension’s courses and programs in technology and information management can provide the innovative training to thrive in the dynamic IT field. Learn more about our certificates and programs in the following pages, or visit extension.berkeley.edu/static/cert/technology.

Sec. 001
1 meeting
Wednesday, 6–7 pm
Jan. 8
Berkeley: Golden Bear Center • FREE

Sec. 002
1 meeting
Wednesday, 5:30–6:30 pm
May 14
Berkeley: Golden Bear Center • FREE

Leading in a Technical Business Environment: When Being a Genius Is Not Enough
COMPSCI X404.2 • 1 semester unit in Computer Science
Understand what leading, leadership and becoming a leader are, and why it matters at work even when you are not a manager. Begin with an introduction to management, then study business leadership in general and how it differs from management. Continue with discussions about the role of leadership in a technical environment. Course topics cover key capacities such as the ability to distinguish leadership from management, change management, emotional and social intelligence, communications, complexity and systems thinking. In this highly interactive course, you create a basic, self-driven leadership development plan. Learn strategies for leadership development through role playing, group simulations and reading assignments.

Sec. 002
Lucie Newcomb, M.A.
2 meetings
Saturdays, 9 am–5:30 pm
Feb. 8 and 22
Belmont: Belmont Center • $445
Post-Baccalaureate Certificate in Information System and Management

Prepare yourself for a new career in the IT field. Our rigorous curriculum combines theory and practice to give you a balanced mix of skills and powerful tools 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 are able to 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 comprises 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:
- Applied Business Process and Systems Analysis COMPSCI X423 (offered this term)
- Concepts of Relational Database Management Systems COMPSCI X408 (offered this term)
- Fundamentals of Data Communications and Networking COMPSCI X433 (offered this term)
- Introduction to Information Systems Analysis and Design COMPSCI X422 (offered this term)
- Introduction to Relational Database Management Systems COMPSCI X409.1 (offered this term)
- Managing the Software Development Life Cycle EL ENG X458.4
- Software Project Management BUS ADM X433 (offered this term)
- Software Requirements Analysis BUS ADM X438.1 (offered this term)
- UNIX/Linux System Administration Programming: Shell, C and Perl COMPSCI X426.1B (offered this term)
- UNIX/Linux System Fundamentals COMPSCI X426.1A (offered this term)
- Using the UNIX Operating System COMPSCI X415 (offered this term)

Electives
For a list of electives available this term, 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

Get the Knowledge You Need
- Develop a systems management perspective
- Understand data theory, software principles and networking technology
- Enhance your practical skills

Find the Flexibility You Want
- Optimize the program to meet your needs
- Study online or in the classroom
Software Project Management
BUS ADM X434 • 2 semester units in Business Administration
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management; an elective in the Certificate Program in Project 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.

Prerequisites: B.A. or B.S., or consent of the instructor
Sec. 002
Alka Jarvis, M.B.A.
6 meetings
 Saturdays, 9 am–4 pm
Jan. 4–Feb. 22 (no meetings on Jan. 18 and Feb. 15)
Belmont: Belmont Center • $645

Software Requirements Analysis
BUS ADM X438.1 • 1 semester unit in Business Administration
A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management
Requirements analysis is a defined step in the software development life-cycle model. Having software requirements clearly defined in the beginning saves time, money and frustration in later phases. Learn how to determine and define levels of requirements, common rules and desirable characteristics of requirements, risks associated with requirements, requirement analysis methods and sources, requirements road map, validation and traceability of requirements, and requirement change management.

Sec. 001
Alka Jarvis, M.B.A.
2 meetings
 Saturdays, 9 am–5 pm
March 1 and 8
Belmont: Belmont Center • $425

Elicitation, Requirements Management and Communication
BUS ADM X448.2 • 2 semester units in Business Administration
Learn how to manage conflicts, issues and changes to ensure that stakeholders agree on the solution scope.

For course schedule, see p. 60.

SAS, SPSS, Quantitative Analysis and Analytics

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

Business Intelligence and SAS Analytics
For software-requirement information for SAS courses, contact the department at (510) 642-4151.

Introduction to the SAS System
STAT 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 grounded in the fundamentals of the SAS system programming language and procedures.

Sec. 003
Jianmin Liu, Ph.D.
10 meetings
Tuesdays, 6–9 pm
Jan. 28–April 1
San Francisco: Downtown Center • $945

SAS Graphing and Output Delivery System (ODS)
STAT X405.7 • 2 semester units in Statistics
A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software
SAS/GRAPH is an 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.

Sec. 001
Jianmin Liu, Ph.D.
10 meetings
Thursdays, 6–9 pm
April 3–June 5
San Francisco: Downtown Center • $945

Data Analysis Using the SAS System
STAT 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.

Sec. 001
Jianmin Liu, Ph.D.
10 meetings
Tuesdays, 6–9 pm
April 8–June 10
San Francisco: Downtown Center • $945

SAS Techniques for Risk Management
STAT 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 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.

Sec. 001
Jianmin Liu, Ph.D.
10 meetings
Thursdays, 6–9 pm
April 3–June 5
San Francisco: Downtown Center • $945

FOR COURSE AND SCHEDULE INFORMATION VISIT extension.berkeley.edu/catalog
Quantitative Analysis

Quantitative Analysis: Data Mining Using SQL

COMPSCI X407.1 • 1 semester unit in Computer Science

A requirement in the professional programs in Data Administration and Management and in Quantitative Analysis

Learn how to analyze and mine data with the Structured Query Language (SQL). Understand SQL fundamentals, then advance into the uses of SQL data analysis and data mining with real applications. You use Microsoft Excel to further analyze, manipulate and present your data exploration and data-mining findings in tabular and graphical formats. This course is ideal if you want to analyze data with SQL queries and learn statistical methods to test the results.

Sec. 006
Can Gencer, B.S., M.S.
3 meetings
Fridays, 3–6:30 pm
Jan. 10 and 17 (also Saturday, Jan. 11, 8:30 am–5 pm)
Berkeley: Golden Bear Center • $445

Sec. 007
Can Gencer, B.S., M.S.
3 meetings
Fridays, 3–6:30 pm
Feb. 21 and 28 (also Saturday, Feb. 22, 8:30 am–5 pm)
Berkeley: Golden Bear Center • $445

Sec. 008
Can Gencer, B.S., M.S.
3 meetings
Fridays, 3–6:30 pm
March 21 and April 4 (also Saturday, March 22, 8:30 am–5 pm)
Berkeley: Golden Bear Center • $445

Sec. 009
Can Gencer, B.S., M.S.
3 meetings
Fridays, 3–6:30 pm
May 2 and 9 (also Saturday, May 3, 8:30 am–5 pm)
Berkeley: Golden Bear Center • $445

Professional Program in Quantitative Analysis

With the Professional Program in Quantitative Analysis, you acquire the skills to effectively combine applications in mathematics, statistics and numerical computing methods to design, develop and deploy valuable solutions in today’s competitive global market. In addition to learning how to build robust quant-knowledge foundations, explore ways to effectively address difficult modeling and analysis problems to reach “correct” real-world solutions based on complex models with database-driven back ends and to devise mission-critical quality solutions relative to your company’s business case.

Curriculum Requirements
The curriculum comprises 4–6 required courses for a total of 7 semester units (105 hours of instruction).

Required Courses
Choose a minimum of 7 semester units from this list:

• Financial Quantitative Analysis and Modeling Using Excel COMPSCI X407.5
• Introduction to Statistical Analysis With SPSS STAT X400
• Introduction to MATLAB and SCILAB EL ENG X446.7
• MATLAB and SCILAB for Economists, Scientists and Engineers EL ENG X446.8
• Quantitative Analysis: Data Mining Using SQL COMPSCI X407.1 (offered this term)
• Quantitative Analysis: ERwin Data Modeling Essentials COMPSCI X407.2
• Quantitative Analysis: Toad for Data Analysts COMPSCI X407.3
• Quantitative Analysis: Using SAP BusinessObjects COMPSCI X407.4 (offered this term)
• Any one course from the Certificate Program in Business Analysis from the Professional Program in Business Process Management; from the Professional Series in Virtual and Cloud Computing; or any SQL, SAS programming or database technology course.

Learn More and View the Flyer
extension.berkeley.edu/spos/quantitative.html (510) 642-4151
course@unex.berkeley.edu

Business 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, which 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 comprises 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 STAT X405 (offered this term)
• Advanced Programming Using the SAS System STAT X405.5
• Data Analysis Using the SAS System STAT X446 (offered this term)
• Data Mining Using SAS/Enterprise Miner STAT X405.6
• Database Marketing and Data-Driven Customer Relationship Management (CRM) BUS ADMX481.9
• SAS Graphing and Output Delivery System (ODS) STAT X405.7 (offered this term)
• SAS Techniques for Risk Management STAT X402 (offered this term)
• Visual Data Discovery Using SAS Enterprise Code STAT X403

Learn More
extension.berkeley.edu/spos/sas.html (510) 642-4151
course@unex.berkeley.edu
Quantitative Analysis: Using SAP BusinessObjects
COMPSCI X407.4 2 semester units in Computer Science

A requirement in the Professional Program in Quantitative Analysis

Learn how to develop professional business intelligence (BI) reports using the SAP BusinessObjects XI Web Intelligence report development tool. Begin with a brief review and understanding of SAP BusinessObjects XI BI software components. Learn and practice the essentials of the SAP BusinessObjects Edge BI report development process using WebI. (WebI is a BO XI BI report development tool that gives business users an easy-to-use, interactive and flexible user interface for building and analyzing reports on corporate data using a Web browser.) Explore practical issues and solution scenarios that enable the successful design of Web Intelligence reports.

Sec. 004
Can Gencer, B.S., M.S.
6 meetings
Fridays, 3–6:30 pm
Jan. 31 and Feb. 7 (also Saturdays, Feb. 1 and 8, 8:30 am–5 pm; and Thursdays, Feb. 6 and 13, 6–10 pm)
Berkeley: Golden Bear Center • $625

Sec. 005
Can Gencer, B.S., M.S.
6 meetings
Thursdays, 6:30–10 pm
April 10 and 17 (also Fridays, April 11 and 18, 1:30–5 pm; and Saturdays, April 12 and 19, 8:30 am–5 pm)
Berkeley: Golden Bear Center • $625

Data Administration

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

Introduction to NoSQL
COMPSCI X409.4 1 semester unit in Computer Science

NoSQL databases represent a recent evolution in enterprise application architecture, a demand dictated by companies dealing with unprece-dented data and operation volumes under tight latency constraints. Gain a clear understanding of NoSQL database concepts, technologies, landscape and market trends by examining industry challenges and solution use cases of NoSQL. Analyzing high-volume real-time data, such as website click streams, can provide significant business advantages by harnessing unstructured and semi-structured data sources to create more business value. Course topics include understanding NoSQL concepts and evolution, characteristics and significance of NoSQL databases, NoSQL data formats, key and value pairs, basic schema in NoSQL, table structure and data types. You are expected to actively contribute to group discussions.

Sec. 002
Alakh Verma, M.S.
4 meetings
Mondays and Wednesdays, 6–9:45 pm
Feb. 5–19 (no meeting on Feb. 17)
Belmont: Belmont Center • $445

Introduction to Big Data
COMPSCI X409.2 1 semester unit in Computer Science

Research areas of data management (unstructured, semistructured and structured); data science; and warehouse and predictive analytics using technologies such as Hadoop, NoSQL, Hive and Hbase for data acquisition, cleansing, processing, visualization, analytics and reporting. Gain a clear understanding of big data concepts, technologies, and landscape and market trends. Industry challenges and solution use cases offer you deeper insights into this innovative field. You are expected to actively participate in in-class group discussions.

Sec. 002
Alakh Verma, M.S.
4 meetings
Mondays and Wednesdays, 6–9:45 pm
Jan. 6–15
Belmont: Belmont Center • $445

Introduction to Hadoop
COMPSCI X409.1 1 semester unit in Computer Science

Gain a clear understanding of Apache Hadoop concepts, technologies, landscape and market trends. Explore how Hadoop allows you to organize and process large data while keeping the data on the original data storage cluster. Learn how to process large datasets in parallel with the use of low-level commodity machines. This course is ideal for managers, analysts, architects and developers.

Sec. 002
Alakh Verma, M.S.
4 meetings
Mondays and Wednesdays, 6–9:45 pm
Jan. 22–Feb. 3
Belmont: Belmont Center • $445

Introduction to Relational Database Management Systems
COMPSCI X409.3 1 semester unit in Computer Science

Gain an introduction 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 DBMS. Gain confidence in using DBMS and understanding data structures.

Sec. 003
Andrew Oppel, B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 7–March 11
Berkeley: Golden Bear Center • $795

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.
Concepts of Relational Database Management Systems

COMPSCI X408 • 3 semester units in Computer Science

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management; an elective in the Professional Program in Data Administration and Management

Study techniques for creating and using database applications. Learn requirements analysis and specification; logical database design, normalization; database implementation; recovery, concurrency, integrity and security concerns; and database use. You focus on the relational database model and the SQL language. Learn the creative art and science of database design rather than training for the tactical oversight role of an operational database administrator. Access to a computer system with a relational database management system (DBMS) installed or on which you can install a relational DBMS and create tables is highly recommended. Such functionality can prove useful for written assignments that include SQL problems.

A programming course in any language or equivalent experience is recommended.

Sec. 002
Patrick McDermott, B.A., M.S.
15 meetings
Wednesdays, 6:30–9:30 pm
Jan. 8–April 16
Berkeley; Golden Bear Center • $845

Introduction to MySQL and PHP

EL ENG X495.1 • 2 semester units in Electrical Engineering

A requirement in the Professional Program in Data Administration

In this practical introductory course, discover why the combination of MySQL’s fast database speed and the ease of use of PHP’s server-side programming tools make MySQL a powerful tool in today’s applications. Learn how to deploy PHP server-side form-processing connectivity with MySQL to generate HTML-based webpages; create a MySQL database; set up tables and user permissions; and recognize MySQL types, operators and syntax. Code examples are given for both MySQL and PHP. On completion of this course, you should be able to construct data-driven websites using MySQL and PHP.

Sec. 002
Hans Yip, M.S.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–March 20
Belmont: Belmont Center • $595

Data Modeling and Database Design

EL ENG X402.5 • 2 semester units in Electrical Engineering

A requirement in the Professional Program in Data Administration and 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 transactional (OLTP) and analytical (OLAP) databases, including data warehouses and data marts. Get an introduction to data-modeling concepts and 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.

Sec. 002
Andrew Oppel, B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 18–May 20
Berkeley; Golden Bear Center • $595

Business Intelligence With SQL Server

EL ENG X404.8 • 2 semester units in Electrical Engineering

A requirement in the Professional Program in Data Administration and Management; an elective in the Post-Baccalaureate Certificate in Information Systems and Management

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.

Sec. 003
Erick Ahrens, B.S., M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
April 2–June 4
San Francisco: Downtown Center • $645

Professional Program in Data Administration and Management

Build a strong foundation in contemporary databases. Enhance your traditional Structured Query Language (SQL) relational-database and information management knowledge. Gain practical information-processing skills needed in information technology, finance and marketing departments, as well as back-end operations in a variety of corporate settings. With the Professional Program in Data Administration and Management, you gain a comprehensive and diversified understanding of database principles and tools in today’s data-driven society.

Curriculum Requirements

The curriculum comprises 4–5 required courses for a total of 8 semester units (120 hours of instruction).

Required Courses

Choose a minimum of 8 semester units from this list:

• Managing Data(bases) Using SQL EL ENG X401.9
• Data Modeling and Database Design EL ENG X402.5 (offered this term)
• Building Database Systems EL ENG X478
• Designing, Building and Using Databases EL ENG X405.4 (offered this term)
• Developing Database Applications EL ENG X405.5 (offered this term)
• Introduction to MySQL and PHP EL ENG X495.1 (offered this term)
• PostgreSQL Fundamentals EL ENG X496.1
• Business Intelligence With SQL Server EL ENG X404.8 (offered this term)
• Quantitative Analysis: Data Mining Using SQL COMPSCI X407.1 (offered this term)
• Mining Business Intelligence With Machine Learning EL ENG X414.7

Electives

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

Learn More
extension.berkeley.edu/spos/data_administration.html
(510) 642-4151
course@unex.berkeley.edu
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 comprises 3 required courses for a total of 6 semester units (90 hours of instruction).

Required Courses
- Designing, Building and Using Databases EL ENG X405.4 (offered this term)
- Developing Database Applications EL ENG X405.5 (offered this term)
- Database Automation Using VBA EL ENG X405.6 (offered this term)

Learn More
extension.berkeley.edu/spos/access.html
(S10) 642-4151
course@unex.berkeley.edu

Procedural Database Programming (T-SQL and PL/SQL)
EL ENG X496 • 2 semester units in Electrical Engineering
Learn to use Microsoft Transact-SQL and Oracle PL/SQL extensions to maximize the power of industry-standard SQL. While declarative SQL yields access to data, procedural SQL empowers new capability to programmatically manipulate data and code complex business logic at the database level. You use graphical tools to write stored procedures, functions and triggers to manage data and enforce input integrity. The skills you learn enable you to efficiently model, organize and manage the code-development process to ensure smooth implementation and future maintenance.

Sec. 001
Michael C. Kremer, M.S., Ph.D.,
Extension Honored Instructor
10 meetings
Thursdays, 6–9 pm
March 13–May 15
San Francisco: Downtown Center • $695

Building Applications Using C# and .NET Framework
EL ENG X428.6 • 2 semester units in Electrical Engineering
Learn to develop information system applications using C#, Microsoft .NET Framework and Visual C# Express Edition (part of Microsoft Visual Studio).
For course schedule, see p. 180.

Microsoft Access Series
Designing, Building and Using Databases
EL ENG X405.4 • 2 semester units in Electrical Engineering
A requirement in the Microsoft Access Series and in the Professional Program in Data Administration and Management
Get an introduction to fundamental relational database management system (RDBMS) concepts and data normalization principles, and learn to create simple tables, queries, forms and reports. 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 (EL ENG X405.4, EL ENG X405.5 and EL ENG X405.6) and get a $200 discount on your final course.

Sec. 002
Michael C. Kremer, M.S., Ph.D.,
Extension Honored Instructor
5 meetings
Saturdays, 8:30 am–3:30 pm
Jan. 11–Feb. 22 (no meetings on Jan. 18 and Feb. 15)
San Francisco: Downtown Center • $695

Developing Database Applications
EL ENG X405.5 • 2 semester units in Electrical Engineering
A requirement in the Microsoft Access Series and in the Professional Program in Data Administration and Management
Learn data import and export, advanced table properties, advanced queries and basic SQL forms and reports, macros for automating database tasks and how to build 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 (EL ENG X405.4, EL ENG X405.5 and EL ENG X405.6) and get a $200 discount on your final course.

Sec. 001
Michael C. Kremer, M.S., Ph.D.,
Extension Honored Instructor
6 meetings
Saturdays, 8:30 am–3:30 pm
March 1–April 5
San Francisco: Downtown Center • $695

ENROLL EARLY
UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.
Database Automation Using VBA
EL ENG X405.6 • 2 semester units in Electrical Engineering

A requirement in the Microsoft Access Series; an elective in the Post-Baccalaureate Certificate in Information Systems and Management and in the Professional Program in Data Administration and Management

Get an introduction to 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 (EL ENG X405.4, EL ENG X405.5 and EL ENG X405.6) and get a $200 discount on your final course.

Sec. 002
Michael C. Kremer, M.S., Ph.D.,
Extension Honored Instructor
6 meetings
Saturdays, 8:30 am–3:30 pm
April 12–May 17
San Francisco: Downtown Center • $695

Open Source and Operating Systems

COURSE INFORMATION

(510) 642-4151
course@unix.berkeley.edu
extension.berkeley.edu/technology

UNIX/Linux System Administration

Using the UNIX Operating System

COMPSCI X415 • 3 semester units in Computer Science

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.

Sec. 001
James Connor, B.S., M.B.A.
Enroll anytime
Online • $815

HANDS-ON UNIX/Linux System Fundamentals

COMPSCI X426.1A • 2 semester units in Computer Science

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.

Sec. 002
Marcelo J. Carvalho, M.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 18–May 20
Berkeley: Golden Bear Center • $895

UNIX/Linux System Administration Programming: Shell, C and Perl

EL ENG X426.18 • 2 semester units in Electrical Engineering

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 is issued to you by the second class meeting.

Sec. 002
Marcelo J. Carvalho, M.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 18–May 20
Berkeley: Golden Bear Center • $895

UNIX/Linux System Administration I: Essentials

EL ENG X422.8 • 2 semester units in Electrical Engineering

Cover the bases and mechanisms of UNIX system administration. Starting with a review of the key concepts, system administration duties, system organization, system configuration and system startup, you then move on to studying the 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 variations among operating systems.

Prerequisites: A general understanding of UNIX system externals and command interfaces, access to a UNIX or Linux system

Sec. 003
Lalitha Krishnamurthy, M.S.
5 meetings
Saturdays, 9 am–4 pm
Feb. 22–March 22
San Francisco: Downtown Center • $795

FIVE WAYS TO ENROLL

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2. Phone: (510) 642-4111
3. Mail: Department B
1995 University Ave., Suite 110
Berkeley, CA 94704-7000
4. Purchase Order: (510) 642-3910
5. In Person:
At Golden Bear Center, 1995 University Ave., Berkeley, Calif.
UNIX/Linux System Administration II: Networking
EL ENG X420.8 • 2 semester units in Electrical Engineering
This course follows UNIX/Linux System Administration I: Essentials EL ENG X422.8. Get an introduction to the TCP/IP Protocol suite, and examine its different layers and protocols. Gain experience with hands-on UNIX/Linux network configuration and troubleshooting tools. Study network programming concepts, and reinforce this new knowledge through programming exercises. Finally, review new and emerging standards, as well as wide-area networking concepts.
Prerequisites: UNIX/Linux System Fundamentals COMPSCI X426.1A; UNIX/Linux System Administration Programming: Shell, C and Perl EL ENG X426.1B; and UNIX/Linux System Administration I: Essentials EL ENG X422.8
Sec. 003
Ronald Petty, M.B.A., M.S.
5 meetings
Saturdays, 9 am–4 pm
March 29–April 26
San Francisco: Downtown Center • $845
UNIX/Linux System Administration III: Services
EL ENG X444.2 • 2 semester units in Electrical Engineering
Learn to master system administration skills related to network services by installing and configuring these services. Topics and exercises include installing and configuring directory services, sharing files using the network file system, managing the IP address space using domain name system, learning how to use basic tools to do kernel performance and tuning, and configuring windowing systems.
Prerequisites: UNIX/Linux System Administration I: Essentials EL ENG X422.8 and UNIX/Linux System Administration II: Networking EL ENG X420.8
Sec. 003
Ronald Petty, M.B.A., M.S.
5 meetings
Saturdays, 9 am–4 pm
May 3–June 7 (no meeting on May 31)
San Francisco: Downtown Center • $845
UNIX/Linux System Security
EL ENG X409.9 • 2 semester units in Electrical Engineering
Get 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. Learn the use of encryption for securing communications and ensuring authenticity. 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.
Sec. 002
Kari Ujanen, M.B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
March 25–May 27
San Francisco: Downtown Center • $695
UNIX/Linux Web and Database Servers
EL ENG X461.2 • 2 semester units in Electrical Engineering
Understand and manage Web/database services (Apache2, PHP, PERL, MySQL) on UNIX/Linux-based systems (UNIX-Solaris, AIX, HP-UX, BSD and others; Linux; or Mac OS X). Learn how to install and configure these services and grasp the interaction of these services and system security. Understand how to perform the typical duties of the system administrator when managing a system providing these services.
Sec. 002
Marcelo J. Carvalho, M.A.
10 meetings
Thursdays, 6:30–9:30 pm
April 3–June 5
Berkeley: Golden Bear Center • $695
Building Your Private Cloud With Linux
EL ENG X422.7 • 2 semester units in Electrical Engineering
A requirement in the Professional Series in Virtual and Cloud Computing
Discover the practical side of cloud computing using the Linux operating system. Acquire hands-on experience to install, configure, test and troubleshoot cloud system platforms, as well as the 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.
Sec. 002
Marcelo J. Carvalho, M.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 23–March 27
Berkeley: Golden Bear Center • $695

Location Guide  For detailed information, see p. 236.

Belmont: Belmont Center 1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus See campus map, p. 237. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center 1995 University Ave., Berkeley
San Francisco: Downtown Center 425 Market St., 8th Floor (enter on Fremont Street), San Francisco
San Francisco: Art and Design Center 95 Third St., San Francisco
Online Internet and email access required. Schedules displaying no dates mean you may enroll anytime and take six months to complete (unless otherwise noted on course description).
Other Classes that are not located at Extension centers or on the UC Berkeley campus have the classroom address provided with the course information.
Programming Languages and Object-Oriented Programming

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

First Course in Android Application Programming
EL ENG X441.9 • 2 semester units in Electrical Engineering
Learn to build Android applications using GUIs and custom views, integrate content provider connections, understand bound and unbound services, schedule notification alarms and manage Internet resources. Java programming and software features of the Android platform architecture and Software Development Kit (SDK).

Sec. 002
Lalitha Krishnamurthy, M.S.
5 meetings
Saturdays, 9 am–4 pm
May 3–June 7 (no meeting on May 31)
San Francisco: Downtown Center • $645

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• Increase efficiency
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NEW THIS TERM
Introduction to C++ and Object-Oriented Programming
COMPSCI X459.4 • 3 semester units in Computer Science
Learn to develop object-oriented C++ applications such as commercial software applications. Object-oriented programs are suitable for large team projects, and they are extensible, reusable, portable, and easy to maintain and enhance as compared to traditional nonobject-oriented approaches. Moreover, C++ code runs quickly, and compilers are widely available, with rich feature sets that support object-oriented programming. Specifically, you examine essential programming concepts, basic techniques and object-oriented concepts, and gain a working knowledge of the C++ language. You also explore data encapsulation, inheritance (derivation), polymorphism and function overloading. You then develop numerous object-oriented C++ programs. Study the latest C++ language and the updated standard libraries. Finally, you are shown guidelines for developing portable C++ applications for UNIX, Linux and Windows platforms.
You must bring a Windows, Mac or Linux laptop to class for in-class exercises and to install a C++ compiler.

Sec. 001
Pratap Chilakanti, M.S.
15 meetings
Thursdays, 6:30–9:30 pm
Feb. 27–June 5
Berkeley: Golden Bear Center • $795

Developing Applications for the iOS (iPhone)
EL ENG X422.9 • 2 semester units in Electrical Engineering
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 for hands-on experience.

Sec. 003
David Rowland, M.S.
10 meetings
Thursdays, 6:30–9:30 pm
April 3–June 5
Berkeley: Golden Bear Center • $625

C Language Programming I
COMPSCI X444 • 2 semester units in Computer Science
Get a solid introduction to all of the fundamental aspects of C, including elementary data types; arithmetic, logical and bitwise operators; control-flow statements; functions; structures; pointers; program scope rules; good program design practices; and C debugging techniques. Course curriculum focuses on ANSI-standard C, but you also discuss earlier versions of C. No computing facilities are provided; you are required to have access to a C compiler and hard-copy output device for programming assignments.

Sec. 002
Pratap Chilakanti, M.S.
10 meetings
Mondays, 6:30–9:30 pm
Jan. 6–March 24 (no meetings on Jan. 20 and Feb. 17)
Berkeley: Golden Bear Center • $595

Introduction to C Language Programming
COMPSCI X24 • 2 semester units in Computer Science
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 is helpful.

Sec. 001
Robert Adams, M.S.
Enroll anytime
Online • $595

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PHP Programming for the Web
COMPSCI X400  •  1 semester unit in Computer Science
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.

Prerequisite: You should have a hosted website with 10 MB or disk space, MySQL and PHP. In general, most Web hosts offer workable sites. Free PHP Web-hosting options are also available.

Sec. 001
Robert Adams, M.S.
Enroll anytime
Online  •  $595

Java
First Course in Java
EL ENG X429.9  •  2 semester units in Electrical Engineering
An elective in the Post-Baccalaureate Certificate in Information Systems and Management

Java—with its platform independence—is heavily used in Web applications and middleware that work on Windows, Macintosh, UNIX and other platforms. Examine fundamental programming concepts, and get an introduction to object-oriented programming. Upon successful completion of the course, you are able to write simple applications and are prepared for courses that assume some familiarity with Java.

You do not need any background in programming to succeed in this course. You are welcome to bring your own laptop. The classroom does not provide computers but does have free wireless Internet access. Download Java SE 7, and see configuration instructions.

Sec. 003
Thomas Albert, Ph.D.
10 meetings: Tuesdays, 6:30–9:30 pm
Jan. 7–March 11
San Francisco: Downtown Center  •  $695

Java: Discovering Its Power
EL ENG X436.2  •  2 semester units in Electrical Engineering
An elective 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. 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 EL ENG X429.9, C++ Programming I COMPSCI X412.1 or equivalent, and some experience with object-oriented design and techniques.

Sec. 003
Lalitha Krishnamurthy, M.S.
5 meetings
Saturdays, 9 am–4 pm
March 29–April 26
San Francisco: Downtown Center  •  $645

Sec. 002
Carl Limisco, B.A., Certified Java Programmer
Enroll anytime
Online  •  $715

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 comprises 3–4 required courses for a total of 7 semester units (105 hours of instruction).

Required Courses
Choose 3–4 courses from this list:

- Agile Development, Virtualization and Cloud Deployment EL ENG X422.3
- Building Your Private Cloud With Linux EL ENG X422.7 (offered this term)
- Business and Technical Models of Cloud Computing COMPSCI X422.2 (offered this term)
- Cloud Computing: Discovering Its Power EL ENG X422.4
- Cloud Computing: Systems Engineering and Analysis EL ENG X422.5 (offered this term)
- Multivendor Virtualization EL ENG X422.1
- Optimizing Cloud Computing for Profitability EL ENG X415.1
- Private Clouds: Building and Managing With Linux EL ENG X422.7
- Scalable Storage in the Cloud Computing Era EL ENG X459.7
- Virtualization Theory for CPU, Memory and Storage EL ENG X422.0

Learn More
extension.berkeley.edu/spos/cloud.html
(510) 642-4151
course@unex.berkeley.edu
Virtual and Cloud Computing

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

Cloud Computing: Systems Engineering and Analysis
EL ENG X422.5 • 2 semester units in Electrical Engineering
A requirement in the Professional Series in Virtual and Cloud Computing
Cloud computing promises cheaper, faster and better computing. Can your organization take advantage of this evolutionary change? Learn about the history of cloud computing, identify and profile the early adopter, compare various deployment options, and explain the cloud ecosystem and the drivers compelling current adopters. Identify key criteria of your organization’s systems that determine cloud suitability, and apply that knowledge to transition to the best-suited deployment architecture. The course is targeted at IT management, system architects, operations managers and application developers.

Sec. 001
Hari Hirani, B.Tech., M.S.
3 meetings
Saturdays, 9 am–5 pm
March 17–May 5
Berkeley: Golden Bear Center • $625

Sec. 002
Kwang-Pill Sung, M.S.
3 meetings
Mondays, 6:15–10 pm
Jan. 6–March 19 (no meetings on Jan. 20 and Feb. 17)
Belmont: Belmont Center • $595

Business and Technical Models of Cloud Computing
COMPSCI X422.2 • 3 semester units in Computer Science
A requirement in the Professional Series in Virtual and Cloud Computing
Review the benefits and rapid growth of Internet clouds, and then learn how to build competitive business models based on robust and economically successful cloud computing concepts. Understand how cloud computing technologies deliver economies of scale using virtualization, including how they incorporate and expand upon the proven business elements of infrastructure as a service, platform as a service and software as a service. Learn the technical intricacies of building a scalable, low-cost cloud environment. As a group, you and other course participants build a cloud environment, and then explore various scenarios through which you can build an economically compelling business using cloud computing.

Sec. 003
Alakh Verma, M.S.
12 meetings
Mondays and Wednesdays, 6–9:45 pm
Feb. 24–April 2
Belmont: Belmont Center • $795

Electrical Engineering

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

CCNA Preparation: Network Security Theory
EL ENG X411.7 • 2 semester units in Electrical Engineering
Gain a solid foundation in modern network security theory and prepare to take the Cisco Certified Network Associate (CCNA) Security Exam (640-553 IINS) in this 30-hour course. You learn about core security technologies, as well as how to develop security policies and mitigate risks. IT organizations that employ CCNA Security–certified staff seek applicants with the knowledge you gain in this course, as well as staff who can develop a security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats.

Sec. 001
Ching-Cheng Lee, Ph.D.
Online
Enroll anytime
Ching-Cheng Lee, Ph.D.
Online
Enroll anytime

CCNA Preparation: Routing and Switching Theory
EL ENG X411.8 • 2 semester units in Electrical Engineering
Get a solid foundation in modern routing and switching theory and prepare to take the Cisco Certified Network Associate (CCNA) certification composite exam (640-802 CCNA) in this 30-hour course. Through lectures and hands-on router simulations, you learn how to use router simulators (downloaded or Internet-based). You also learn about Internetworking, Internet Protocols, IP subnetting and VLSM, IDS, IP routing, EIGRP, OSPF, BGP, Layer 2 switching, VLANs, managing a Cisco Internetwork, managing traffic with access lists and wide area network (WAN) protocols, among other topics.

Sec. 001
Kwang-Pill Sung, M.S.
8 meetings
Mondays, 6:15–10 pm
March 17–May 5
Belmont: Belmont Center • $595

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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. Instruction emphasizes a practical perspective involving physical concepts, operation principles, second-order effects, modeling and simulation. By choosing UC Berkeley Extension, you benefit from an association with a university known worldwide for engineering excellence. An advisory board comprising 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 academically strong and professionally relevant. English and Mandarin sound tracks accompany the English course slides. If you speak Mandarin, you need some proficiency in English.

### Curriculum Requirements

The curriculum comprises 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 EL ENG X138 (offered this term)
- Advanced Analog Microelectronics EL ENG X139 (offered this term)
- Fundamentals of Analog Integrated Circuit Design Techniques EL ENG X140 (offered this term)
- Advanced Design Techniques for Analog Integrated Circuits EL ENG X141 (offered this term)

#### Electives

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

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course@unex.berkeley.edu
Integrated Circuit (IC) Design and Engineering

COURSE INFORMATION
(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/technology

Semiconductor Devices for Integrated Circuit Design
EL ENG 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.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Advanced Analog Microelectronics
EL ENG 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.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Fundamentals of Analog Integrated Circuit Design Techniques
EL ENG 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. Topics cover basic concepts, practical techniques and design skills used for analog ICs. Lectures include: basic op-amp circuits and applications, theory, specifications, and analysis; linear CMOS amplifiers, operational amplifiers, feedback, frequency compensation, multistage amplifiers, circuit models and stability in the era of analog IC design with multi-standard 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 for high-performance CMOS comparators for flash analog-to-digital converter (ADC) applications.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Introduction to Microelectronic Theory and Applications
EL ENG X30 • 1 semester unit in Electrical Engineering
An elective in the Certificate Program in Integrated Circuit Design and Techniques

Take an application-oriented approach to 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, precision rectifiers, voltage regulators and biasing techniques of amplifiers.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Fundamentals of Integrated Circuit Design
EL ENG 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.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265
**Introduction to Physics of Semiconductor Devices**

**EL ENG 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.

**Sec. 001**

Vincent Chang, Ph.D.

Enroll anytime

Online  •  $265

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**Fundamentals of Analog Microelectronic Techniques**

**EL ENG 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 performing 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 focuses on the analysis-by-inspection method. Topics 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.

**Sec. 001**

Vincent Chang, Ph.D.

Enroll anytime

Online  •  $265

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**Digital Integrated Circuit Design**

**EL ENG 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 circuit emphasis (SPICE) verification and design skills from complementary metal-oxide semiconductor (CMOS), emitter-coupled logic (ECL) and BiCMOS logic to memory design. 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.

**Sec. 001**

Vincent Chang, Ph.D.

Enroll anytime

Online  •  $525

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**Effective SPICE Circuit Simulation Techniques**

**EL ENG 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 2CMOS latches.

**Sec. 001**

Vincent Chang, Ph.D.

Enroll anytime

Online  •  $265

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**Fundamentals of Modern Data Converter Design**

**EL ENG 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. You gain a solid foundation and the skills to diagnose and tackle real-world issues. Topics include data converter fundamentals, characterizations and performance limitations, Nyquist-rate digital-to-analog (D/A) and analog-to-digital (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.

**Sec. 001**

Vincent Chang, Ph.D.

Enroll anytime

Online  •  $265

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**Design Techniques of High-Performance Data Converters**

**EL ENG 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 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 0.8Gs/s analog-to-digital converters (ADC) for 10Gb/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.

**Sec. 001**

Vincent Chang, Ph.D.

Enroll anytime

Online  •  $265
Jena Binderup is indulging her love of writing by making it her priority with the Post-Baccalaureate Certificate Program in Writing.

“The program is more challenging than I expected, and that is a positive thing for me,” she says. “Laurie Ann Doyle was my first instructor in the program. She pushed me, but she also encouraged me.” Now, Binderup participates in student readings and enjoys sharing her pieces with the community at large.

Halfway through the certificate, Binderup explores her passion without restricting her writing focus on any one genre, such as fiction, nonfiction or poetry. “The certificate gives me the opportunity to explore without the pressure of being in a graduate program,” Binderup says. “If I decide to go to graduate school, it really does serve as a bridge. My dream is to write fiction and find a way to apply that to the real world and support myself.”
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 penning 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.

NEW COURSE
Reading the Memoir, p. 196
Grammar, Mechanics and Usage for Editors

ENGLISH 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. 014
Anne Hill, B.S., J.D., M.A.
Jan. 14–April 8
Online • $645

Sec. 015
Amanda Kaufmann, M.A.
Jan. 14–April 8
Online • $645

Sec. 017
Barbara Magalnick, M.S.
Jan. 21–April 15
Online • $645

Sec. 018
Diane Martin, M.A.
Jan. 21–April 15
Online • $645

Sec. 019
Anne M. Ahlman, M.P.T.
Jan. 21–April 15
Online • $645

Sec. 012
Victoria Casana, M.A.
12 meetings
Wednesdays, 6:30–9 pm
Jan. 22–April 9
Berkeley: Golden Bear Center • $595
Editorial Workshop I:
Introduction to Copyediting
JOURN 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; and copyedit and insert figures, tables and artwork. Enrollment is limited.
Prerequisite: Grammar, Mechanics and Usage for Editors ENGLISH X445
Sec. 001
Leda Ciraolo, Ph.D.  
Jan. 14–April 8
Online • $645
Sec. 012
Beth Burke, B.S., M.A.  
Jan. 14–April 8
Online • $645
Sec. 014
Amanda Kaufmann, M.A.  
Jan. 21–April 15
Online • $645
Sec. 008
David Kudler, M.F.A.  
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 28–April 1
Belmont: Belmont Center • $595
Sec. 009
Lori Stephens, B.A.  
10 meetings
Saturdays, 10 am–1 pm
March 15–May 17
San Francisco: Downtown Center • $595

Editorial Workshop II:
Intermediate Copyediting
JOURN X415 • 2 semester units in Journalism
A requirement in the Professional Sequence in Editing
Study the 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. Receive practice working with codes and type specifications, photos and artwork, tables, and references and footnotes.
Prerequisite: Editorial Workshop I: Introduction to Copyediting JOURN X405
Sec. 004
Lisa Carlson, B.A.  
Jan. 14–April 8
Online • $645
Sec. 005
Leda Ciraolo, Ph.D.  
Jan. 21–April 15
Online • $645
Sec. 006
Lisa Carlson, B.A.  
10 meetings
Tuesdays, 6:30–9:30 pm
March 25–May 27
Berkeley: Golden Bear Center • $595
Writing and Editing Internship Program
JOURN X484 • 2 semester units in Journalism
Gain real-world writing experience and career exposure through an internship with a Bay Area news organization, ad agency, PR firm or publishing house. Use your Extension-enhanced writing skills to complete various projects with the guidance of your host organization and our program director. Your role should equal or exceed 90 hours of commitment within a six-month period.
You are responsible for finding a relevant internship. Interested applicants should contact the department for the mandatory approval packet, which must be submitted prior to meeting with the program director for internship approval.
Prerequisites: Registration in the Professional Sequence in Editing, in the Specialized Program in Professional Writing or in the Post-Baccalaureate Certificate Program in Writing.
Sec. 001
Scheduled by appointment. Call (510) 642-6362 to verify enrollment.
Various locations • $395

Professional Sequence in Editing
Focusing on proficiency in copyediting, line editing and developmental editing, the Professional Sequence in Editing is the ideal training for those with a passion for fine-tuning the written word. The curriculum builds from grammar and usage to editing for various goals and audiences and culminates in the art of substantive editing to refine an author’s style. Courses—taught by working professionals with years of experience—are offered in both online and classroom formats. Whether you want to begin a rewarding editing career, rise to a management position in publishing or apply editing expertise in a related profession, the program can help turn your editorial sensibilities into marketable skills.
Curriculum Requirements
The curriculum comprises 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 ENGLISH X445 (offered this term)
• Editorial Workshop I: Introduction to Copyediting JOURN X405 (offered this term)
• Editorial Workshop II: Intermediate Copyediting JOURN X415 (offered this term)
• Advanced Editorial Workshop: Substantive Editing JOURN X425 (offered this term)
A course of equivalent length and unit value from UC Berkeley Extension’s Professional Sequence in Technical Communication may be substituted for Advanced Editorial Workshop: Substantive Editing JOURN X425.
Learn More and View the Flyer
extension.berkeley.edu/spos/edit.html  
(510) 642-6362  
letters@unex.berkeley.edu
Professional Sequence in Technical Communication

The rapidly expanding software, hardware, consumer electronics, biopharmaceutical and financial services industries have increased the demand for technical communicators and editors in the Bay Area and beyond. Technical communicators play a vital role in bridging the gap between subject-matter experts (such as scientists and engineers) and those who must understand how to implement their ideas. The Professional Sequence in Technical Communication offers the skills to translate complex concepts and gain a competitive edge in the field.

Curriculum Requirements

The curriculum comprises 3 required courses and 1–2 electives for a total of 8 semester units (120 hours of instruction).

Required Courses

• Technical Communication I JOURN X465 (offered this term)
• Technical Communication II JOURN X466 (offered this term)
• Technical Editing JOURN X437

*Technical Writing JOURN X412, offered this term, may be substituted for Technical Communication I JOURN X465.

Electives

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

Learn More

extension.berkeley.edu/spos/techcom.html
(510) 642-4151
course@unex.berkeley.edu

Advanced Editorial Workshop: Substantive Editing

JOURN 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.

Prerequisite: Editorial Workshop I: Introduction to Copyediting JOURN X405

Sec. 006
Anna Lustig, M.A.
Jan. 14–April 8
Online • $645

Sec. 007
Cathleen Small, B.A., M.A.
Jan. 21–April 15
Online • $645

Sec. 005
Gail Shea, B.A.
10 meetings
Saturdays, 10 am–1 pm
March 1–May 3

Berkeley Campus: 103 Wheeler Hall • $595

Indexing: Theory and Application

JOURN X477 • 3 semester units in Journalism

Recipient of the 2005 Distance Learning “Community of Practice” Course Award from the University Professional and Continuing Education Association (UPCEA)

A good index greatly enhances a book’s usability and value, 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 formats, guidelines and term-selection approaches of embedded and Web indexing using three major indexing software programs to complete several assignments.

Prerequisites: Strong language, reading, computer and Internet skills; a PC running 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/writing.

Fundamentals of Freelancing

ENGLISH 1004 • 0.7 ceu

Examine the changing media landscape, and develop strategies to both survive and thrive in it.

For course schedule, see p. 197.

Technical Communication I

JOURN X465 • 2 semester units in Journalism

A requirement in the Professional Sequence in Technical Communication; an elective in the Post-Baccalaureate Certificate in Information Systems and Management

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.

Sec. 002
Linda Urban, B.A., Extension Honored Instructor
11 meetings
Tuesdays, 6:30–9:30 pm
Jan. 14–March 18 (also Saturday, March 8, 9 am–12 pm)
Berkeley: Golden Bear Center • $695

ENROLL EARLY

UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.

Technical Communication

COURSE INFORMATION

(510) 642-4151
course@unex.berkeley.edu
extension.berkeley.edu/writing

ONLINE COURSE INFORMATION

(510) 643-4957
extension.berkeley.edu/online
Technical Communication II
JOURN X465 • 2 semester units in Journalism
A requirement in the Professional Sequence in Technical Communication
Build on the skills you developed in Technical Communication I JOURN X465, and hone your ability to define a document’s audience and purpose 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 print and online presentation. Review technical communication tools and technologies, as well as current Web content and formatting languages.
Prerequisite: Technical Communication I JOURN X465, Technical Writing JOURN X412 or equivalent
Sec. 002
John Tabor, B.A.
Enroll anytime
Online • $550
Sec. 004
Louise Galindo, B.A.
10 meetings
Thursdays, 6:30–9:30 pm
March 20–May 22
Berkeley: Golden Bear Center • $595

Technical Writing
JOURN X412 • 3 semester units in English
May be substituted for Technical Communication I JOURN 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, desktop publishing and the publication-to-print process.
Sec. 001
John Tabor, B.A.
Enroll anytime
Online • $770

Writing
COURSE INFORMATION
(510) 642-6362
letters@unex.berkeley.edu
extension.berkeley.edu/writing

ONLINE COURSE INFORMATION
(510) 643-4957
extension.berkeley.edu/online

OPEN HOUSE
Post-Baccalaureate Certificate Program in Writing
UNEX 1095
Find out how UC Berkeley Extension’s program for aspiring writers can help formalize your training and prepare you for graduate-level study. Join us for an evening of community and inspiration as the instructors in the Writing certificate read from their work and discuss their fall courses. Learn more about the certificate on p. 193 or visit extension.berkeley.edu/cert/writing.html.
Sec. 002
1 meeting
Thursday, 6:30–8 pm
Jan. 16
Berkeley: Golden Bear Center • FREE

ONLINE INFORMATION SESSION
Writing and Editing
UNEX 1095
Find out how UC Berkeley Extension’s programs for aspiring writers and editors can help formalize your training, prepare you for graduate-level study or enhance your career. Visit the program pages online to register.
Thursday, Jan. 9, 12–1 pm
Online • FREE

Creative Writing
Exploring Your Creative Writing Potential
ENGLISH X438 • 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. Exercises and weekly writing assignments help you discover your talents in a variety of forms: brief fictional scenes, short stories, poetry and journalistic writing. The supportive atmosphere helps you see how others respond to your writing.
Sec. 001
David Rompf, J.D.
Jan. 14–April 8
Online • $550

The Craft of Writing
ENGLISH 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 you 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. 006
David Rompf, J.D.
Jan. 14–April 8
Online • $575
Sec. 007
Erich Miller, M.F.A.
Jan. 21–April 15
Online • $575
Sec. 005
Lindsey Crittenden, M.A.
10 meetings
Wednesdays, 6–9 pm
Jan. 29–April 9 (no meeting on March 5)
San Francisco: Art and Design Center • $550

Location Guide  For detailed information, see p. 236.
Belmont: Belmont Center
1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus
See campus map, p. 237. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center
1995 University Ave., Berkeley
San Francisco: Downtown Center
425 Market St., 8th Floor (enter on Fremont Street), San Francisco
San Francisco: Art and Design Center
95 Third St., San Francisco
Online
Internet and email access required. Schedules displaying no dates mean you may enroll anytime and take six months to complete (unless otherwise noted on course description).
Other
Classes that are not located at Extension centers or on the UC Berkeley campus have the classroom address provided with the course information.
The Craft of Reading  
ENGLISH X7 • 2 semester units in English  
An elective in the Post-Baccalaureate Certificate Program in Writing  
To write well, you must read well. By learning to read with the eyes of a writer, you can develop an understanding of what makes great literature work. Class readings include novel excerpts, short stories and memoirs, from classics to contemporary treasures. Weekly writing assignments emphasize analytical responses to the works read while providing the chance to practice writing strategies revealed through close reading. Appropriate for all levels of writers, this course teaches you to read widely, respond deeply and turn any piece of writing into your own best teacher.  
Sec. 001  
Monica Wesolowska, B.A.  
10 meetings  
Wednesdays, 6:30–9:30 pm  
Jan. 29–April 16 (no meetings on Feb. 26 and April 2)  
Berkeley Campus: 203 Wheeler Hall • $550

Introduction to Writing Fiction  
ENGLISH 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. 003  
Daniel Coshnear, M.F.A.  
10 meetings  
Wednesdays, 6:30–9:30 pm  
Jan. 15–March 19  
San Francisco: Art and Design Center • $550

Sec. 004  
Marc Schiffman, M.F.A.  
Jan. 21–April 15  
Online • $550

Intermediate Fiction Writing  
ENGLISH 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 ENGLISH 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 plot, 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 18.  
Sec. 001  
Laurie Ann Doyle, M.F.A.  
10 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 21–April 1 (no meeting on Feb. 18)  
Berkeley: Golden Bear Center • $550

Advanced Fiction Writing  
ENGLISH 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 during 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.  
Sec. 002  
Thaisa W. Frank  
10 meetings  
Thursdays, 7–10 pm  
March 20–May 22  
Berkeley: Golden Bear Center • $550

Developing the Novel I  
ENGLISH 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.  
Sec. 005  
Mary Ann Koory, Ph.D., Extension Honored Instructor  
10 meetings  
Tuesdays, 6:30–9:30 pm  
Jan. 14–March 18  
San Francisco: Art and Design Center • $550
For aspiring writers serious about the craft, the Post-Baccalaureate Certificate Program in Writing is ideal. Formalize your training and prepare for graduate study in writing with this certificate developed with input from several Bay Area M.F.A. programs and approved by the University of California, Berkeley, English Department. Develop a regular writing practice, build your writing portfolio, and gain a credential that shows your commitment. Whether you’re in online or classroom courses, you join a community of writers who share your dedication. Be inspired as you read exemplary works of literature. Learn from accomplished instructors who provide structure, support and thoughtful feedback on your work. Whether your goal is learning what it takes to be published or achieving a coveted place in an M.F.A. program in writing, this flexible curriculum can meet your needs and schedule.

**Curriculum Requirements**
The curriculum comprises 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
  ENGLISH X421 (offered this term)
- Writing Skills Workshop
  ENGLISH X13 (offered this term)

**Literature and Writing Workshop Electives**
For a list of electives available this term, visit extension.berkeley.edu/cert/writing.html.

**Michele Melonas** is a graduate of 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 asks. “I found myself saying, ‘Writer.’” Now, that desire has become reality for Melonas, who has published a cookbook titled *Girls Night In: Recipes for a Fun Night With Friends*. “A funny thing happened when I came to Berkeley to take classes,” she says. “I wanted to learn how to write, but I never imagined writing a cookbook, though I love to cook. You never know in what form things will take shape!”
Poets Studied and in Conversation

ENGLISH X110.2 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Study, emulate and engage in discussion with 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 class of poetics and process. You also write your own poems from exercises inspired by the five poets’ work, and a part of each class is devoted to a workshop of students’ writing. You pay particular attention to exploring new writing ideas and approaches arising from the work you study.

Instructor
Laura Lynn Walker, M.F.A., is the author of Follow Haswed (Apogee, 2012), bird book (Shearsman Books, 2011), nimmtown/an atlas (UC Press, 2008) and swarm lure (Battery Press, 2004). A UC Berkeley Extension instructor since 2004, she also teaches in the M.F.A. in Writing Program at the University of San Francisco. She is the recipient of a Fund for Poetry grant.

Guest Poets
Martin Camps has published four books of poetry in Spanish: Desierto Sol (Ichicuct, 2003), La invención del mundo (Veracruz, 2008), La extinción de los atardeceres (Ichicuct, 2009) and Poemas de un Zombi (Samsara, 2012). He is the recipient of two poetry prizes from the Institute of Culture of Mexico. He is currently an associate professor of Spanish at the University of the Pacific in Stockton, Calif.

Susan Kolodny’s first poetry collection, After the Firestorm, was published in 2011 by Mayapple Press. She is a psychoanalyst practicing in Oakland and also the author of The Captive Muse: On Creativity and Its Inhibition (PsychoSocial Press, 2000). She is member and faculty of the San Francisco Center for Psychoanalysis.

Joseph Lease’s books of poetry include Testify (Coffee House Press, 2011) and Broken World (Coffee House Press, 2007). He has received the Academy of American Poets Prize and the Henry Evans Fellowship in Poetry, among other awards. He is a professor of writing and literature at California College of the Arts and a member of the advisory board of the Princeton Encyclopedia of Poetry and Poetics.

John Sakkis is the author The Islands (forthcoming from Nightboat Books) and Rude Girl (BlazeVOX Books, 2009). He has translated three books by Athenian poet Demosthenes Agrafiotis: “now, 1/3” & thepoem (BlazeVOX Books, 2012), Chinese Notebook (Ugly Duckling Presse, 2010) and Mariner (The Post-Apollo Press, 2010), Sakkis was awarded the 2011 Northern California Books Award for Poetry in Translation. He lives in Oakland, Calif.

giovanni singleton’s debut collection Ascension (Counterpath Press, 2011) was awarded the 81st California Book Award Gold Medal for poetry. She is the founding editor of nocturnes (review of the literary arts, a journal committed to experimental work of the African diaspora and other contested spaces. For the past 15 years, singleton has taught poetry at Saint Mary’s College, Naropa University, and at museums and schools throughout the Bay Area.

Sec. 001
Laura Walker, M.F.A.
10 meetings
Thursdays, 7–10 pm
Feb. 6–April 17 (no meeting on Feb. 27)
Berkeley: Golden Bear Center • $550

Novel Writing Workshop

ENGLISH X405 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

In this workshop’s supportive atmosphere of give and take, writers who have a novel in progress can participate in instructor-led group critiques and discuss story line, pacing, mood, pivotal episodes, character, dialogue, viewpoint and description. This course is designed for the advanced writer. Enrollment is limited to 16.

Previous writing class or workshop experience is required.

Sec. 002
Donna Levin, J.D.
10 meetings
Mondays, 6:30–9:30 pm
March 17–May 19
San Francisco: Art and Design Center • $595

Your Final Draft: A Fresh Look at the Work You Know by Heart

UNEX 1170
An elective in the Post-Baccalaureate Certificate Program in Writing

This brief intensive helps you identify your best work. Confer privately with the instructor, and meet in class with other serious writers. hone the skills you need to critique your own work effectively and to revise it. Lectures, handouts and published models contribute to your understanding of what a final draft needs. Develop practical strategies to help you prepare a project for publication or submission to an M.F.A. program.

Sec. 002
Deborah Lichtman, Ph.D.
7 meetings
Wednesdays, 6:30–8:30 pm
Jan. 22–March 5
Berkeley Campus: 103 Wheeler Hall • $595

Screenwriting: The Art of Visual Storytelling

ENGLISH X470 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Writing for visual media requires learning to conceptualize and shape a story that can be told with images. In this 18-week workshop, learn the fundamentals of narrative screenwriting (creating compelling characters and building plot, story structure, dialogue and theme) while developing a short or full-length film script. Through a combination of workshop, film analysis, writing and cinematic exercises, you gain screenwriting skills and storytelling techniques useful to all types of visual media.

Sec. 002
Megan Siler, M.F.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–March 25
Berkeley Campus: 103 Wheeler Hall • $550
Nonfiction

Writing Skills Workshop

ENGLISH 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 course, prepare to 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 for those wishing to hone their skills for any writing need.

Sec. 007
Margo Perin, M.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Jan. 15–March 19
San Francisco: Downtown Center • $550

Sec. 010
Marc Schiffman, M.F.A.
Jan. 21–April 15
Online • $575

Sec. 011
Katherine Sharpe, M.A.
Jan. 21–April 15
Online • $575

Sec. 008
Katherine Sharpe, M.A.
10 meetings
Wednesdays, 6:30–9:30 pm
March 26–May 28
Berkeley: Golden Bear Center • $195

Brushing Up on English Grammar

UNEX 1011 • 1.6 ceu

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, Microsoft Word and access to email

Sec. 002
Stuart Froman, M.A.
5 meetings
Saturdays, 9 am–1 pm
Jan. 25–March 1 (no meeting on Feb. 15)
San Francisco: Downtown Center • $395

Grammar Intensive: How Syntax Can Make Your Prose Sing

ENGLISH 1013 • 0.7 ceu

Syntax—that collection of rules dictating how to string words together into sentences—can be a minefield for any writer. This one-day workshop, developed specifically for writers and editors, gives you the basics of grammar and helps you straighten out your sentences. You receive particular instruction on parts of speech—nouns, verbs and adjectives—as well as the basic components of a sentence.

Sec. 001
Constance Hale, M.A.
1 meeting
Saturday, 10 am–5 pm
March 29
Berkeley: Golden Bear Center • $195

Creative Nonfiction Workshop

ENGLISH X482 • 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. 004
Katherine Sharpe, M.A.
Jan. 14–April 8
Online • $550

Sec. 003
Stephen Albert, M.F.A.
10 meetings
Thursdays, 6:30–9:30 pm
Jan. 16–March 20
San Francisco: Art and Design Center • $550

Writing Skills Workshop ENGLISH X13

Writing for Social Media: Prose That Works for Web 2.0 ENGLISH X468

Fundamentals of Freelancing ENGLISH 1004

Introduction to Public Relations Workshop JOURN X481

Effective Writing in the Workplace ENGLISH X456

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 critical 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 comprises 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 ENGLISH X456 (offered this term)
• From Pitch to Print: A Five-Week Introduction to Public Relations Workshop JOURN X481 (offered this term)
• Fundamentals of Freelancing ENGLISH 1004 (offered this term)
• Writing for Social Media: Prose That Works for Web 2.0 ENGLISH X468 (offered this term)
• Writing Skills Workshop ENGLISH X13 (offered this term)

Electives

For a list of electives available this term, 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

VISIT OUR WEBSITE

Up-to-date course and schedule information with easy enrollment

extension.berkeley.edu

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

WRITING, EDITING AND TECHNICAL COMMUNICATION
Fact or Fiction: Reading and Writing the Personal Essay

ENGLISH 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 David 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.

Sec. 001
Audrey Ferber, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
Feb. 10–April 21 (no meeting on Feb. 17)
San Francisco: Art and Design Center • $595

NEW THIS TERM
Reading the Memoir

ENGLISH X483 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Immerse yourself in the literature of memoir. Examine a century’s worth of autobiography and personal essays, tracing how the memoir form has evolved over time. Discuss themes of memory, family, trauma, creativity and love. Readings are drawn from authors such as Virginia Woolf, Zora Neale Hurston, Vladimir Nabakov, Richard Rodriguez, Nick Flynn and Jeannette Winterson, among others.

Sec. 001
Catherine Hollis, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Jan. 21–March 25
Berkeley: Golden Bear Center • $245

Journalism Workshop

JOURN X473 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing

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.

Sec. 002
Katya Cengel, B.A.
10 meetings
Mondays, 6:30–9:30 pm
Feb. 10–April 21 (no meeting on Feb. 17)
Berkeley Campus: 20 Wheeler Hall • $550

WRITING, EDITING AND TECHNICAL COMMUNICATION

Writing and Editing Internship Program

JOURN X484 • 2 semester units in Journalism
Gain real-world writing experience and career exposure through an internship with a Bay Area news organization, ad agency, PR firm or publishing house. Use your Extension-enhanced writing skills to complete various projects with the guidance of your host organization and your program director. Your role should equal or exceed 90 hours of commitment within a six-month period.

See p. 189 for course details.

Writing the Feature Story

JOURN X419 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing

Develop an understanding of how feature stories blend journalism and art. Explore the dual nature of features based on facts but with the voice of a novel. Learn how to grab the attention of editors and audiences and create successful feature stories for magazines, newspapers and online publications.

Sec. 004
Thomas Abate, M.A.
10 meetings
Thursdays, 7–10 pm
March 27–May 29
San Francisco: Downtown Center • $550

Sec. 004
Margaret Steen, M.J., Extension Honored Instructor,
Enroll anytime
Online • $550

Cross-Cultural Reporting

JOURN X483 • 1 semester unit in Journalism
Whether you want to work as a stringer in Russia or write about Iraqi refugees in the Bay Area, start to build skills in cross-cultural communication to enhance your journalistic opportunities. Foreign correspondent jobs may be dying out, but there are still plenty of ways to cover the world’s distinct populations with or without a passport. Learn how to identify and approach stories within distinct ethnic communities, as well as report on them from abroad. Find out how to work with a translator and gain the trust of subjects who may not speak your language or understand the context of the questions you are asking. Discover what it takes to work for an English-language newspaper, be a reporter abroad or gain the trust of a skeptical Somali community in the United States.

Sec. 001
Katya Cengel, B.A.
5 meetings
Saturdays, 10 am–1 pm
March 22–April 19
Berkeley Campus: 2 Evans Hall • $395

Writing for Social Media: Prose That Works for Web 2.0

ENGLISH X488 • 1 semester unit in English
A requirement in the Specialized Program in Professional Writing

Learn to write effectively for social media, specifically blogs, Twitter and Facebook. Establish a coherent writing process; learn editing techniques; and examine the interplay among context, content and style. Classes focus primarily on workshop critiques, peer editing and weekly composition of posts and tweets. Note that this course focuses primarily on content writing and editing, not Web technology.

Sec. 003
Timothy Peters, B.S., M.A.
5 meetings
Wednesdays, 6:30–9:30 pm
Jan. 22–Feb. 19
Berkeley Campus: 24 Wheeler Hall • $395

From Pitch to Print: A Five-Week Introduction to Public Relations Workshop

JOURN 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 optimum 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, giving you the experience to think and write as both a publicist and a journalist.

Sec. 002
Nancy Davis Kho, M.A.
5 meetings
Tuesdays, 6:30–9:30 pm
April 28–May 27
Berkeley Campus: 103 Wheeler Hall • $395

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.
Effective Writing in the Workplace
ENGLISH 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 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.* Class meets every other week.

Sec. 003
Margaret Steen, M.J., Extension Honored Instructor,
5 meetings
Tuesdays, 10 am–1 pm
Jan. 14–Feb. 11
San Francisco: Art and Design Center • $395

Sec. 002
Margaret Steen, M.J., Extension Honored Instructor,
5 meetings
Tuesdays, 6–9 pm
April 15–May 13
Belmont: Belmont Center • $395

Fundamentals of Freelancing
ENGLISH 1004 • 0.7 ceu
A requirement 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 your 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 are rigorous but fun.

Sec. 002
Constance Hale, M.A.
1 meeting
Saturday, 10 am–6 pm
April 5
San Francisco: Downtown Center • $195

Writing and Selling Your Personal Essays
UNEX 1172
An artful personal essay showcases your wit, wisdom and window on the world. This is especially useful in today’s wide variety of publishing venues, specifically print, blogs and other online media. The adaptable essay format can also help kick-start your writing career. This informative one-day workshop transforms your essays from ideas to potential publication. The instructor draws on more than 20 years of magazine essay-writing experience to share tips on style, structure, scene setting and narrative arc, as well as how to target what different publications want.

An editor and widely published writer share their expertise on breaking into a variety of markets, then provide feedback in class on short essays (300–500 words maximum) that you are invited to submit ahead of time. Email your submissions to letters@unex.berkeley.edu, no later than midnight, one week before the workshop date. Essays brought on the day of the workshop may be discussed in class if time permits.

Please contact the department at (510) 642-6362 with any questions about essay submission.

Sec. 001
Elizabeth Fishe, Extension Honored Instructor
1 meeting
Saturday, 10 am–5 pm
Feb. 8
Berkeley: Golden Bear Center • $195

Science Writing
ENGLISH X463.5 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing

Get a practical introduction to the diversity of science-writing opportunities, including those for news organizations, magazines, institutions and websites. Learn about finding story ideas and reliable sources, conducting interviews, matching writing style to the target audience and choosing the best structure for the given field. Study the craft of making complex, scientific concepts understandable and exciting to a general audience. In addition to many in-class exercises, you write a weekly science blog and an in-depth science article. A background in science is not required, but an interest in scientific topics is encouraged.

Sec. 001
Jennifer Huber, Ph.D.
10 meetings
Thursdays, 6:30–9:30 pm
March 13–May 15
Berkeley: Golden Bear Center • $550

Expository Writing: Crafting the Graduate Admission Essay
ENGLISH X454 • 1 semester unit in English

The personal statement essay is your chance to show an admissions committee your unique personality. Learn to write personal statements tailored toward graduate program applications. Develop efficient techniques for completing secondary essays. Learn to leverage your personal traits and achievements through written and oral communication. This course is most appropriate for those entering the health professions.

Sec. 001
Jessica Pishko, M.F.A., J.D.
6 meetings
Sundays, 10 am–1 pm
March 16–April 20
San Francisco: Art and Design Center • $395

Introductory Composition
ENGLISH 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.

Sec. 001
Susie Meserve, B.A., M.F.A.
Enroll anytime
Online, proctored final exam • $715

Composition and Literature
ENGLISH 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 ENGLISH X2A is not a prerequisite for this online course.

Sec. 001
Susie Meserve, B.A., M.F.A.
Enroll anytime
Online, proctored final exam • $715

Grant Writing for Professionals
BUS ADM 1024 • 1.3 ceu
Gain the skills necessary to tackle the grant-writing process.

See p. 63 for course schedule.
Finding success as a researcher at biotech company Vaxart, Jennifer Brandl is taking on increased job duties, including clinical operations for phase 1 clinical trials. Seeking training to support these new duties—after an email about UC Berkeley Extension courses and a discussion with her boss—Brandl is immersed in the Certificate Program in Clinical Research Conduct and Management.

Because Brandl works full time while pursuing the certificate, she is completing the certificate online. With her busy schedule, Brandl’s key to success is not only in making time for her studies but also in applying the course material on the job. “One of my classes was about regulatory documents, and at the same time, my boss had requested I go to one of our clinical trial sites and gather regulatory documents for the sponsor and site files,” she says. “Part of my homework was to create a regulatory document checklist. So for the class, I made the checklist; for work, I brought the checklist and did what I needed to do to gather the documents. I’m learning and implementing as the course goes, and that’s how you really retain what you’ve learned.”

In addition, Brandl appreciates her online instructors’ responsiveness to questions and clarifications. “I love that they post open discussions for everybody to talk about a topic,” she says. “Even though I’m looking at a computer screen, it feels more interactive than if I were in a lecture hall with 300 students and just taking notes.”
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.

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Online • $715
Enroll anytime
L. Thomas Pollard, Ph.D.
Sec. 001
viewing films as part of this course.
writing. You are responsible for renting and
performance, directing, narrative style and screen-
the history and uses of sound, editing, perfor-
handled of space and time in motion pictures,
crafted motion picture. Topics include the
Survey a range of classic and modern works,
Art of Film
Online
Enroll anytime
Dominic Angerame, M.F.A.
Sec. 001
Francis
Man With
Greed
Birth of a Nation
Un Chien Andalou
Discover little-
and
A Movie Camera, Notes on the Port of St.

The Art of Film
FILM X20 • 3 semester units in Film Studies
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,
the history and uses of sound, editing, perfor-
ance, directing, narrative style and screen-
writing. You are responsible for renting and
viewing films as part of this course.

Sec. 001
L. Thomas Pollard, Ph.D.
Enroll anytime
Online • $715

Interior Design and Interior Architecture
Fundamentals of Interior Design
ARCH X474 • 1 semester unit in Architecture
An elective in the Certificate Program in Interior Design and Interior Architecture
Explore the world of residential and commer-
cial 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 over-
view of future coursework.

Sec. 002
Catherine Chance, M.A.
Jan. 21–April 15
Online • $595

Principles of Sustainability
ARCH X411.6 • 1 semester unit in Architecture
An elective in the Certificate Program in Interior Design and Interior Architecture
Explore various pathways to global environmental sustainability, examining commerce, culture,
design, policy and individual actions. Focus
on key concepts such as ecological footprint measurement, life-cycle analysis, cradle-to-
cradle design, green energy, biomimicry and zero waste. Then, learn to apply these sustainable
principles to your personal lives and careers.

Sec. 001
Jessica Kraft, LEED AP, M.A., M.Res.
March 11–April 22
Online • $550

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
General Psychology

Abnormal Psychology
PSYCH X146 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit
A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions
Learn about the dynamics and prevention of abnormal behavior, including neuroses, psychoses, character disorders, psychosomatic reactions, schizophrenia and other abnormal personality patterns.

Sec. 001
Darrel Richards, Ph.D.
Online, proctored final exam • $730

Research Methods in Psychology
PSYCH X106 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit
A requirement in the Post-Baccalaureate Program for Counseling and Psychology Professions
Gain an understanding of the scientific methods behind psychological research. 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.
Prerequisite: A lower-division general psychology course
Sec. 003
Bernadette M. Guimberteau, Ph.D.
Jan. 21–April 15
Online • $730

Adolescent Psychology
PSYCH X139.1 • 3 semester units in Psychology
Explore current theories about adolescents’ physical, mental, emotional, social and personality characteristics. 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.

Sec. 001
Darrel Dean Richards, Ph.D.
Enroll anytime
Online, proctored final exam • $730

Psychology of Personality
PSYCH X176 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit
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. 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, psycho-dynamic, phenomenological, behavioral and learning, and social-cognitive theories.

Sec. 004
Christina Chin-Newman, Ph.D.
Jan. 21–April 15
Online • $730

Introduction to Developmental Psychology
PSYCH X140 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit
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.

Sec. 001
Richard Sprott, Ph.D.
Enroll anytime
Online • $730

Psychology of Communication
PSYCH X156.1 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN
An elective in the Post-Baccalaureate Program for Counseling and Psychology Professions
Recipient of the Mentorious Award for the Best College-Level Distance Course from the University Professional and Continuing Education Association (UPCEA)
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: A lower-division general psychology course
Sec. 001
Michael Swett, Ph.D.
Enroll anytime
Online, proctored final exam • $730

General Psychology
PSYCH XBW1 • 3 semester units in Psychology
4.5 ceu • 45 hours CE credit: BRN
Important: Special academic policies apply to XBW courses. See p. 230 for details.
Get 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.

Sec. 001
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $730

Public Health and Health Management

General Nutrition
NUSCTX 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 enables 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.

Sec. 001
Alanna Nimau Vigil, M.S., RD
Enroll anytime
Online • $770
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 comprises 8 required courses for a total of 24 semester units (at least 360 hours of instruction).

Required Courses
- Intermediate Accounting I BUS ADM X421.1 (offered this term)
- Intermediate Accounting II BUS ADM X421.2 (offered this term)
- Advanced Accounting BUS ADM X421.3 (offered this term)
- Accounting Ethics BUS ADM X420.6
- Auditing and Attestation BUS ADM X422.2
- Cost Accounting BUS ADM X419 (offered this term)
- Financial Statement Analysis BUS ADM X419.2 (offered this term)
- Taxation for Corporations and Other Flow-Through Entities BUS ADM X419.5 (offered this term)

Learn More and View the Brochure
extension.berkeley.edu/cert/account.html
(510) 642-4231
business@unex.berkeley.edu
See p. 55 for complete certificate details.

Introduction to Financial Accounting
UGBA XB102A • UGBA XBW102A
for online sections
3 semester units in Business Administration

We recommend you take this course and Introduction to Managerial Accounting BUS ADM X812B before you register for the Certificate Program in Accounting.

Important: Special academic policies apply to XBW courses. See p. 230 for details.

Learn financial accounting fundamentals and how to identify, measure and report on the financial effects of economic events on enterprises. Topics include accrual accounting concepts; 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.

Sec. 001
Andrew Barnett, Ph.D., CPA,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900

Sec. 002
Joseph McPeak, CPA, M.B.A., M.S.,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900

Accounting Ethics
BUS ADM X420.6 • 3 semester units in Business Administration

A requirement in the Certificate Program in Accounting

Gain an understanding of ethical standards for accountants and auditors at all levels. Learn the nature and scope of ethics standards and the need for them in business and society. Review professional codes of conduct for principal governing bodies and discuss their application in real-world situations. Through case studies bolster your understanding of the importance and the applicability of current ethical rules for accountants and auditors.

Sec. 001
Harry Lorsbach, CIA, CPA, M.B.A.
Jan. 21–April 15
Online: proctored final exam • $900

Intermediate Accounting I
BUS ADM X421.1 • 3 semester units in Business Administration

A requirement in the certificate programs in Accounting and in Financial Planning and Analysis, Accounting Concentration

Build on the financial accounting concepts and principles covered in Introduction to Financial Accounting BUS ADM X812B. 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 pay 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 BUS ADM X812A or equivalent

Sec. 006
Anna Lee, M.B.A.
Feb. 4–April 29
Online • $900

Sec. 007
Nancy Batch, CPA, M.B.A., M.S.
Feb. 4–April 29
Online • $900

Sec. 012
Marc Hyman, M.B.A.
Feb. 4–April 29
Online • $900
Intermediate Accounting II
BUS ADM X421.2 • 3 semester units in Business Administration
A requirement in the certificate programs in Accounting and in Financial Planning and Analysis, Accounting Concentration

Expand upon the financial accounting concepts and principles covered in Intermediate Accounting I BUS ADM 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. Additional topics cover earnings per share, the statement of cash flows, accounting changes and error corrections.

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

Sec. 006
Kelly Pope, CPA, Ph.D.
Jan. 14–April 8
Online • $900

Sec. 007
Nancy Batch, CPA, M.B.A., M.S.
Jan. 21–April 15
Online • $900

Advanced Accounting
BUS ADM X421.3 • 3 semester units in Business Administration
A requirement in the Certificate Program in Accounting: an elective in the Certificate Program in Financial Planning and Analysis

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 nonbusiness 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.

Sec. 001
Joseph McPeak, CPA, M.B.A., M.S.,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900

Auditing
BUS ADM XBW126 • 4 semester units in Business Administration
Important: Special academic policies apply to XBW courses. See p. 230 for details.

Examine the 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). 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 BUS ADM X421.1 and Intermediate Financial Accounting II BUS ADM X421.2, equivalent experience or consent of instructor

Sec. 001
Andrew Barnett, Ph.D., CPA,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $1,025

Taxation for Corporations and Other Flow-Through Entities
BUS ADM X419.5 • 3 semester units in Business Administration
A requirement in the Certificate Program in Accounting: an elective in the Certificate Program in Financial Planning and Analysis

Learn about the major provisions to the tax laws for filing in calendar years 2012–2013. Study the taxation of corporations; S corporations; partnership taxation; income taxation of estates, trusts and gifts; and tax accounting methods and periods. Review rules governing the formation, operation, and disposition of partnerships and corporations.

Sec. 001
Joseph McPeak, CPA, M.B.A., M.S.,
Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $900

Cost Accounting
BUS ADM X419 • 3 semester units in Business Administration
A requirement in the Certificate Program in Accounting: an elective in the Certificate Program in Financial Planning and Analysis

Intensively study basic cost-accumulation systems and refinements 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 BUS ADM XB102A and Introduction to Managerial Accounting BUS ADM XB102B or equivalent

Sec. 001
Anna Lee, M.B.A.
Enroll anytime
Online, proctored final exam • $900

BUS Administration

Essentials of Business
BUS ADM X406.6 • 2 semester units in Business Administration
A requirement in the Certificate Program in Business Administration; an elective in the certificate programs in Leadership and Management and in Project Management

Understand the goals, processes and operations of business enterprises. Examine the functions that a company must effectively manage to be successful, such as accounting, finance, human resource management, marketing, operations management and strategic planning. Pay particular attention to the legal environment in which businesses operate and the importance of business ethics and corporate citizenship.

Sec. 001
Kevin M. Shea, M.B.A.
Enroll anytime
Online, proctored final exam • $800

Organization and Management
BUS ADM 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

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

Sec. 006
Derek Day, M.B.A., Ph.D.
Jan. 21–April 15
Online • $800

COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.
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 comprises 4 required courses for a total of 10 semester units (150 hours of instruction).

Required Courses
- Business Analysis Essentials and Planning BUS ADM X495.1 (offered this term)
- Elicitation, Requirements Management and Communication BUS ADM X448.2 (offered this term)
- Enterprise and Requirements Analysis BUS ADM X448.3 (offered this term)
- Solution Assessment and Validation, Underlying Competencies BUS ADM X448.4 (offered this term)

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

See p. 61 for complete certificate details.

International Business Management
X495.1 • 2 semester units in Business Administration
Examine successful international business strategies, and learn how to internationalize your business and career. Study the basics of marketing, economics, finance and business negotiation in a global context. This entrepreneur-focused course prepares you for participation in larger international businesses.

Sec. 001
Christopher Lai, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $995

Communicating Across Cultures: Marketing and Sales Challenges Around the World
BUS ADM 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.

Sec. 001
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $800

Business Analysis
BUS ADM X448.1 • 3 semester units in Business Administration
Learn business analysis fundamentals and the planning and monitoring knowledge areas—the first of the seven generally accepted areas that define the profession’s framework. Discover how practitioners determine 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 IIBA® testing requirements.

Sec. 001
Ashley Wright, B.S., M.B.A.
Jan. 2–Feb. 27
Online • $995

Elicitation, Requirements Management and Communication
BUS ADM X448.2 • 2 semester units in Business Administration
Learn how to manage conflicts, issues and changes to ensure that stakeholders agree on the solution scope. Study the elicitation knowledge area. 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®). Those who intend to sit for the CBAP exam should also meet IIBA® testing requirements.

Sec. 003
Wei Zhu, B.S.
Jan.–Feb. 27
Online • $995

Sec. 004
Wei Zhu, B.S.
March 4–April 29
Online • $995

Enterprise and Requirements Analysis
BUS ADM X448.3 • 3 semester units in Business Administration
Learn to identify a business need using enterprise and requirements analysis to refine and clarify the definition of that need and define a solution scope that the business can implement. Understand 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 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 IIBA® testing requirements.

Sec. 003
Wei Zhu, B.S.
Jan.–Feb. 27
Online • $995

Sec. 004
Wei Zhu, B.S.
March 4–April 29
Online • $995

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.
Solution Assessment and Validation, Underlying Competencies
BUS ADM X448.4 • 2 semester units in Business Administration
Learn to assess proposed solutions to determine which best fit the business need. You also learn 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. 003
Ashley Wright, B.S., M.B.A.
Jan. 2–Feb. 27
Online • $995

Sec. 004
Ashley Wright, B.S., M.B.A.
March 4–April 29
Online • $995

Business Communication
Business Writing Review
BUS ADM X455 • 1 semester unit in English
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.

Sec. 001
Margaret Steen, M.J., Extension Honored Instructor
Enroll anytime
Online • $550

Economics
Applied Economics for Business
ECON 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.

Sec. 001
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $750

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

Sec. 001
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $750

Introduction to Macroeconomics
BUS ADM X105 • 3 semester units in Economics
An elective in the Certificate Program in Business Administration
Get an introduction to the 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 ECON X2 concurrently with this course.

Sec. 001
Larry O’Connell, M.A., M.S., M.B.A.
Enroll anytime
Online • $900

Introduction to Microeconomics
ECON 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. 001
Edward T. Derbin, M.A., M.B.A.
Enroll anytime
Online • $900

Entrepreneurship and Small Business Management
Small Business Management
BUS ADM X105 • 3 semester units in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management
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.

Sec. 001
Judith Forbes, M.B.A., Ph.D.
Enroll anytime
Online • $900

BUILD A CAREER
Turn your talents into a new career. UC Berkeley Extension professional certificates and specialized programs of study can help you advance in your current position or start your dream career. Program details at extension.berkeley.edu/cert.
Online Certificate Program in Financial Planning and Analysis

Learn to guide your employer’s company to optimum financial performance and growth with UC Berkeley Extension’s new Certificate Program in Financial Planning and Analysis. Gain an understanding of the analytical underpinnings of economic decision making to qualify to work in the high-growth area of corporate accounting and finance. Financial planning and analysis expertise is in high demand for high-growth progressive companies. In this program, you learn to interpret accounting results and formulate plans and strategies for future growth based on sound analytical principles. You also examine the latest analytical techniques used by industry executives to shape their companies’ future plans and strategies.

Curriculum Requirements
The curriculum comprises 8 required courses (4 core courses, 3 concentration courses and 1 elective) for a total of 16–18 semester units (at least 240 hours of instruction).

Required Courses
- Business Valuation BUS ADM X431.9 (offered this term)
- Corporate Financial Analysis and Modeling BUS ADM X435.6 (offered this term)
- Financial Statement Analysis BUS ADM X419.2 (offered this term)
- International Finance BUS ADM X430.8 (offered this term)

Concentrations and Electives
See extension.berkeley.edu/cert/financial_planning_analysis.html for a list of concentration courses and electives available this term.

Learn More and View the Flyer
extension.berkeley.edu/cert/financial_planning_analysis.html
(510) 642-4231
business@unex.berkeley.edu
See p. 77 for complete certificate details.

Finance

Options and Other Financial Derivatives
BUS ADM 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 real-life case studies 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.

Sec. 001
Richard Lehman, M.B.A.
Enroll anytime
Online, proctored final exam • $800

Intermediate Corporate Finance
BUS ADM X444.1 • 2 semester units in Business Administration
A requirement in the certificate programs in Finance and in Financial Planning and Analysis, Planning Concentration
A continuation of Basic Corporate Finance BUS ADM X430.1, this course rounds out the comprehensive overview of corporate finance topics and examines the concepts, techniques and tools that financial managers use to make effective investing, financing and working capital management decisions. Understand advanced capital budgeting topics, financing decisions, working capital management and multinationa fiscal finance.

Sec. 001
Lawrence Cox, B.S., M.B.A.
Enroll anytime
Online, proctored final exam • $800

Corporate Financial Analysis and Modeling
BUS ADM X435.6 • 1 semester unit in Business Administration
A requirement in the certificate programs in Finance and in Financial Planning and Analysis
This hands-on computer course provides the skills to apply the theories, concepts and tools covered in Basic Corporate Finance BUS ADM X430.1 and Intermediate Corporate Finance BUS ADM X444.1 to develop 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.

Sec. 001
Catherine Pinkas, M.B.A., PMP
Enroll anytime
Online, proctored final exam • $645

International Finance
BUS ADM X430.8 • 2 semester units in Business Administration
A requirement in the certificate programs in Finance and in Financial Planning and Analysis; 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. 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.

Sec. 001
Grace Kalil, M.B.A.
Enroll anytime
Online, proctored final exam • $800

Fundamentals of Risk Management
BUS ADM X435.6 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance; an elective in the certificate programs in Business Administration and in Personal Financial Planning
Learn the fundamentals of financial risk management as it is practiced by corporate treasury staffs and investment managers. Focus on current theory, best practices and financial products that can be used for risk mitigation.

Sec. 004
Lawrence Cox, B.S., M.B.A.
Jan. 14–April 8
Online • $800

ENROLL EARLY
UC Berkeley Extension is a self-supporting institution. Therefore, we sometimes cancel courses with low enrollment before they begin. Early enrollment can prevent such cancellations and ensure that you get the education and training you need.
Financial Planning and Analysis

Basic Corporate Finance
BUS ADM X430.1 • 2 semester units in Business Administration
A requirement in the Certificate Program in Financial Planning and Analysis, Accounting Concentration; 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. Devote specific attention to the financial management context, the time value of money, risk and return, the cost of capital, the valuation of stocks and bonds, capital budgeting decision-analysis tools, the impact of financial leverage on cost of capital and valuation, dividend policy, and an overview of financial statement analysis.

This course serves as a prerequisite for most other finance courses at UC Berkeley Extension.

Sec. 007
Bradley Fox, M.B.A.
Jan. 14–April 8
Online • $800

Sec. 008
Fernando Garcia, J.D., M.B.A.
Jan. 21–April 15
Online • $800

Sec. 012
Instructor to be announced
Feb. 4–April 29
Online • $800

Advanced Corporate Finance
BUS ADM X431.5 • 2 semester units in Business Administration
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 BUS ADM X430.1 and Intermediate Corporate Finance BUS ADM X444.1; you should also be proficient with computer spreadsheets and financial calculators.

Sec. 001
Donald Byrne, M.B.A., Ph.D.
Enroll anytime
Online, proctored final exam • $800

Strategy Execution With the Balanced Scorecard
BUS ADM X464.6 • 2 semester units in Business Administration
(Formerly Balanced Scorecard for Metric-Centered Strategic Management)
A requirement in the Certificate Program in Financial Planning and Analysis, Planning Concentration

The Balanced Scorecard (BSC) is a strategic performance-management tool that helps you choose a set of targets through which a company measures success. Most often, this set includes sales, financial, customer service, employee learning and operations measures. Review the management theory that led to the creation of the BSC method, and explore its subsequent evolution in the real business world. Study components of the BSC—such as strategy maps, key performance indicators and scorecards—to learn best practices and implementation strategies, including performance information systems. Gain an understanding of this widely used, empirical management tool, and be ready to implement it in your own business environment to spur sales and profit growth.

Sec. 003
Erick Ahrens, B.S., M.B.A.
Jan. 14–April 8
Online, proctored final exam • $800

Employee Benefit Plans
BUS ADM 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. Explore legal requirements, administrative problems and available options, as well as government-mandated plans such as workers’ compensation and Social Security. 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.

Sec. 001
Richard Takahashi, M.B.A.
Enroll anytime
Online • $800

Law

Principles of Business Law
BUS ADM X410.1 • 2 semester units in Business Administration

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.

Sec. 003
Jason Lum, J.D.
Jan. 14–April 8
Online • $800

Intellectual Property Law
BUS ADM 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, and recent technological developments and trends in the legislative and legal arenas. Anyone involved in the creation, acquisition, use, sale, marketing, licensing and ownership of intellectual property can benefit from this course.

Sec. 001
Brien Walton, J.D., LL.M.
Enroll anytime
Online • $800

Human Resources

Essentials of Human Resources
BUS ADM X450.1 • 2 semester units in Business Administration
A prerequisite for 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 laws, rules and regulations that affect the California employer and the role of the human resources professional in an organizational setting.

Sec. 004
Catherine McKnight, M.A.
Jan. 14–April 8
Online • $800
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 comprises 4 required courses and a minimum of 2 electives for a total of 12 semester units (180 hours of instruction).

Required Courses
- Introduction to Marketing
  BUS ADM X460.1 (offered this term)
- Marketing Research: Concepts and Techniques
  BUS ADM X460.6 (offered this term)
- Marketing Strategy
  BUS ADM X415 (offered this term)
- Social Media Marketing Strategies
  BUS ADM X432.5 (offered this term)

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

See p. 89 for complete certificate details.
Paralegal Studies

**Essential Paralegal Studies Part I: Foundational Skills**

LAW X418 • 2 semester units in Law

* A requirement in the Certificate Program in Paralegal Studies

Study the foundational paralegal qualities most sought by attorneys and law firms. Learn various aspects of paralegal skills, including legal terminology; court structures and procedures; legal ethics; evidence; investigation; interviewing; formal discovery methods and procedures; legal research, analysis and writing; and other subjects relevant to becoming a qualified paralegal.

Online section must be completed within three months of receiving course login information.

**Sec. 001**
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750

**Essential Paralegal Studies Part II: Authority, Research and Writing**

LAW X419 • 2 semester units in Law

* A requirement in the Certificate Program in Paralegal Studies

Learn all aspects of advanced paralegal practice, 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 a successful paralegal. **Note:** You should bring a laptop to class.

Online section must be completed within three months of receiving login information.

**Prerequisite:** Essential Paralegal Studies Part I: Foundational Skills LAW X418

**Sec. 001**
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $1,750

**Paralegal Business Law**

LAW X404 • 1 semester unit in Law

* An elective in the Certificate Program in Paralegal Studies

Study relevant examples from the day-to-day practices of business lawyers and their paralegals. Learn about sole proprietorships, partnerships, corporations and limited-liability companies.

Online section must be completed within two months of receiving course login information.

**Sec. 001**
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

**Paralegal California Procedures**

LAW X407 • 1 semester unit in Law

* An elective in the Certificate Program in Paralegal Studies

Study California court rules and procedures, as well as ways 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 to successfully assist attorneys in identifying and applying trial court rules.

Online section must be completed within two months of receiving course login information.

**Sec. 003**
Julie Goren, J.D.
Enroll anytime
Online • $875

**Paralegal Contract Law**

LAW X405 • 1 semester unit in Law

* An elective in the Certificate Program in Paralegal Studies

Learn how to form effective legal contracts, how contracts are performed, and how to remedy for nonperformance or breach of contract. You can apply the contract drafting, analysis and litigation skills learned in this course to a wide variety of legal situations.

Online section must be completed within two months of receiving login information.

**Sec. 001**
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

**Paralegal Criminal Law**

LAW X406 • 1 semester unit in Law

* An elective in the Certificate Program in Paralegal Studies

Study substantive and procedural criminal law, and learn to identify the elements of and defenses against criminal charges. Examine levels of criminal intent and the purpose of criminal punishment.

Online section must be completed within two months of receiving course login information.

**Sec. 001**
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

**Online Certificate Program in Paralegal Studies**

Make the most of your professional opportunities with UC Berkeley Extension's Certificate Program in Paralegal Studies. 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 program: 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 comprises 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 X418 (offered this term)
- Essential Paralegal Studies II: Authority, Research and Writing X419 (offered this term)

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

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

See p. 83 for complete program details.

**Statement Regarding California Regulatory Requirements**
The UC Berkeley Extension online and hybrid Certificate Program in Paralegal Studies 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 340 classroom hours. In addition, students earn up to 8 semester units of academic credit for the program.
Paralegal Studies

Paralegal Family Law
LAW X410 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies
Learn the paralegal’s role in family law practice. Topics include child custody and visitation matters, examine issues of paternity proceedings, adoption and surrogacy rights.
Online section must be completed within two months of receiving course login information.
Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Intellectual Property Law
LAW X409 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies
Explore trademark, copyright, patent and trade-secret laws as they relate to a paralegal's role in representing clients. Gain quantifiable paralegal skills in the area of intellectual property law to assist clients with their intellectual property matters under an attorney's supervision.
Online section must be completed within two months of receiving course login information.
Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Paralegal Tort Law
LAW X403 • 1 semester unit in Law
An elective in the Certificate Program in Paralegal Studies
Get an overview of negligence, personal injury, strict and products liability. Examine the distinctions between criminal and civil law, as well as liability, duty, breach of duty, causation and damages while applying the appropriate legal defenses.
Online section must be completed within two months of receiving course login information.
Sec. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875

Personal Financial Planning
Survey of Personal Financial Planning
BUS ADM X433 • 2 semester units in Business Administration
A requirement in the Certificate Program 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.
Sec. 001
Mohsin Hafeez, CFP, M.B.A.
Enroll anytime
Online, proctored final exam • $750

Project Management

Project Management
BUS ADM X470 • 2 semester units in Business Administration
A primary elective in the Certificate Program in Project Management; an elective in the Certificate Program in Construction 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 BUS ADM X470
Sec. 012
Timothy Donahue-Bombosch, Ph.D.
Jan. 2–Feb. 27
Online • $800

Sec. 013
Timothy Donahue-Bombosch, Ph.D.
Jan. 14–April 8
Online • $800

Sec. 014
Catherine Pinkas, M.B.A., PMP
March 4–April 29
Online • $800

Project Cost and Procurement Management
BUS ADM X474.3 • 2 semester units in Business Administration • 30 pdus: PMI® provider 1173
A primary elective in the Certificate Program in Project Management, an elective in the Certificate Program in Construction Management
Procuring 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. Examine a variety of contractual arrangements and fee options.

Prerequisite: Project Management BUS ADM X470
Sec. 012
Murray Millet, M.B.A., M.S.
Jan. 2–Feb. 27
Online • $800

Sec. 013
Mark Angel, B.S., M.B.A., PMP
Jan. 14–April 8
Online • $800

Murray Millet, M.B.A., M.S.
March 4–April 29
Online • $800

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### Project Leadership and Building High-Performance Teams

**BUS ADM X470.2**  2 semester units in Business Administration  30 pdu: PMI® provider 1173

A primary elective in the Certificate Program in Project Management; an elective in the Certificate Program in Construction Management

Learn the leadership and communication skills to support quality management in your organization. Through team-based projects, learn how to master the most difficult aspects of quality management. 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 BUS ADM X470

**Sec. 013**
Alex Brown, IPMA-C, PMP
Jan. 2–Feb. 27
Online • $800

**Sec. 014**
Catherine McKnight, M.A.
Jan. 14–April 8
Online • $800

**Sec. 015**
Ali Aiyed, B.S., M.A., Ph.D., PMP
March 4–April 29
Online • $800

### Project Schedule and Risk Management

**BUS ADM X440.4**  2 semester units in Business Administration  30 pdu: PMI® provider 1173

A primary elective 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. However, specific techniques 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 BUS ADM X470

**Sec. 011**
Madeleine Bronstone, MLHR, PMP
Jan. 2–Feb. 27
Online • $800

**Sec. 012**
Anthony Minstein, B.A., CPIM, PMP
Jan. 14–April 8
Online • $800

**Sec. 013**
Madeleine Bronstone, MLHR, PMP
March 4–April 29
Online • $800

### Project Execution and Control

**BUS ADM X471.9**  2 semester units in Business Administration  30 pdu: PMI® provider 1173

A requirement in the Certificate Program in Project Management

A successful project manager relies on an effective management processes and a project baseline plan to monitor progress, identify variances and take action to mitigate the impact of problems. Learn how to manage project execution through completion and evaluation. You also explore the tools and techniques for project control and build on processes you learned in Project Management BUS ADM X470.

**Prerequisite:** Project Management BUS ADM X470

**Sec. 011**
Anthony Minstein, B.A., CPIM, PMP
Extension Honored Instructor
Jan. 2–Feb. 27
Online • $800

**Sec. 012**
Anthony Minstein, B.A., CPIM, PMP
Extension Honored Instructor
Jan. 14–April 8
Online • $800

**Sec. 013**
Deann Smith, B.A., CKM, PMP
March 4–April 29
Online • $800

**Sec. 032**
Alex Brown, IPMA-C, PMP
March 4–April 29
Online • $800

**Sec. 033**
Timothy Donahue-Bombosch, Ph.D.
March 4–April 29
Online • $800

**Sec. 035**
Mark Angel, B.S., M.B.A., PMP
March 4–April 29
Online • $800

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### COURSES AVAILABLE THROUGHOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

### 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, information technologies, international trade, health sciences, 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, Inc. (PMI®).

### Curriculum Requirements

The curriculum comprises 3 required courses and 8 additional units of electives for a total of 14 semester units (210 hours of instruction).

### Required Courses

We recommend taking these courses in the following sequence:

- Project Management BUS ADM X470  (offered this term)
- Project Leadership and Building High-Performing Teams BUS ADM X479.4  (offered this term)
- Project Execution and Control BUS ADM X479.7  (offered this term)

### Electives

You must take at least two of the following three courses:

- Project Scope and Quality Management BUS ADM X479.4  (offered this term)
- Project Schedule and Risk Management BUS ADM X479.5  (offered this term)
- Project Cost and Procurement Management BUS ADM X479.6  (offered this term)

Find additional electives to make up the total of 14 semester units (210 hours) at extension.berkeley.edu/cert/project.html.

### Learn More and View the Brochure

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

See p. 99 for complete certificate details.
Intensive PMP/CAPM Exam Preparation

BUS ADM X474.9 • 2 semester units in Business Administration • 35 pd: 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. Topics include management of integration, scope, time, cost, quality, human resources, communications, risk, procurement and stakeholder management. The course also covers ethics and professional responsibility. In addition to in-depth coverage of (MI’a A Guide to the Project Management Body of Knowledge (PMBOK® Guide) 5th Edition (Project Management, Inc., 2013) you analyze sample exam questions and learn 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.

Some classroom sections have an online component. See schedule blocks below for details.

Sec. 007
Edmond Matevosian, B.S., PE, PMP
March 4–April 29
Online • $1,850

PMI is a registered mark of the Project Management Institute, Inc.

Humanities, Languages and Personal Development

ONLINE COURSE INFORMATION
(510) 643-4957 extension.berkeley.edu/online

Humanities

The Development of World Civilization: The Neolithic Age to the Renaissance

HISTORY 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.

Sec. 001
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

The Development of World Civilization: 1500 to the Present

HISTORY 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 hemispheres, Africa and the Middle East; the beliefs and social organizations 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.

Sec. 001
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

HISTORY XBW7A • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 230 for details.

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.

Sec. 001
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

HISTORY XBW7B • 4 semester units in History
Important: Special academic policies apply to XBW courses. See p. 230 for details.

Survey U.S. history from the 1870s to the new millennium, and increase your knowledge of events, institutions and prominent historic figures while developing your 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.

Sec. 001
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $770

The Culture of India: Roots of Tradition and Change

S,SEASN X11 • 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.

Sec. 001
Alice W. Clark, Ph.D.
Enroll anytime
Online, proctored final exam • $595

FIVE WAYS TO ENROLL

1. Online:
extension.berkeley.edu

2. Phone:
(510) 642-4111

3. Mail:
Department B
1995 University Ave.,
Suite 110
Berkeley, CA
94704-7000

4. Purchase Order:
(510) 642-3910

5. In Person:
At Golden Bear Center,
1995 University Ave.,
Berkeley, Calif.
History of Islam
EA LANG X21 • 3 semester units in Near Eastern Studies
Recipient of the Distinguished Course Award from the University Professional and Continuing Education Association (UPCEA)
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.
Sec. 001
Arthur Kane Scott, M.A.
Enroll anytime
Online, proctored final exam • $715

Principles of Sociology: A Multicultural Perspective
SOCIOL 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 a 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.
Sec. 001
Gwynne Pacheco, Ed.D.
Enroll anytime
Online, proctored final exam • $760

Introduction to American Politics
POLISCI XBW1 • 4 semester units in Political Science
Important: Special academic policies apply to XBW courses. See p. 230 for details.
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, and social spending.
Sec. 001
Nina Clark, Ph.D.
Enroll anytime
Online, proctored final exam • $760

Mystery Fiction
ENGLISH X103 • 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.
Sec. 001
Mary Ann Koory, Ph.D., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $715

Children’s Literature: The Golden Age
ENGLISH X466 • 3 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
During the late 19th and early 20th centuries, many of the major works of children’s literature were published, among them Alice in Wonderland, The Wind in the Willows, Peter Pan, Treasure Island and The Wizard of Oz. Examine these and other classics of children’s literature to discover what visions they present of childhood, of the social world and of the self. Pay particular attention to how these books address the two audiences of children’s literature: the child and the adult.
Sec. 002
Celeste Mannis, B.A., M.B.A.
Jan. 21–April 15
Online • $770

Shakespeare
ENGLISH 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. 230 for details.
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.
Sec. 001
Mary Ann Koory, Ph.D., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $770

Contemporary Environmental Issues
ENVS SCI X70 • 4 semester units in Environmental Science, Policy and Management
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. Examine the roles played by governments, businesses, scientists, advocacy groups and individual citizens in shaping solutions to environmental problems and managing resources.
Sec. 001
Douglas Greenberg, Ph.D.
Enroll anytime
Online, proctored final exam • $770

American Environmental and Cultural History
ENVS SCI X70AC • 4 semester units in Environmental Science, Policy and Management
Important: Special academic policies apply to XB and XBW courses. See p. 230 for details.
Winner of UC Berkeley’s Educational Initiatives Award
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, visit americancultures.berkeley.edu.
Sec. 001
Douglas Greenberg, Ph.D.
Enroll anytime
Online, proctored final exam • $770

Comparative Philosophy
PHILOS X11 • 3 semester units in Philosophy
Get an introduction to basic themes in ethics, epistemology, and political and social 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.
Sec. 001
Eric Boynton, M.A., Ph.D.
Enroll anytime
Online, proctored final exam • $715
History of Western Philosophy From the Pre-Socratic Period to the End of the Middle Ages

PHILOS 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.

Sec. 001
Eric Fletcher, Ph.D.
Enroll anytime
Online, proctored final exam • $715
Views of the Absolute in World Religions

RELIGST X10  •  3 semester units in Religious Studies
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.

Sec. 001
Instructor to be announced
Enroll anytime
Online, proctored final exam • $730

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Sciences, Mathematics and Biotechnology

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Biology

Introductory Biology With Lab, Part A
MCELLBI 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 relation between biological issues and current topics in experimental research, biotechnology and medicine.
Familiarity with basic chemistry is recommended but not required.

Sec. 001
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online, proctored final exam • $875

Introductory Biology With Lab, Part B
MCELLBI 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 on 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.

Sec. 001
Susan Parkinson, Ph.D.
Enroll anytime
Online, proctored final exam • $875

General Human Anatomy

INTEGBI 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 gross and microscopic examination. Topics include the cardiovascular, respiratory, gastrointestinal, nervous and musculoskeletal 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. 001
Kashif Ahmad, M.B.B.S., M.Sc., Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 006
James Smiley, B.A., D.C.
Enroll anytime
Online, proctored final exam • $850

Introduction to Human Physiology

MCELLBI XB32  •  XBW32 for online sections
3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program
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.

Sec. 007
Jennifer Wade, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 008
Keith Earnshaw, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 009
Christina Morales, Ph.D.
Enroll anytime
Online, proctored final exam • $850

For course and schedule information, visit extension.berkeley.edu/catalog
Cell Biology
MCELLBI X116 • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program
Understand 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 the mechanism underlying cellular events.

Prerequisite: One year of college-level general biology for majors

Sec. 002
Nidhi Ahuja, Ph.D.
Enroll anytime
Online, proctored final exam • $880

Marine Biology
INTEGBI 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 nonlab course, you also consider human use of the marine environment and the resulting problems and issues, including pollution, habitat modification and exploitation of resources.

Sec. 001
Stephen Shaner, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Introductory Biochemistry
MCELLBI X105 • 3 semester units in Molecular and Cell Biology

A Core Course in the Clinical Laboratory Scientist Preparatory Program; an elective in the Advanced Biosciences Program
Understand the basic chemistry and overall structure of the most important biological macromolecules presented in this nonlab course, 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. 001
Nidhi Ahuja, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 002
Weiwei Gu, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 003
Rebekah Marsh, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 004
Paul Tarr, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 005
Veronica Ardi-Pastores, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Genetics
MCELLBI X143 • 3 semester units in Molecular and Cell Biology

An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program 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. 003
John Placyk, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 004
Christina Morales, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Sec. 006
Paul Tarr, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Principles and Techniques of Molecular Cell Biology
MCELLBI X121 • 3 semester units in Molecular and Cell Biology

45 hours CE credit: BRN provider 00226
An elective in the Advanced Biosciences Program and in the Clinical Laboratory Scientist Preparatory Program
Learn how cells function in this nonlab course 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

Sec. 001
Susan Parkinson, Ph.D.
Enroll anytime
Online, proctored final exam • $850

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For more information, visit extension.berkeley.edu/corporate.
Epigenetics of Human Development and Disease  
MCELLBI X423  •  3 semester units in Molecular and Cell Biology  
An elective in the Advanced Biosciences 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). 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. 
Prerequisites: Although there are no formal prerequisites for this course, some background in molecular biology and genetics is helpful.  
Sec. 001  
Rebekah Marsh, Ph.D.  
Enroll anytime  
Online, proctored final exam  •  $850  
Immunology  
MCELLBI X110  •  3 semester units in Molecular and Cell Biology  
A Core Course in the Clinical Laboratory Scientist Preparatory Program; an elective in the Advanced Biosciences Program 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. 
Prerequisites: One year of college-level general biology for majors  
Sec. 002  
Amy Morgan, Ph.D.  
Enroll anytime  
Online, proctored final exam  •  $850  
Advanced Bioscience  
Current Topics in the Biosciences  
MCELLBI X427  •  2 semester units in Molecular and Cell Biology  
A requirement in the Advanced Biosciences Program; an elective in the Post-Baccalaureate Health Professions Program  
Learn about recent scientific advances and emerging technologies in molecular and cell biology, neurobiology, genomics, immunology and infectious disease. Read current scientific literature, and learn how to analyze experimental data and critically evaluate the impact of research findings. Participate in classroom discussions and student presentations to enhance your ability to discuss some of the exciting scientific advances being published today. This course is intended for advanced science students with some previous knowledge of cell biology, molecular biology and genetics. Industry professionals and health professions students can also benefit from this course.  
Sec. 003  
Monica Ranes-Goldberg, Ph.D.  
Jan. 14–April 8  
Online  •  $585  
The Biology of Cancer  
MCELLBI X26  •  3 semester units in Molecular and Cell Biology  
An elective in the Advanced Biosciences Program  
Examine the molecular, cellular and genetic basis for the 270 diseases called cancer. Topics in this nonlab course 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. 
A background in high school or college-level biology is recommended.  
Sec. 001  
David Lieu, M.D., Ph.D.  
Enroll anytime  
Online, proctored final exam  •  $850  
Chemistry  
Introduction to Chemistry  
CHEM X16  •  3 semester units in Chemistry  
This nonlab course introduces you 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, you are required to have a basic knowledge of math, including algebra.  
Sec. 001  
Weiwei Gu, Ph.D.  
Enroll anytime  
Online, proctored final exam  •  $850  
Introductory Organic Chemistry  
CHEM X18  •  3 semester units in Chemistry  
Examine the compounds that comprise most living mass. Following an introduction to chemical bonding and isomerism, you 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  
Sec. 001  
Weiwei Gu, Ph.D.  
Enroll anytime  
Online, proctored final exam  •  $850  
Alternative Assessment Tools for Choosing Safer Chemicals, Material and Products  
CHEM X415  •  2 semester units in Chemistry  
Understand the basic ideas of materials science, and learn to apply the principles of green chemistry to materials and processing design. Explore microstructure, property and processing, as well as their environmental impacts for different types of materials. Learn to integrate pollution-prevention and resource-conservation strategies into the development of more ecologically and economically sustainable product systems using the Life Cycle Assessment (LCA) methodology. Through relevant case studies, build a foundation in designing and discovering the next generation of materials.  
Sec. 001  
Heather Kimmel  
Jan. 14–April 8  
Online  •  $585
Business and Financial Planning for Green Chemistry Innovation

BUS ADM X413.8 • 2 semester units in Business Administration

Get an introduction to the core principles of economics, finance and accounting to 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.

Sec. 002
Jane Talkington, M.B.A.
Jan. 14–April 8
Online • $585

Online 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 trial process; thus, thorough knowledge of the procedures at every stage is essential. This professional certificate 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 comprises 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
  PB HLTH X400.2 • 3 semester units in Public Health
  A requirement in the Certificate Program in Clinical Research Conduct and Management
  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. 005
  Peter Dubinsky, B.S.
  Jan. 2–Feb. 27
  Online • $1,895

- Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities
  PB HLTH X400.3 • 3 semester units in Public Health
  A requirement in the Certificate Program in Clinical Research Conduct and Management
  Learn the procedures to plan clinical trials, including protocol development, case report form design, institutional review board (IRB) submission, prestudy visits and more.
  Prerequisite: Successful completion of Introduction to Clinical Research: Clinical Trial Phases and Design X400.2

  Sec. 004
  Karen Henry, M.P.H.
  Jan. 2–Feb. 27
  Online • $1,895

  Sec. 005
  Karen Henry, M.P.H.
  March 4–April 29
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extension.berkeley.edu/cert/clinical.html

COURSES AVAILABLE THROUGOUT THE YEAR

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

Physics

Concepts of Physics
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. Study the concepts of physics with a minimum of mathematics.

Sec. 001
Raja Almukahhal, Ph.D.
Enroll anytime
Online, proctored final exam • $850

Clinical and Regulatory Sciences

Introduction to Clinical Research: Clinical Trial Phases and Design
PB HLTH X400.2 • 3 semester units in Public Health
A requirement in the Certificate Program in Clinical Research Conduct and Management
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. 005
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Sec. 006
Peter Dubinsky, B.S.
March 4–April 29
Online • $1,895

Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities
PB HLTH X400.3 • 3 semester units in Public Health
A requirement in the Certificate Program in Clinical Research Conduct and Management
Learn the procedures to plan clinical trials, including protocol development, case report form design, institutional review board (IRB) submission, prestudy visits and more.
Prerequisite: Successful completion of Introduction to Clinical Research: Clinical Trial Phases and Design X400.2

Sec. 004
Karen Henry, M.P.H.
Jan. 2–Feb. 27
Online • $1,895

Sec. 005
Karen Henry, M.P.H.
March 4–April 29
Online • $1,895

See p. 157 for complete certificate details.
Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting
PB HLTH X400.4 • 3 semester units in Public Health
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 PB HLTH X400.2 and Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities PB HLTH X400.3

Sec. 005
Jan. 2–Feb. 27
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Sec. 006
March 4–April 29
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Clinical Trial: Data Analysis, Regulatory Audits, Vendor Selection and Project Management
PB HLTH X400.5 • 3 semester units in Public Health
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 PB HLTH X400.2; Clinical Trial Planning: Protocol Development, Data Management and Clinical Site Activities PB HLTH X400.3; and Clinical Trial Implementation: Site Initiation, Subject Recruitment, Monitoring and Safety Reporting PB HLTH X400.4

Sec. 004
Daniel Redline, B.A., CCRP
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Sec. 005
Daniel Redline, B.A., CCRP
March 4–April 29
Online • $1,895

Mathematics and Statistics
Math for Management
MATH X402 • 2 semester units in Mathematics
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program
Get an introduction to quantitative and statistical techniques needed to address business coursework, and gain a working knowledge of concepts you can apply to other math and statistics courses. Get an introduction to basic mathematical principles, and learn to apply these principles to the study of economics, statistics, probability, finance and decision making. Key topics from probability and descriptive statistics include measures of central tendency, probability distributions, correlation, and regression and statistical hypothesis testing. Topics from finance include mathematical analysis of investments and financial decision making. An emphasis is placed on using mathematics as a means to develop the intuition and understanding necessary to apply concepts to business decisions and other courses.

Sec. 001
Steven Pon, Ph.D.
Enroll anytime
Online, proctored final exam • $720

Precalculus
MATH X9 • 2 semester units in Mathematics
Gain exposure to concepts in basic and advanced algebra and some trigonometry. Explore topics such as logarithms, solving or graphing linear equations, and factoring a polynomial at a more advanced level than that of a beginning or intermediate algebra class. 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, visit mymathlab.com/system-requirements.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

Sec. 001
Flor Feldman, M.Sc., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $720

Calculus X1A
MATH 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. Note: If you are looking to fill Haas prerequisites, you must be in the online course for three months before you can take the final exam.

Prerequisite: Three-and-a-half years of high school mathematics, including trigonometry and analytic geometry

Sec. 001
Merlin Miller, M.A.
Enroll anytime
Online, proctored final exam • $860

Sec. 002
Steven Pon, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Calculus X1B
MATH X1B • 4 semester units in Mathematics
Approved as a prerequisite to the Haas School of Business Evening and Weekend M.B.A. Program
This continuation of Calculus MATH 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

Sec. 001
Merlin Miller, M.A.
Enroll anytime
Online, proctored final exam • $860

Sec. 002
Hillel Raz, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Sec. 003
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $860
Introduction to Statistics

XB2 • XBW2 for online sections
4 semester units in Statistics

An elective in the Advanced Bioscience Program, the Clinical Laboratory Scientist Preparatory Program and 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. 230 for details.

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.

**Prerequisite:** Two years of high school algebra. A recent course in college algebra is recommended.

**Sec. 001**
Dieter Jurkat, M.S., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $860

**Sec. 002**
Guohua Pan, Ph.D.
Enroll anytime
Online, proctored final exam • $860

**Sec. 003**
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Technology and Information Management

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extension.berkeley.edu/online

Leadership, Systems and Technology Management

Introduction to Information Systems Analysis and Design

COMPSCI X422 • 3 semester units in Computer Science

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management, an elective in the Professional Program in Data Administration and Management

Study information analysis and logical specification of the system development process in an organizational context. Explore the interactive nature of the analysis and design process.

**Sec. 004**
Mark Angel, B.S., M.B.A., PMP
Jan. 14–April 8
Online • $820

Applied Business Process and System Analysis

COMPSCI X423 • 3 semester units in Computer Science

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management, an elective in the Professional Program in Data Administration and Management

Hone your end-to-end analysis skills in this case study–driven course, starting with classical business process modeling and resulting in an enhanced database-assisted, automated system. Business goals include higher performance, improved quality, ease of use and reduced costs. Topics include needs analysis, system requirements, data modeling, process modeling, feasibility analysis, system proposal, application architecture, user interface design, systems construction, implementation, commissioning and life-cycle support. Hands-on projects include creating your own flow diagrams, developing process models, evaluating alternatives, developing a prioritization schema and performing return on investment analysis.

**Sec. 003**
Todd Landreneau, Ph.D., CHC, CPHQ
Jan. 14–April 8
Online • $820

Online 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. This professional certificate is based on a wide variety of core courses and electives.

**Curriculum Requirements**
The curriculum comprises 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

See p. 171 for complete certificate details.

START WITH A COURSE

You do not have to apply for acceptance into UC Berkeley Extension. Courses are open to all eligible students. Our courses can help you develop career skills, meet professional certification requirements or satisfy an intellectual urge.
Data Administration

Concepts of Relational Database Management Systems
COMPSCI X408 • 3 semester units in EECS-DCS

A Core Course in the Post-Baccalaureate Certificate in Information Systems and Management; an elective in the Professional Program in Data Administration and Management

Study techniques for creating and using database applications. Learn requirements analysis and specification; logical database design; normalization; database implementation; recovery, concurrency, integrity and security concerns; and database use. You focus on the relational database model and the SQL language. Learn the creative art and science of database design rather than training for the tactical oversight role of an operational database administrator. Access to a computer system with a relational database management system (DBMS) installed or on which you can install a relational DBMS and create tables is highly recommended. Such functionality can prove useful for written assignments that include SQL problems.

A programming course in any language or equivalent experience is recommended.

Sec. 001
Andrew Oppel, B.A.
Enroll anytime
Online • $799

Open Source and Operating Systems

Using the UNIX Operating System
COMPSCI 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.

Sec. 001
James Connor, B.S., M.B.A.
Enroll anytime
Online • $815

Programming Languages and Object-Oriented Programming

Introduction to C Language Programming
COMPSCI 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 is helpful.

Sec. 001
Robert Adams, M.S.
Enroll anytime
Online • $595

C++ Programming I
COMPSCI X412.1 • 2 semester units in EECS

An elective in the Post-Baccalaureate Certificate in Information Systems and Management

C++ provides all the tools for object-oriented programming, such as data abstraction, inheritance, polymorphism and generic programming. Get a solid introduction to all the major features of American National Standards Institute’s (ANSI) standard C++, including the newer syntactic and semantic constructs, by studying each concept through lucid, fluent examples. You learn all major features of C++, including objects, classes, pointers, and single and multiple inheritance.

Prerequisites: Introduction to C Language Programming COMPSCI X24 or reasonable knowledge of 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.

Sec. 001
Robert Adams, M.S.
Enroll anytime
Online • $715

C# Programming I
COMPSCI 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 XP/Vista/7/8 and Visual Studio

Sec. 001
David Gewirtz, B.S.
Enroll anytime
Online • $595

Introduction to Perl Programming
COMPSCI X416.7 • 1 semester unit in EECS

An elective in the Post-Baccalaureate Certificate in Information Systems and 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. 001
Carl Limsico, B.A., Certified Java Programmer
Enroll anytime
Online • $595

Python Programming
COMPSCI 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 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. 001
Carl Limsico, B.A., Certified Java Programmer
Enroll anytime
Online • $595

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
PHP Programming for the Web  
COMPSCI 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.  
Prerequisite: 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.  
Sec. 002  
Carl Limisco, B.A., Certified Java Programmer  
Enroll anytime  
Online • $715

Java: Discovering Its Power  
EL ENG X436.2 • 2 semester units in EECS  
An elective 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. 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 EL ENG X429.9, C++ Programming I COMPSCI X412.1 or equivalent, and some experience with object-oriented design and techniques.  
Sec. 001  
Robert Adams, M.S.  
Enroll anytime  
Online • $595

Electrical Engineering  
Fundamentals of Data Communications and Networking  
COMPSCI X433 • 2 semester units in EECS (DCS)  
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 be knowledgeable 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.  
Sec. 001  
Ching-Cheng Lee, Ph.D.  
Enroll anytime  
Online • $715

Integrated Circuit Design and Techniques  
Semiconductor Devices for Integrated Circuit Design  
EL ENG 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.  
Sec. 001  
Vincent Chang, Ph.D.  
Enroll anytime  
Online • $525

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 comprises 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 EL ENG X138 (offered this term)  
• Advanced Analog Microelectronics EL ENG X139 (offered this term)  
• Fundamentals of Analog Integrated Circuit Design Techniques EL ENG X140 (offered this term)  
• Advanced Design Techniques for Analog Integrated Circuits EL ENG X141 (offered this term)  
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) 642-4115  
See p. 183 for complete certificate details.
Advanced Analog Microelectronics
EL ENG 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.

Sec. 001
Vincent Chang, Ph.D.
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Online • $525

Fundamentals of Analog Integrated Circuit Design Techniques
EL ENG 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. 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. 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.

Sec. 001
Vincent Chang, Ph.D.
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Online • $525

Advanced Design Techniques for Analog Integrated Circuits
EL ENG 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 multi-standard 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.

Sec. 001
Vincent Chang, Ph.D.
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Online • $525

Introduction to Microelectronic Theory and Applications
EL ENG X30 • 1 semester unit in Electrical Engineering

An elective in the Certificate Program in Integrated Circuit Design and Techniques

Take an application-oriented approach to 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, precision rectifiers, voltage regulators and biasing techniques of amplifiers.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Fundamentals of Integrated Circuit Design
EL ENG 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.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Introduction to Physics of Semiconductor Devices
EL ENG 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.

Sec. 001
Vincent Chang, Ph.D.
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5. In Person: At Golden Bear Center,
   1995 University Ave., Berkeley
Fundamentals of Analog Microelectronic Techniques
EL ENG 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 performing 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 focuses on the analysis-by-inspection method. Topics 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.
Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Effective SPICE Circuit Simulation Techniques
EL ENG 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.
Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Fundamentals of Modern Data Converter Design
EL ENG 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. You gain a solid foundation and the skills to diagnose and tackle real-world issues. Topics include data converter fundamentals, characterizations and performance limitations, Nyquist-rate digital-to-analog (D/A) and analog-to-digital (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.
Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Digital Integrated Circuit Design
EL ENG 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), emitter-coupled logic (ECL) and BiCMOS logic to memory design. 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.
Sec. 001
Vincent Chang, Ph.D.
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Online • $525

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Design Techniques of High-Performance Data Converters
EL ENG 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 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 0.8GS/s analog-to-digital converters (ADC) for 10Gb/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.

Sec. 001
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Writing, Editing and Technical Communication

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Editing

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Online • FREE

Grammar, Mechanics and Usage for Editors
ENGLISH 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.

Sec. 014
Anne Hill, B.S., J.D., M.A.
Jan. 14–April 8
Online • $645

Sec. 015
Amanda Kaufmann, M.A.
Jan. 14–April 8
Online • $645

Sec. 017
Barbara Magalnick, M.S.
Jan. 21–April 15
Online • $645

Sec. 018
Diane Martin, M.A.
Jan. 21–April 15
Online • $645

Sec. 019
Anne M. Ahlman, M.P.T.
Jan. 21–April 15
Online • $645

CORPORATE AND PROFESSIONAL TRAINING

UC Berkeley Extension is a leader in employee development and workforce training. We design education programs that suit the precise training needs of your employees and organization. No matter where your employees are located, we have the ability to come to you.

For more information, visit extension.berkeley.edu/corporate.
**Editorial Workshop I: Introduction to Copyediting**

**JOURN 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; and copyedit and insert figures, tables and artwork. *Enrollment is limited.*

**Sec. 011**
Leda Ciraolo, Ph.D.
Jan. 14–April 8
Online *$645*

**Sec. 012**
Beth Burke, B.S., M.A.
Jan. 14–April 8
Online *$645*

**Sec. 014**
Amanda Kaufmann, M.A.
Jan. 21–April 15
Online *$645*

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**Editorial Workshop II: Intermediate Copyediting**

**JOURN X415** • 2 semester units in Journalism

*A requirement in the Professional Sequence in Editing*

Study the 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. Receive practice working with codes and type specifications, photos and artwork, tables, and references and footnotes.

**Sec. 004**
Lisa Carlson, B.A.
Jan. 14–April 8
Online *$645*

**Sec. 005**
Leda Ciraolo, Ph.D.
Jan. 21–April 15
Online *$645*

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**Advanced Editorial Workshop: Substantive Editing**

**JOURN 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 non-fiction 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.

**Sec. 006**
Anna Lustig, M.A.
Jan. 14–April 8
Online *$645*

**Sec. 007**
Cathleen Small, B.A., M.A.
Jan. 21–April 15
Online *$645*

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**Indexing: Theory and Application**

**JOURN X477** • 3 semester units in Journalism

Recipient of the 2005 Distance Learning “Community of Practice” Course Award from the University Professional and Continuing Education Association (UPCEA)

A good index greatly enhances a book’s usability and value, 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 formats, guidelines and term-selection approaches of embedded and Web indexing using three major indexing software programs to complete several assignments.

**Prerequisites:** Strong language, reading, computer and Internet skills; a PC running 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/writing.

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**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 comprises 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 ENGLISH X445 (offered this term)
- Editorial Workshop I: Introduction to Copyediting JOURN X405 (offered this term)
- Editorial Workshop II: Intermediate Copyediting JOURN X415 (offered this term)
- Advanced Editorial Workshop: Substantive Editing JOURN X425* (offered this term)
- Advanced Editorial Workshop: Substantive Editing JOURN X425 (offered this term)
- Advanced Editorial Workshop: Substantive Editing JOURN X425* (offered this term)

*Course from the Professional Sequence in Technical Communication of equivalent length and unit value may be substituted for Advanced Editorial Workshop: Substantive Editing JOURN X425.

**Learn More and View the Brochure**

extension.berkeley.edu/programs/edit.html
(510) 642-6362
letters@unex.berkeley.edu

See p. 189 for complete program details.
Technical Communication

Technical Communication II
JOURN 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 JOURN X465, and hone your ability to define a document’s audience and purpose 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 print and online presentation. Review technical communication tools and technologies, as well as current Web content and formatting languages.

Prerequisite: Technical Communication I JOURN X465, Technical Writing JOURN X412 or equivalent

Sec. 002
John Tabor, B.A.
Enroll anytime
Online • $550

Technical Writing
JOURN X412 • 3 semester units in English
May be substituted for Technical Communication I JOURN 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, desktop publishing and the publication-to-print process.

Sec. 001
John Tabor, B.A.
Enroll anytime
Online • $770

Writing

ONLINE INFORMATION SESSION
Editing and Writing Professional Programs
UNEX 1095
Find out how UC Berkeley Extension’s programs for aspiring writers and editors can help formalize your training, prepare you for graduate-level study or enhance your career. Visit the program pages online to register.

Thursday, Jan. 9, 12–1 pm
Online • FREE

Exploring Your Creative Writing Potential
ENGLISH X70 • 2 semester units in English
Learn to assess your potential, identify your strengths and develop valuable writing techniques in this course for beginning writers. Exercises and weekly writing assignments help you discover your talents in a variety of forms: brief fictional scenes, short stories, poetry and journalistic writing. The supportive atmosphere helps you see how others respond to your writing.

Sec. 001
David Rompf, J.D.
Jan. 14–April 8
Online • $550

The Craft of Writing
ENGLISH 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 you 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. 006
David Rompf, J.D.
Jan. 14–April 8
Online • $575

Sec. 007
Erich Miller, M.F.A.
Jan. 21–April 15
Online • $575

Introduction to Writing Fiction
ENGLISH 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. 004
Marc Schiffman, M.F.A.
Jan. 21–April 15
Online • $550

Writing Skills Workshop
ENGLISH 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 course, prepare to 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 for those wishing to hone their skills for any writing need.

Sec. 010
Marc Schiffman, M.F.A.
Jan. 21–April 15
Online • $575

Sec. 011
Katherine Sharpe, M.A.
Jan. 21–April 15
Online • $575

Writing the Feature Story
JOURN X419 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing and in the Specialized Program in Professional Writing

Develop an understanding of how feature stories blend journalism and art. Explore the dual nature of features based on facts but with the voice of a novel. Learn how to grab the attention of editors and audiences and create successful feature stories for magazines, newspapers and online publications.

Sec. 004
Margaret Steen, M.J., Extension Honored Instructor,
Enroll anytime
Online • $550

VISIT OUR WEBSITE
Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu
**Introductory Composition**
ENGLISH 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.

Sec. 001
Susie Meserve, B.A., M.F.A.
Enroll anytime
Online, proctored final exam • $715

**Composition and Literature**
ENGLISH 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 ENGLISH X2A is not a prerequisite for this online course.

Sec. 001
Susie Meserve, B.A., M.F.A.
Enroll anytime
Online, proctored final exam • $715

**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 comprises 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 ENGLISH X421 (offered this term)
- Writing Skills Workshop ENGLISH 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

See p. 193 for complete certificate details.

**COURSES AVAILABLE THROUGHOUT THE YEAR**

UC Berkeley Extension has three terms, spring, summer and fall. New courses start almost every month. Check extension.berkeley.edu/catalog for current course information and to enroll.

**FIVE WAYS TO ENROLL**

1. Online: extension.berkeley.edu
2. Phone: (510) 642-4111
3. Mail:
   Department B
   1995 University Ave., Suite 110
   Berkeley, CA
   94704-7000
4. Purchase Order: (510) 642-3910
5. In Person: At Golden Bear Center,
   1995 University Ave., Berkeley
Student Services

Enrollment

Who May Enroll
UC Berkeley Extension courses are open to the general public. Unless otherwise indicated, any interested adult may enroll. If you require special accommodation, please refer to Disabled Student Services on p. 234. Any course prerequisites are listed in the course descriptions.

Note regarding enrollment in UC Berkeley-equivalent (XB or XBW) courses, including courses through concurrent enrollment. Special requirements and deadlines apply to students in UC Berkeley-equivalent courses, including those taken through concurrent enrollment or online.

Review these requirements and deadlines prior to enrollment. For further information, please refer to p. 230 or extension.berkeley.edu/static/student/services/enrollment.

 Concurrent enrollment application procedures and deadlines differ from other Extension courses; for information specific to concurrent enrollment, refer to extension.berkeley.edu/static/student/services/concurrent.

How to Enroll
You may enroll online, by phone, by mail or in person at the Golden Bear Center. UC Berkeley Extension uses your contact information provided at the time of enrollment to notify you of any changes in your class schedule.

Online
Visit extension.berkeley.edu to enroll online. You must create and/or log in to your student account before enrolling and paying for your courses. For detailed information on how to set up your account, please visit http://extension.berkeley.edu/upload/student_web_tutorial.pdf. Once you create your student account, you receive two emails at your preferred email address: one for your user name and one for your password. You can use your user name and password to log in to your account and to enroll and pay for courses. If you forget your user name or password, select Forgot User Name or Forgot Password on the student login screen and follow the instructions to resend/reset them. You may also call (510) 642-4111 if you are having trouble logging in. Please note that your user name is also your UC Berkeley Extension student ID number and it cannot be changed. However, when you log in to your account, you may change your password and your contact information, affiliate yourself with a licensing board or professional association, affiliate yourself with a group or third-party payer, and update other information.

Phone
Call (510) 642-4111. Telephone registration hours are 9 am–5 pm, Monday–Friday, except holidays (see p. 234). Please be prepared to give us the information requested on the enrollment form on the inside back cover of this catalog. UC Berkeley Extension accepts Visa, MasterCard, Diners Club and American Express.

Mail
Complete and send us the enrollment form on the inside back cover of this catalog, or a copy of it, with payment to UC Berkeley Extension, Department B, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000. Make checks payable to UC Regents. Do not mail cash.

Purchase Order
For payment by purchase order only, fax enrollments to (510) 642-3910. For more information regarding purchase orders, see Paying Enrollment Fees on this page.

In Person
In-person enrollment is only available at the Golden Bear Center. See p. 236 for center hours and location.

When to Enroll
Enrollment for the spring 2014 term opens Dec. 4. Enrollments are processed in the order received, so 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. If a course has six or more classroom meetings, and if space permits, you may attend the first class meeting of a course. If the minimum enrollment is not met, the course 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 can be immediately available if you do not enroll in advance.

For course status or availability information, please visit extension.berkeley.edu or 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 continuous enrollment, which means you may enroll at any time and progress at your own pace. You must allocate a minimum of 30 days 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 90 days. You have a maximum of 180 days to complete any continuous-enrollment course from the date of enrollment, unless otherwise noted in the course description. Submit no more than one assignment 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 before the completion date, you receive a grade of F.

Paying Enrollment Fees
You are not officially enrolled until fees are paid in full; partial payments cannot be accepted. All fees are 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.

A hold may be placed on your student records and transcripts requests until all outstanding debts to the University are paid in full.

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. If you pay by credit card and the charge is declined, you lose your space in the course.
- 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, military tuition assistance or employer tuition voucher, please fax the completed enrollment form with the purchase order form 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 Extension, and attach a screenshot showing this transfer to your enrollment form when enrolling by mail or in person.

Enrollment Confirmation
When you enroll using the Extension website or by phone, you receive a receipt via email after your payment is processed. If you enroll in person at the Golden Bear Center, the cashier gives you a receipt, and on request, can also email you an enrollment confirmation and receipt.

Wait list for Courses
Your name is added to the wait list if your requested course section is full. On the website, sections that are
full have a JOIN WAIT LIST button. Click on that button and fill in the requested information. You are notified if space becomes available. If we do not hear from you within 24 hours of notification, the space is offered to the next person on the wait list. If you are wait listed, you should not attend the first class meeting unless you are specifically advised to do so by Student Services. Student Services maintains the wait list; instructors cannot approve enrollments from the wait list.

Transfers
To change sections or to enroll in a different course, call (510) 642-4111 during business hours: Monday–Friday, 9 am–5 pm, Pacific time.

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. The timelines stated below are standard transfer policy timelines; these timelines, however, may vary for specific course sections. Transfer requests that are a result of a course cancellation are not subject to the transfer processing fee.

Approval for transfers are based on course and space availability and the scheduled course start date, as applicable. Any difference in course fees is assessed and due at the time of the transfer. If you have any questions regarding the transfer policy, please call (510) 642-4111 or email refund-unex@berkeley.edu.

Note: All transfer deadlines below apply to the class in which you are currently enrolled. Different add/drop and withdrawal policies and deadlines apply to UC Berkeley–equivalent courses. UC Berkeley–equivalent courses are denoted by the prefix XB or XBW in course numbers.

Transfers for Classroom and Hybrid Courses
Between courses with fewer than six meetings: Transfer requests must be made one 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. If the course meets on the weekend, the transfer deadline is the Friday immediately before the course starts.

Between courses with six or more meetings each: Transfer requests must be made one day before the second course meeting of both courses, provided the enrollment limit of the course you are transferring to has not been reached. If the course meets on the weekend, the transfer deadline is the Friday immediately before the second class meeting. The timeline for transferring varies from one to 14 days after the course start date, depending on the course meeting pattern.

Transfers for Online Courses
For fixed-date online courses, you can request transfers up to six days after the course start date. For continuous-enrollment online courses, you can request transfers up to six days after you enroll.

Drop/Refund and Transfer Appeals
Appeals to the drop/refund and transfer policies and deadlines are only approved by exception for extenuating circumstances such as personal or family emergencies. You may submit an appeal in writing to refund-unex@berkeley.edu. You may also write to the Registrar’s Office or in person at the Golden Bear Center in Berkeley.
Office, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7005, or fax a request to (510) 642-0374. Include your name, the name and section number of your course, your reason for requesting a refund appeal, and your daytime phone number. 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. If a course is canceled, you may either request a transfer to another course or you automatically receive a full refund, usually within four weeks.

Course Credit and Grades

Academic Standards
All academic credit courses numbered X, XB1–299 and XBW1–299 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, postgraduate 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
Participating in UC Berkeley Extension programs and courses does not in itself provide preference in admission to the University of California. If you are interested in applying to the University of California, you should refer to the University of California Admissions website or the admissions office of the University of California campus you wish to attend for details about the admissions process.

UC Berkeley’s Office of Undergraduate Admissions is located at 103 Sproul Hall. Contact the office online at students.berkeley.edu/admissions/index.asp. The University of California campuses use the same procedures to evaluate and determine the suitability of Extension credit courses to fulfill degree requirements as they do for credits gained at other regionally accredited institutions.

If you are admitted for a future term or 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 adviser in order to transfer credit earned at UC Berkeley Extension toward UC degree requirements.

If you are a UC Berkeley–matriculated undergraduate student or a student in the Fall Program for Freshmen, special regulations may apply. See extension.berkeley.edu/static/studentservices/grades for more information.

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.

Application of Credit or Noncredit CEUs Toward Licensing and Other Requirements
When courses in this catalog have been approved by government agencies, licensing boards, professional associations and other authorities as meeting their educational criteria, a statement to this effect appears with the course listing. Through your student account on the website, you can elect to affiliate yourself with your licensing board or professional association and enter your license number or member identification number. Upon enrolling online into courses that are offered for licensing or other professional education requirements, you can elect to earn professional education units from these organizations. Some licensing boards and organizations also require that you sign in and sign out at each class meeting. Upon completion of the course, the academic department may issue you a letter of completion that you can submit to your organization as evidence that you have fulfilled their licensing or professional education requirements. Please note that only credit semester units or noncredit continuing education units are recorded on your UC Berkeley Extension transcript, as applicable.

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 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, require more instructional time and less study time. The title of each credit course in the catalog is followed by the academic approving department abbreviation and the course number with a letter prefix and sometimes a letter suffix, for example, Analytic Geometry and Calculus MATH 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 and the Fall Program for Freshmen 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/static/studentservices/enrollment. For information about UC Berkeley prefixes and suffixes, visit http://academic-senate.berkeley.edu/committees/ccc/handbook2#2-2-5.

Course Numbers
The course number indicates the level of instruction as detailed below:

- X, XB1–99 and XBW1–99: Lower-division credit courses at the level of the first two years of college.
- X, XB100–199 and XBW100–199: Upper-division credit courses at the level of the second two years of college.
- X, XB200–299 and 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 or academic department’s permission to enroll.

Noncredit Courses
You may take any credit course on a noncredit basis. If you opt to change from a credit to noncredit basis, you must inform your instructor prior to your final exam, prior to your online course end date or project due date, or by the deadlines established for XB and XBW and concurrent enrollment courses. Please note that opting for noncredit means that you attended the course but decided not to complete credit requirements.

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.

Noncredit Courses Numbered 800–899
While not offering academic credit, these professional courses are offered either for a letter grade, P/NP or for
CEUs. Extension does not award both a grade and CEUs for the same course.

Other Noncredit Courses
Noncredit courses that carry no academic credit, grades or CEU values are not recorded on your transcript. Noncredit courses that carry grades or CEU values are recorded on your transcript.

Grades
If you enroll for credit, you must meet the attendance, participation and course requirements set by the instructor. You can log in to your student account on the Extension website to view grades and print grade reports. On request only, grade reports can be mailed to you via USPS. Note: The grade report is not an official transcript.

We assume that when you enroll in a credit course, you want to receive a letter grade. In some courses, however, you may opt to take the course for a passed/not passed grade (P/NP) or to take the course on a noncredit basis (NC). If you opt to change from a letter grade to a P/NP grade or from a letter grade to a noncredit basis, you must inform your instructor before the last class meeting, or by the deadlines established for XB and XBW and concurrent enrollment courses. If you plan to apply that course toward a degree or professional certificate, you should first make sure that a P/NP grade is accepted. Please note that most institutions do not accept noncredit courses and noncredit grade options for transfer credit. We cannot change a P/NP grade or NC grade option to a letter grade after recording it.

Letter Grades
A Excellent
B Good
C Fair
D Barely passing
F Failure

Plus or minus grades may be recorded.

Passed/Not Passed Grades
P Passed (equivalent to a C– or higher)
NP Not passed (lower than C–)

Other Letter Designations
W Withdrew without academic penalty. You can submit a request to withdraw by logging in to your student account and submitting the request on the Enrollment History page. You may also print out a Petition to Withdraw form from your student account in the Forms and Policies section. The request or form must be submitted prior to your final exam, prior to your online course or project due date, or by the deadlines established for XB and XBW and concurrent enrollment courses. Visit extension.berkeley.edu/static/studentservices/concurrent and http://extension.berkeley.edu/static/studentservices/enrollment/#wb for details. If your request to withdraw is approved, you receive a W grade that appears on your official transcript.

NC Not for credit. Signifies attendance but not completion of credit requirements.

Incomplete. Issued for coursework of passing quality but not finished during the term or enrollment period. Incomplete grades are contingent on instructor approval, and instructors are under no obligation to grant them. If left unresolved, an Incomplete (I) grade in any course becomes part of your permanent academic record.

An I designation is 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 successfully 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) to make up any missed work within three months of the final class meeting date or online course end date.
4. You can log into your student account and find the Incomplete Petition Form in the Forms and Policies section. Complete the petition as documentation of your written arrangement with the instructor(s) and submit it as directed on the form by the final class meeting date or by the online course end date.
5. Online students only: Please note that once enrollment expires or a grade of I or NC is recorded, you 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 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/static/studentservices/grades.

Grade Points and Averages
Although UC Berkeley Extension does not calculate or record an official grade point average (GPA) on your transcript, GPAs can be unofficially calculated on the basis of grades and number of units. The University’s scale of grade points is A+ = 5, B+ = 4, B = 3, C = 2, D = 1 and F = 0. A plus (+) or minus (−) may also be recorded. Grades with a plus sign (such as B+) carry 0.3 points more per unit; minus grades (such as A−) carry 0.3 points less. (An A+ counts as 4.0.) Work is shown in semester units unless otherwise noted.

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 or gender— not directly reflective of performance related to course requirements;
2. Sexual harassment; or,
3. Clerical or procedural error in the calculation of your final grade.

Consult your instructor if you have a question about your final grade. If the matter is not resolved at the instructor level, write to your program director to request a final grade review within 30 days after your final grade is posted to your student account. Within your final grade review request, state which of the above three criteria comprises the grounds for the request. The program director then 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 Ave., 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

Records
We maintain permanent academic records for UC Berkeley Extension students who have completed credit courses and noncredit courses numbered 800–899, and noncredit courses that carry CEU values.

On July 9, 2013, UC Berkeley Extension began its transition to a new student information system. The new system includes student accounts. For classroom and online fixed-date coursework that occurred in summer 2013 or before and for online continuous enrollments that occurred prior to July 9, 2013, coursework, grades and transcripts are retained by UC Berkeley Extension in former students systems.

For concurrent enrollment and Fall Program for Freshmen coursework occurring in fall 2013 and in spring 2014, coursework, grades and transcripts are retained by UC Berkeley Extension in former students systems.

For other classroom and online fixed-date coursework starting with the fall 2013 term forward and for online continuous enrollments on or after July 9, 2013, you can log in to your student account on the UC Berkeley Extension website and view your enrollment history, including coursework and grades.

Ordering Transcripts
You have three options to order transcripts: online, by mail or in person. No phone or email orders are accepted.
All transcript orders require a signed authorization, which includes the signature of the student whose record is requested. Please note that courses in progress are not included on transcripts.

All transcripts—standard and rush—are sent via U.S. First-Class Mail unless requested otherwise.

**Standard Requests**

Please allow 10–15 business days from the time UC Berkeley Extension receives the request to process and mail your transcript(s).

**Rush Service**

If you need transcript(s) mailed sooner, you may opt for rush service ($15 rush service fee required per order). All transcripts requested in the same order are processed as rush requests for a single $15 rush fee. Rush service ensures that transcript(s) are mailed the next business day after the receipt of the signed authorization and payment. Ensure that all grades have been submitted and recorded before requesting a rush transcript. Grades that have not been recorded are not included on transcripts.

**Hold for Final Grades Option**

Your transcript includes all courses for which final grades have been submitted and recorded. If you have not yet finished your coursework or not received grades for courses that must appear on your transcript, check “Hold for final grades” on the order form and indicate the course title, term, and year that you will complete that coursework. The UC Berkeley Extension Registrar’s Office will not mail your transcript(s) until those grades have been recorded. No partial transcripts are issued.

**Ordering Transcripts Online**

Order transcripts online (including rush transcripts) through Credential Solutions Transcript Ordering Services at https://www.credentials-inc.com/cgi-bin/dcgtpm.pl?ALUMMTOEX1312.

Complete the contact information and transcript request details, pay by credit card, choose standard or rush service, and opt to have the transcripts sent via U.S. First-Class Mail or a courier service (such as FedEx). During the ordering process, you will be provided with an authorization form; you can either print this form immediately or have a printable PDF emailed to you. Print and sign the authorization form, and return the form as directed by Credential Solutions. Your transcript request cannot be completed until the authorization form is received, regardless of when you place your online order. Transcripts ordered online are sent as a standard request via U.S. First-Class Mail unless requested otherwise.

**Ordering Transcripts by Mail**

You can order transcripts (including rush transcripts) by mail. Log in to your student account and find the Transcript Request and Authorization form located in the Forms and Policies section. Print and complete the form, select the appropriate payment amount and method, and sign the form to authorize release of your transcript(s). Mail the form with payment to UC Berkeley Extension at the address listed on the form; your request will be processed when it is received. The Transcript Request and Authorization form may not be emailed or faxed, and electronic signatures are not accepted. Transcripts ordered by mail are delivered by U.S. First-Class Mail unless requested otherwise.

**Ordering Transcripts in Person and Same-Day Pickup**

Order transcripts (including rush transcripts) in person with the Transcript Request and Authorization form available at extension.berkeley.edu/static/studentservices/transcripts.

Print and complete the form, select the appropriate payment amount and method, and sign the form to authorize release of your transcript(s). Bring the form and payment to the Student Administrative Services Office at 1995 University Ave., Suite 110, Berkeley, CA, 94704-7000, Monday–Friday, 9 am–3 pm. You may have the transcripts sent by U.S. First-Class Mail, or you may pick them up in person with a photo ID. If another person is paying for and picking up your transcript for you, he or she must provide a photo ID AND a written authorization, signed by you, to receive the transcript. All in-person rush service requests for same-day pickup of transcript(s) require the $15 rush service charge per order.

**Transcript Holds**

A hold may be placed on your records and no request for transcript is granted until all outstanding debts to the University are paid in full. A hold may also be placed on transcripts for student conduct code violations.

**Partial Transcripts**

UC Berkeley Extension does not issue in-progress or partial transcripts. You can print an Enrollment Confirmation or receipt by logging into your student account on the Extension website.

**Course Description Availability**

Past catalogs are available on the website. If you cannot find the course description on the website, you may order one by completing a Transcript Request and Authorization form (see Order Transcripts by Mail on this page for more information). Course descriptions are copied from the appropriate UC Berkeley Extension catalog. There is a $15 charge for each copy of each course description requested.

**Family Educational Rights and Privacy Act (FERPA) Disclosure Policy**

The UC Berkeley Extension Dean’s Office is responsible for maintaining Extension student records, and any questions about them should be addressed to the Dean’s Office in writing. The policy governing the disclosure of information from student records is available at extension.berkeley.edu/static/studentservices/policies. This policy provides for your right to be informed about where student records are located, to review your own records, to request corrections, to grieve alleged violations of privacy, to consent to disclosures of personally identifiable information and to file complaints with the U.S. Department of Education. UC Berkeley Extension adheres to the privacy requirements in FERPA, the California Information Practices Act and all other applicable federal and state laws and regulations that safeguard education records, privacy and confidentiality.

UC Berkeley Extension has designated the following as public information under the policy, and on request may release this information to the general public, including potential employers: student names; terms of attendance; and major fields of study, including any earned certificates or other program completion awards. You may opt out of releasing this information by logging into your student profile and changing your privacy settings.

**Professional Certificates, Specialized Programs of Study and Other Curricula**

**Curricula**

UC Berkeley Extension offers professional certificates and other organized curricula in a variety of subject areas. (For the complete list, see pp. 270.)

**Getting Started**

Consult the certificate’s description in this catalog for recommended beginning courses.

**Registration Procedures**

You should register for most certificates and specialized programs of study before you begin your third course; see individual certificate and program requirements for details. To register, complete the registration form on p. 271. Mail it as indicated, and include the registration fee. Do not send cash. You can also register online at extension.berkeley.edu/cert/register.html. Click on the certificate or program title to begin the registration process. Complete your student account profile if you are a new student, and pay the registration fee.

Some certificates and programs require application for candidacy before enrolling in courses; please read individual certificate and program requirements carefully.

Requirements are updated based on new developments in the field of study; we recommend you complete the curriculum in a timely manner.

**Fees**

The registration fee for professional certificates is $150; the registration fees for specialized programs of study are $50 or $100, depending on the specific program. All fees must accompany the registration. All fees are subject to change without notice. Certificate and program registration fees are not refundable.

**Requirements**

See the individual certificate or program descriptions for required and elective courses. A program GPA of 2.5 is the minimum required for completion of a certificate or program, and you must complete each course in any certificate or program with a grade of C or better. Higher grades are required in some programs.

**Preparation**

For many professional certificates, a college degree or comparable professional experience is recommended. Some certificates have more specific prerequisites.
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. All course substitution coursework—including UC Berkeley Extension course substitutions, transfer credit and waivers—must not exceed one-fourth of the total number of semester units and hours of the professional certificate.

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 description of the course you wish to transfer.

2. Transfer credit is only accepted if:
   • You completed all coursework to be transferred prior to beginning the certificate at UC Berkeley Extension.
   • Your substitution coursework—including UC Berkeley Extension course substitutions, transfer credit and waivers—does not exceed one-fourth of the total number of semester units/hours required for the professional certificate.
   • You have obtained a B or higher 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 is calculated into your professional certificate GPA.

4. Accepted transfer credit from institutions outside of the UC system is not calculated into your professional certificate GPA.

After you have started your professional certificate, no transfer credit is 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>Quarter units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>4½</td>
</tr>
<tr>
<td>4</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/static/online.

Obtaining the Certificate or Award of Completion

When you have satisfied your program course requirements, you must notify your academic department to receive the certificate or Award of Completion.

Transcript Notation

Completion of the professional certificate or program is noted on your permanent record (transcript).

Financial Assistance

You must be registered in a professional certificate to be certified for financial assistance. Financial assistance is not available to online or international students.

Select a Lender to Apply for Alternative Private Student Loans

You are free to borrow from any lender of your choosing. We encourage you to review lender terms and conditions and carefully consider the benefits and repayment information before choosing a lender. Extension programs and certificates are not eligible for federally sponsored (Title IV) financial assistance, and Extension is not approved to complete loan deferments for federally sponsored financial assistance (Title IV) loans. Exceptions include the Fall Program for Freshmen. Visit fpf.berkeley.edu for more information.

If you are considering a student loan, you should be aware of the differences between private student loans and federal student loans:

• Unlike federal loans, private student loans are not required by law to provide a range of flexible repayment options including, but not limited to, income-based and income-contingent repayment plans, as well as loan forgiveness benefits.

• Private student loans are not always available to students regardless of income. Federal direct loans are available to most students regardless of income, but other qualification criteria apply. For more information, visit www.studentaid.ed.gov/eligibility.

• Private student loan lenders can offer variable interest rates that can increase or decrease over time, depending on market conditions.

• The interest rate on a private loan may depend on the borrower’s and/or co-signer’s credit rating.

• Private student loans have a range of interest rates and fees and students should determine the interest rate of, and any fees associated with, the private student loan included in their financial assistance package before accepting the loan. Students should contact the lender of the private student loan or the UC Berkeley Extension financial assistance office at finast-unex@berkeley.edu if they have any questions about a private student loan.

Visit extension.berkeley.edu/static/studentservices/certprog to find a list of preferred lenders. To review The University of California Code of Conduct in Regard to Preferred Lender Arrangements, visit www.ucop.edu/student-affairs/_files/loans/codeofconduct.pdf.

Loans are 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 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 finast-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.

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 requires a fee and a signed release form from you. Please allow 15 business days for processing. If you have questions, call (510) 642-4111 (option 3) or email records-unex@berkeley.edu.

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>Course type</th>
<th>Full time</th>
<th>Half time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses numbered 1–199 (undergraduate-level)</td>
<td>12 semester units</td>
<td>6–11.9 sem. units</td>
</tr>
<tr>
<td>Courses numbered 200–299 (graduate-level)</td>
<td>12 semester units</td>
<td>6–11.9 sem. units</td>
</tr>
<tr>
<td>Courses numbered 300–399 (professional courses in education)</td>
<td>8 semester units</td>
<td>6–7.9 sem. units</td>
</tr>
<tr>
<td>Courses numbered 400–499 (professional courses in subjects other than education)</td>
<td>8 semester units</td>
<td>6–7.9 sem. units</td>
</tr>
</tbody>
</table>

Please call (510) 643-2843 or email finast-unex@berkeley.edu for information regarding full- and half-time study.

Full-Time Study for International Students

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.
Restrictions for Those Traveling With Nonstudent Visas

If you are visiting the United States on a B1/B2 tourist visa, you are prohibited from enrolling into a full-time program of study at UC Berkeley Extension. You may take a course at UC Berkeley Extension only for recreational purposes. Such study cannot be the main purpose of your visit, and your course cannot exceed 18 instructional hours per week. Refer to your visa application for more details, and see extension.berkeley.edu/static/studentservices/policies for specific restrictions before enrolling.

Military Educational Benefits

Tuition Assistance for Active Military

If you are in the military on active duty and need information about using your tuition assistance funds toward enrollment into a certificate program at UC Berkeley Extension, email Student Affairs specialist Sarah Van Nostrand at extension-studentaffairs@berkeley.edu for advising. You are provided with the following information: an educational plan; certificate requirements; estimated costs; options for private financial assistance; and policies and procedures regarding enrollment, drops, refunds, transfers, withdrawals, substitutions, waivers and transfer credit; academic residency; unanticipated deployment; and refund appeals and grade review appeals. Private financial assistance is not available for certificate programs offered online. Once you are pre-approved by your military education officer, submit your approved tuition assistance voucher and a completed enrollment form to unex_ar@unex.berkeley.edu or fax it to (510) 642-3910.

If you wish to enroll in an individual course using your tuition assistance funds, you must be pre-approved to take the course by your military education officer. Once you are pre-approved, submit your approved tuition assistance voucher and a completed enrollment form to unex_ar@unex.berkeley.edu or fax it to (510) 642-3910. Please note that private financial assistance is not available for individual courses at UC Berkeley Extension.

Military Spouse Career Advancement Accounts (MyCAA)

UC Berkeley Extension participates in the Department of Defense (DoD) Military Spouse Career Advancement Accounts (MyCAA) program. This program provides financial assistance for military spouses who are pursuing a certificate program of study at UC Berkeley Extension. For program eligibility requirements and restrictions, contact Military One Source at (800) 342-9647 or visit militaryonesource.com.

If you would like to use MyCAA benefits at Berkeley Extension, please complete the following steps:

1. Establish your MyCAA account at aiportal.acc.af.mil/mycaa, selecting UNIVERSITY OF CALIFORNIA BERKELEY EXTENSION as the designated school. (You must designate University of California Berkeley Extension to ensure that MyCAA funds go directly to UC Berkeley Extension.) Requests designating other schools are not be honored.

2. Within 90 days of each course start date, a current MyCAA Financial Assistance (FA) voucher and a UC Berkeley Extension enrollment form must be submitted to UC Berkeley Extension. Attn: Sponsored Enrollment, 1995 University Ave, Suite 110, Berkeley, CA 94704, fax: (510) 642-3910, telephone: (510) 642-4111. This document serves as a purchase order, and authorizes UC Berkeley Extension to enroll you in the course and invoice MyCAA for enrollment fees.

Note: If you’re unable to access the MyCAA website, contact (800) 342-9647 for assistance.

Cal Vet Tuition Exemption

Under California law and University of California policy, the Cal Vet tuition exemption applies only to certain charges assessed to students in state-supported programs. Since UC Berkeley Extension is a self-supporting program, students enrolled in UC Berkeley Extension programs are not eligible for the Cal Vet tuition exemption. If you have any questions about the applicability of the Cal Vet tuition exemption policy at the University of California, contact extension -studentaffairs@berkeley.edu.

Veterans’ Benefits

Currently, UC Berkeley Extension certifies Veterans Administration benefits only for students eligible for Vocational Rehabilitation (Chapter 31) under the Veterans Administration Benefits program. No other veterans’ benefits can be certified. Contact Sarah Van Nostrand, extension-studentaffairs@berkeley.edu or (510) 664-4216, for additional information.

For more information on eligibility for Chapter 31, see the Department of Veterans Affairs website at www.vba.va.gov/bln/vre/.

DANTES

UC Berkeley Extension is no longer eligible to accept DANTES (Defense Activity for Non-Traditional Education Support).

Concurrent Enrollment

UC Berkeley campus courses are open to the public on a space-available basis through Extension's concurrent enrollment program. 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 enroll 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. See Applications of Credit Toward UC Degrees section on p. 230 for more information.

Concurrent enrollment fees and deadlines for application, add/drop, payment, refund request and change of grading option are listed at extension.berkeley.edu/static/studentservices/concurrent. Late applications are not accepted.

For frequently asked questions about concurrent enrollment, visit extension.berkeley.edu/static/studentservices/concurrent/faq or contact us at concurrent-unex@berkeley.edu.

Policies and General Information

Holidays

UC Berkeley Extension is closed on:

- Martin Luther King Jr. Day Jan. 20, 2014
- Presidents’ Day Feb. 17, 2014
- Cesar Chavez Day March 28, 2014
- Memorial Day May 26, 2014

Mailing List and Address Change

When you create your student account on the Extension website, you can opt in or out of receiving the print course catalog. You can also clip the catalog mailing label and send it to UC Berkeley Extension, CMS Dept., 1995 University Ave., Suite 110, Berkeley, CA 94704-7000. UC Berkeley Extension never sells its mailing list.

If you have moved since you last enrolled, update your Student Profile online or submit a Change of Permanent Student Information form to update your permanent record. The form is available online at extension.berkeley.edu/static/studentservicesgeninfo/#addchange and at UC Berkeley Extension centers, or you may have it mailed to you by calling (510) 642-4111. Note: The completed form must include your signature.

Disabled Student Services

UC Berkeley Extension makes arrangements to ensure access to our courses for 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’s Office, Attn.: Special Needs, UC Berkeley
Library Use
Extension students can use the UC Berkeley campus libraries. 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
You are free to purchase your textbooks from any vendor. Textbook information is available on the website under the course section information. You should note the ISBN when making purchases as publishers frequently update editions. Several online booksellers specialize in textbook sales and rentals. You can also special order textbooks through most local and chain bookstores. Please be sure to thoroughly review the return policies before making a purchasing decision as UC Berkeley Extension does not reimburse students for course materials in the event of a textbook change or an unexpected cancellation or rescheduled course section.

Proctored Final Exam Fee
Students not enrolled at UC Berkeley Extension must pay a $150 fee for taking a proctored exam at the Golden Bear Center. 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
To verify your taxpayer’s eligibility for education tax credits, UC Berkeley Extension is required by federal law to report your Social Security number (SSN) or Individual Taxpayer Identification (ITIN) and other pertinent information to the Internal Revenue Service (IRS) per the Taxpayer Relief Act of 1997. If you are a U.S. resident for tax purposes and you have qualified education expenses for the corresponding tax year, you will receive emailed instructions by Jan. 31, 2014, for retrieving your 1098-Ts at www.1098T.com. As of tax year 2013, there will be no 1098-Ts mailed via the U.S. Postal Service. If you do not receive a 1098-T notification by email by Jan. 31, 2013, log in to www.1098T.com to retrieve your 1098-T. If you have any difficulty setting up your personal identification number (PIN) or logging in to the Tax Credit Recording Service (TCRS) website, contact TORS toll free directly at (877) 467-3821.

Classroom Rental
UC Berkeley Extension classrooms in our Belmont, Berkeley and San Francisco locations 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, 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 more information, refer to extension.berkeley.edu/static/studentservices/policies.

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/static/studentservices/policies.

Student Conduct
UC Berkeley Extension, as a unit of the University of California at Berkeley, is committed to maintaining an environment that encourages personal, professional and intellectual growth. 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. This behavior includes abiding by the established rules of conduct intended to foster behaviors that are consistent with a civil, educational setting. 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 online at extension.berkeley.edu/static/studentservices/policies.

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 of 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/static/studentservices/policies.

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. 234). Telephone hours are Monday–Friday, 9 am–5 pm.

Access to Classroom Facilities
For main offices, second-floor classrooms and enrollment/information desk: UC Berkeley Extension, Golden Bear Center, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000; 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. 234, for information about the accessibility of UC Berkeley Extension courses.

Public Transportation and Auto Access
Visit extension.berkeley.edu/static/locations for information on how to get to the Golden Bear Center.

Parking
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. Metered and 2-hour street parking is also available.

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.

Access for Students With Disabilities
See Disabled Student Services, p. 234, for information about the accessibility of UC Berkeley Extension courses.

Public Transportation and Auto Access
Visit extension.berkeley.edu/static/locations for information on how to get to the Belmont Center.

UC Berkeley Campus

Class meetings on the Berkeley campus normally begin 10 minutes after the time printed.

Public Transportation and Auto Access
Visit extension.berkeley.edu/static/locations for information on how to get to campus classrooms.

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 http://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. You can download a BearWalk app at http://bearwalk.berkeley.edu.

Parking on and Near the Campus
Parking and Transportation (P&T) office: 2150 Kittredge St. (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 http://pt.berkeley.edu.

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 http://dsp.berkeley.edu. See p. 234 for information about the accessibility of UC Berkeley Extension courses. See also the information under Campus Night Safety and Services on this page.
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 St., 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. 234, for information about the accessibility of UC Berkeley Extension courses.

Public Transportation and Auto Access
Visit extension.berkeley.edu/static/locations for information on how to get to the Downtown Center.

Parking
There is a parking garage beneath the building. Access is from Fremont Street. The garage is open Monday–Saturday. There is no entry into the parking garage after 8 pm Monday–Friday or after 3 pm on Saturday (but cars may exit after this time). A special evening rate is available after 4:30 pm.

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, 12–10 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. 234, for information about the accessibility of UC Berkeley Extension courses.

Public Transportation and Auto Access
Visit extension.berkeley.edu/static/locations for information on how to get to the Art and Design 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.

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Instructor Biographies

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.

**Robert Adams Jr., M.S.,** is currently employed by Northrop Grumman in Baltimore, where he has worked since 1979 as a software programmer, systems designer, systems engineer and technical lead engineer 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++, C#, Perl, PHP and JavaScript.

**Anne Ahlman, M.P.T.,** writes books and articles on health and medicine, develops continuing medical education courses, edits fiction and nonfiction books, works as a writing coach for graduate-level students and provides peer reviews for health professionals. She is the author of the medical narrative *Naked Elbows: A Physical Therapist’s Reflections on Patient Care, Intuition and Healing* (Gannett Healthcare Group, 2008). She has served as a board officer for the American Medical Writers Association.

**Kashif Ahmad, M.B.B.S., M.Sc., Ph.D.,** has taught a variety of graduate and undergraduate life sciences courses that include anatomy, physiology, pharmacology and general biology in both the classroom and online formats. He has more than 12 years of experience in teaching and in basic science research.

**Erick Ahrens, B.S., M.B.A.,** is a senior business analyst at UCSF, leading development of business intelligence (BI) and data mart systems, and supporting balanced scorecard (BSC) and performance information systems. He teaches applied research and statistics at University of Phoenix.

**Nidhi Ahuja, Ph.D.,** is an adjunct professor and instructor at Merritt College, where she teaches biological sciences. She completed her postdoctoral studies at UCSF. Her research focuses on bacterial pathogenesis.

**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.

**Stephen Albert, M.F.A.,** is a landscape design consultant and a garden writer based in Sonoma, Calif. He works with the Albert Group, a San Francisco project management firm, and is the publisher of Harvestotatable.com.

**Thomas Albert, Ph.D.,** is an advisory technical writer at Accelrys, a software company that provides informatic tools for research in chemistry and biology.

**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.

**Shafiz 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.

**Cheryl Allen, M.S., PMP, Extension Honored Instructor,** is a project management consultant and trainer specializing in practical management processes for software projects. She 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.

**Steven Allen, Ph.D.,** served as program director for the Chemical Dependency Recovery Program at Kaiser Permanente Medical Center, Vallejo, Calif., for the past 20 years. He was also the director at Central County Community Mental Health Center for Contra Costa County Health Services.

**Raja Almukahhal, Ph.D.,** has worked as a college professor, research analyst, high school teacher, department chairman, content writer and reviewer, author, planetarium director, business-education consultant and entrepreneur. He has published books on physics and astronomy.

**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 in 2002. Alter has received national awards for public speaking and presentation.

**Donna Altes, B.A., teaches language arts, English as a second language 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 to understand the underlying evolutionary mechanisms responsible for dispersal among marine fish.

**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.

**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 have 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.

**Kristen Aramthanapong, M.S.,** is the chief technologist for Sylvatex Inc., an early stage biofuel startup. Prior to moving to the Bay Area, she lived in Champaign, Ill., where she taught organic chemistry and forensic science at Parkland College. Previously, Aramthanapong was the lead chemistry developer for Wolfram Research Inc.

**Veronica Ardi-Pastores, Ph.D.,** has been teaching courses in the sciences since 2009. She earned her doctorate in environmental toxicology from University of California, Irvine. Her publications have focused on cancer biology and microbial toxicology.

**Richard P. Arzaga, B.S., CCIM, CFP,®** is the founder and CEO of Cornerstone Wealth Management. In 2008, he was recognized by UC Berkeley Extension 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.
Elie Asmar, M.S.E., PMP, CKM, Extension Honored Instructor, is co-founder 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.

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.

Jamie Bachman, LCSW, is the social services manager at Pathways Home Health and Hospice in Oakland, Calif. He also maintains a private psychotherapy practice specializing in working with individuals, couples and families facing chronic illness and grief. Bachman also has experience in psychiatric social work in both inpatient and outpatient settings.

Sima Bahadori, M.S., is an instructor at California State University, East Bay. She has been teaching general biology and molecular and cellular biology labs. Bahadori has more than 10 years of industrial experience and mentoring in engineering and science.

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 in Oakland, Calif. Banerjee has more than 15 years of research experience in biological sciences. 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, located in South San Francisco. 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. She is the principal and owner of MJB Design Associates.

Lawrence Basso, Ph.D., is on the teaching faculty at Stanford University School of Medicine and has a particular interest in radioimmunogram and molecular imaging. He is a consultant to the online medical decision tool for physicians known as Clincodi. Previously, he was director of the Nuclear Medicine Laboratory at the Palo Alto Medical Foundation.

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 controllership.

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 co-founder of Silicon Valley direct marketing agency Beasley Direct Marketing Inc. (beasleydirect.com), which has managed direct mail and online programs for hundreds of companies. The agency is a recipient of multiple marketing honors.

Laurie Beasley, B.S., is co-founder and president of Beasley Direct Marketing Inc. (beasleydirect.com), a Silicon Valley direct marketing agency that has managed search, email, online and demand generation campaigns for hundreds of companies. She serves as president of the Direct Marketing Association (DMA) of Northern California and manages the eMarketing Roundtable for the Business Marketing Association (BMA) Northern California.

John Beck, B.S., has more than 30 years of experience in financial management, strategic planning and execution for venture-capital-backed startup and development stage companies. In 2008, he was named a finalist for CFO of the Year by the San Jose Business Journal in the category of CFO for Hire.

Monica Doshi Becker, B.A., SPHR, has more than 12 years of experience in human resources. Her areas of specialty and interest include employee relations, policy development, strategic planning, compliance and compensation. Currently, she leads the HR function at a San Francisco–based professional services firm.

Ray Beldner, M.F.A., is a cross-disciplinary artist working in sculpture, installation, digital media, text-based work and applied arts. His work has been included in numerous solo and group exhibitions, both nationally and internationally, and can be found in public and private collections, including the National Portrait Gallery and the Federal Reserve Board in Washington, D.C.; and the Fine Arts Museums of San Francisco.

Susan Benz, M.A., is the Oakland Unified School District manager for career readiness in the Linked Learning Office. She manages district systems that prepare students for college and career through applied work-based learning experiences. After 15 years as an entrepreneur in the restaurant hospitality industry, she became an English language learner teacher, a literacy specialist and then a student services administrator in alternative education settings.

David Berg, ET, creator of the Making Math Real Multisensory Structured Methods and founder and director of the Making Math Real Institute, has been an educator for 30 years, working with all grade levels. He lectures and trains for universities, schools, districts and learning disability (LD) organizations.

Jeri Berman has been a creative director and marketing communications specialist with Target Media Design for more than 20 years. She develops, creates, writes and directs integrated print, digital and online marketing solutions for companies such as The Learning Company and Hewlett-Packard. Berman also writes novels and blogs under the pseudonym J. Cafesin.

Maria-Pilar Bernal-Estevez, M.D., is director of Autism Spectrum Disorders Regional Program, Kaiser Permanente and adjunct clinical professor, Department of Psychiatry, Stanford University. She is currently serving on the Legislative Blue Ribbon Commission on Autism: Task Force on Early Identification and Intervention, the Governor’s Office and the State of California, as well as the task force on Autism Spectrum Disorders: Best Practice Guidelines for Effective Interventions, California Department of Developmental Services.

Mark E. Bettini, M.B.A., Extension Honored Instructor, is a graduate of the UC Berkeley Haas School of Business and has more than 20 years of accounting and financial experience in the areas of small-business consulting, e-commerce, litigation support and health care.

Howard Birnberg, M.B.A., is executive director of the Association for Project Managers; former instructor in the Office of Executive Education at Harvard University, Graduate School of Design; and former lecturer, University of Wisconsin, Engineering Professional Development.

Deborah Biron, B.A., is founder and president of the Speaking Bridge, which provides professional training in presentation skills and communication techniques. She has taught voice and presentation skills at Theatre Bay Area, Apple and PG&E. She also acts and does voice-overs for films and commercials.
Angela Blackwell, M.A. in TESOL, has been an ESL and EFL teacher, teacher trainer and consultant in Britain, France, Spain and the United States. She has led teacher-training courses and given workshops worldwide. She is author and co-author of several ELT textbooks.

Randall Bolten, M.B.A., has more than 30 years of experience as a senior finance manager for Silicon Valley high-technology companies, including nearly 20 years as CFO of both public companies and venture-backed startups. He is currently CEO of Lucidity, a financial management consulting practice. He is the author of Painting With Numbers: Presenting Financials and Other Numbers So People Will Understand You (Wiley, 2012).

Elizabeth Boult, M.L.A., is a landscape architect specializing in the creation of small-scale artful environments. She has an extensive background in teaching, research and theory.

Eva Bovenzi, M.F.A., has taught at UC Berkeley, the San Francisco Art Institute, California College of the Arts, San Francisco State University and many other Bay Area institutions. She has exhibited nationally and internationally, and is represented in San Francisco by the Tomoe-Tourell Gallery.

Eric Boynton, M.A., Ph.D., has taught philosophy full time for the past 12 years. He has published articles on the Continental philosophy of religion and aesthetics and has co-edited two books The Enigma of Gift and Sacrifice (Fordham Press, 2002) and Saintly Influence: Texts for Edith Wyschogrod (Fordham Press, 2008).

Catherine Bradford, M.S., CFP® ChFC, began her career with Merrill Lynch in 1998 as a financial adviser. Since 2005, she has worked both as a financial planning specialist and as an instructor in the use of proprietary planning tools at Merrill Lynch.

Donald Bradford, M.F.A., Extension Honored Instructor, has taught drawing and painting at UC Santa Barbara and at the Academy of Art College, San Francisco. He is represented by Andrea Schwartz Gallery, San Francisco, and has exhibited solo at Laguna Beach Art Museum. He is the principal instructor and co-owner of Room Creative Designs in Berkeley.

Michael Brito, M.S., is a senior vice president of Social Business at Edelman Digital. He has worked for major brands in Silicon Valley including Yahoo! and Intel. Brito is the author of Smart Business, Social Business: A Playbook for Enterprise Social Media in Your Organization (Que, 2011).

Madeleine Bronstone, MLHR, PMP, is a consultant, trainer and project manager with more than 15 years of experience with large financial and health care companies, as well as startups. She has earned certificates from UC Berkeley Extension in project management and the International Institute of Learning in MS Project software. Bronstone is certified in benchmarking techniques and is a Six Sigma Green Belt.

Martin Brook, M.B.A., Extension Honored Instructor, is principal of Martin Brook Associates and provides financial consulting services to individuals and small businesses. He earned UC Berkeley Extension’s Professional Sequence in Personal Financial Planning Award of Completion with distinction.

Denise Brouillette, M.B.A., is president of LeaderXpress, a San Francisco–based leadership consultancy. For more than 20 years, she has been coaching and consulting on ways to lead effectively within the power, political and influence structures in today’s organizations and institutions. In 2006, Brouillette launched The Women’s Edge in Leading,® LeaderXpress’ women’s unit, to help women advance to key leadership positions within their organizations.

Alex Brown, PMP, IPMA-C, president and owner of Real-Life Projects Inc., provides advice and training to companies focused on improving processes and controls in project management.

Warren L. Brown, M.B.A., is a senior consultant with the Brown Group, a firm that develops and implements marketing plans. Formerly, he was vice president of marketing for Damon Corporation and ICN Pharmaceuticals and a senior marketing manager with Bristol-Myers Syntex.

Julie Bukar, B.S., M.B.A., is the managing director of JGB BioPharma Consulting Inc., which provides product development consulting and personnel placement services to the biopharma, medical device and diagnostics industries.

Jayne Bunce, B.F.A., ASID, CID, has managed all aspects of residential design as principal of her own firm. She has taught at UC Santa Cruz Extension and Academy of Art University.

Beth Burke, B.S., M.A., has worked as a reporter, copyeditor and typesetter for newspapers; wrote and edited for an environmental services company, in the nuclear industry and for a manufacturer; and was a project manager and media buyer for an advertising agency. She has been editing and proofreading for publishers and individuals on a freelance basis for many years, handling everything from college textbooks and fiction to business journals and dictionaries. She has taught English composition, technical writing, humanities, art history and art appreciation, and copy editing—both online and in the classroom. Burke is a member of the Editorial Freelancers Association.

Diane Burns, B.A., is an author, trainer and consultant in the field of graphic design and publishing. She founded TransPacific Digital, a design firm specializing in print and online projects in East-Asian languages. She is the author of many articles and books on publishing software and is an Adobe Certified Instructor in InDesign.

Justine Burt, M.S., has 17 years of professional experience in sustainability management planning, waste-reduction technical assistance and environmental regulatory assistance. Recent clients include NASA, StopWaste.org and PG&E.

Lincoln Bynum, M.D., has been working in the pharmaceutical industry since 1983. Since 1995, he has worked as a consultant to the drug industry, contributing to development programs for more than 40 pharmaceutical, biotechnical and medical device companies. Bynum has participated in educational programs in drug development at UC Berkeley since 1999.

Donald R. Byrne, M.B.A., Ph.D., has taught accounting, finance and economics at several universities, including Notre Dame, Wayne State University and the University of Detroit Mercy. He is the editor of An Economics Newsletter for the New Millennium.

Tamara Cagney, Ed.D., M.A., B.S.N., CEAP, BCC, has provided Employee Assistance Program (EAP) services for more than 35 years in both public and private sectors and in unionized and non-unionized settings. Cagney has been an internal employee assistance professional at Sandia National Laboratories since 2000, and she has served on the Board of Directors of Employee Assistance Professional Association for 12 years.

Nicholas Cairns, Ph.D., is the president and CEO of Combinix Inc., a medicinal chemistry-based biotechnology company in Mountain View, Calif. Before embarking on an industrial biotechnology research career, Cairns taught general chemistry, organic chemistry and advanced organic chemistry at Towson University in Maryland.

Peter Calcott, B.Sc., D.Phil., is president of Calcott Consulting, serving the biotechnology, pharmaceutical, device and venture capital industries. He has held executive positions in both pharmaceutical and biotechnology companies, focusing on quality and compliance, regulatory affairs, manufacturing and process development. Calcott has taught university-level microbiology and biotechnology.

Christian Canlas, Ph.D., is an instructor and nuclear magnetic resonance (NMR) facility director at the College of Chemistry, University of California, Berkeley. He has taught various courses in chemistry at the University of the Philippines and at Michigan State University. Currently, he teaches NMR theory and applications at UC Berkeley.

Carin Capolongo, M.F.A., M.B.A., has taught marketing and communications for the past 12 years. She is faculty member at the Fashion Institute of Design and Merchandising in San Francisco. Previously, Capolongo was a copywriter for Red Seed Media LLC, and has written for several startups and integrated marketing firms. She specializes in writing for websites, e-books, ads and direct-mail pieces.
Instructor Biographies

Terri Lynn Cardona, M.S., works in human resources for more than 700 employees at Prometheus Real Estate Group. Her responsibilities include recruitment, staffing, health care and benefits administration, payroll administration and training.

Lisa Carlson, B.A., principal of Wordstream West, is a copyeditor and writer. She has edited for advertising, business, health care and marketing organizations. Carlson loves helping authors of fiction and nonfiction as a proposal writer and developmental editor. A former chair of Bay Area Editors’ Forum, she has taught at Media Alliance and facilitated writers’ groups.

Ronald H. Carlson, Ph.D., has more than 25 years of experience in the pharmaceutical industry and is an expert in both regulatory affairs and quality. Prior to consulting, Carlson was the vice president of regulatory affairs and quality at InSite Vision. At XOMA, he was the senior director of regulatory affairs and vice president of quality. Carlson has held management positions at Berkeley HeartLab, Bayer, Isis Pharmaceuticals and Berlex.

Kurt Carrasquilla, M.B.A., Extension Honored Instructor, is a vice president of wealth management for Morgan Stanley Smith Barney and has been with the firm since 1993. He has taught in UC Berkeley Extension’s Professional Sequence in Personal Financial Planning since 1998 and currently serves as chair of the Advisory Board. In 2006, he was presented with the inaugural Tim Kochis Award for Teaching Excellence, and he received the UC Berkeley Extension Personal Financial Planning Program Golden Bear Award in 2009.

Marcelo Carvalho, M.A., is a data network, voice communications and software application engineer at Usabound, where he manages the company’s servers, Voice over Internet Protocol (VoIP) and data networks. He has been teaching UNIX, shell programming, C language and Perl programming courses at UC Berkeley Extension since 2000. Carvalho was technical reviewer for the third edition of the best-selling UNIX Made Easy (McGraw-Hill Osborne Media) and developed a textbook on Perl programming.

Victoria Casana, M.A., has worked as a developmental editor and copyeditor for 17 years for Houghton Mifflin, University of California Press, Cengage Learning, UCSF Center for the Health Professions and Oakland Museum of California, among others. She previously was an instructor at Northeastern University, teaching grammar, writing and literature courses. She wrote the exercise manual for The College Writer’s Handbook (Houghton Mifflin, 2007).

Maureen Casey, M.A., is a guidance counselor at Ballarino College Preparatory and a marriage and family therapist intern. Casey is a former academic dean for Johns Hopkins University’s Center for Talented Youth program and a former teacher in both public and independent secondary schools.

Katya Cengel spent eight years as a reporter at the Louisville Courier-Journal. She reported from Africa, India, Haiti and the former Soviet Union and has been published in The Wall Street Journal, Marie Claire and Esquire. She is the author of Bluegrass Baseball: A Year in the Minor League Life (University of Nebraska Press, 2012).

Rene-Francois Cervantes, M.B.A., CPA, is an industry professional with significant mergers and acquisitions experience in health care and technology. He is also an associate director at Protiviti Inc. with a focus on transaction services.

Linda Chan, J.D., is an attorney who advises international corporations on employment policies, commercial transactions, intellectual property portfolios and other corporate activities.

Vincent Chang, Ph.D., is the founder and CEO of Knowledge Master Inc. He has more than 20 years of experience teaching electrical engineering courses in both Taiwan and the United States. Chang has published more than 40 international journal and conference papers and holds three patents.

Catherine Chase, M.A., is a Web developer who has worked with a number of nonprofit and for-profit organizations in the Bay Area. She teaches graphic and Web-design classes at Bay Area Video Coalition (BAVC) and has taught at the Art Institute of California Sunnyvale. Previously, Chase worked with Phipps West Farms Technology and Career Center.

Allan Chao, B.A., is a serial entrepreneur who founded Startup V8, a consulting company for early stage Web startups. He has also founded and co-founded several other companies, including those that market both Web and mobile apps. He completed the UC Berkeley Extension Certificate Program in Entrepreneurship and Small Business Management with distinction.

Edmund Chau, M.L.A., is a practicing landscape architect and principal of Eddie Chau Design. He has worked with various design firms and organizations throughout the Bay Area and New Mexico. Chau is also the program director for the Certificate Program in Landscape Architecture at UC Berkeley Extension.

Aung Chein, M.D., is a postdoctoral fellow at UCSF, and has taught biology and human physiology there. His research focuses on human papilloma virus (HPV) and anogenital dysplasia/neoplasia. With his clinical background, Chein applies a practical approach to understanding the intricate biomolecular mechanisms of structure, function and disease of the human body.

Pratap Chilakanti, M.S., was a training program manager at Hewlett-Packard and has held leadership roles on enterprise software development teams. Founder of the consulting company GENI, Chilakanti has assisted clients such as Cisco, Oracle and UC Berkeley in identity and access management, certification development, education and training process re-engineering, corporate training and other training-related projects.

Christina Chin-Newman, Ph.D., is an associate professor, Department of Human Development at California State University, East Bay. Her research interests include creativity and imagination in adolescence.

Richard J. Chiovarelli, Psy.D., is a licensed clinician working with children, families and adults in private practice in the East Bay. He is an assistant professor at the California Institute of Integral Studies and teaches psychology at both the graduate and undergraduate levels in the Bay Area.

Rali Christo, Ph.D., has taught numerous Greek, Latin and civilization courses at UC Berkeley, San Francisco Art Institute, UC Berkeley Extension and Saint Mary’s College of California.

Josef Chytry, D.Phil., Extension Honored Instructor, is adjunct professor in cultural history and visual criticism at the California College of the Arts and managing editor of the Oxford journal Industrial and Corporate Change. He is author of Cytherica: Aesthetic-Political Essays in an Aphrodisian Key (Peter Lang, 2005).

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Derek Day, M.B.A., has four undergraduate degrees in the areas of business management, marketing and information technology. He is working toward a doctoral degree in management, with an emphasis on leadership. The online learning environment intrigues him because of the unique group of students it serves and because it allows students to grasp opportunities they may not otherwise have had. Day has used such opportunities to help him overcome the challenges of cerebral palsy, which requires him to use a powered wheelchair.

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Martha S. Doran, Ph.D., CPA, is an associate at San Diego State University and teaches auditing at both the undergraduate and graduate levels. Prior to her academic career, she served as a controller; later, she was CFO for three closely held businesses and was a partner in the CPA firm of Acosta, Strassels and Company. Doran has written many journal articles; an introductory financial accounting text; and three learning activities books: Keys to Business Success (Prentice Hall, 1999), Activities in Management Accounting (Prentice Hall, 1996) and Activities in Financial Accounting (Prentice Hall, 1996).

Deborah Doyle, B.A., has held senior account positions at advertising agencies such as Publicis & Hal Riney, McCann Erickson and Hoffman/Lewis. She introduced the first camera phone for Sprint PCS, created Stanford Hospital and Clinics’ first brand campaign and turned a sale into an event for Marshall Fields. In 2006, Doyle launched Stage2 Marketing. Her clients include Napa Farms Market, Varian Medical Systems and SolarCity. Her work has won 15 Addys; a D&AD Award; and McDonald’s highest agency honor, the Co–Op Achievement Award.

Laurie Ann Doyle, M.F.A., is the winner of the Alligator Juniper National Fiction Award and recipient of 2012 Pushcart and Best New American Voices 2008 nominations. Her short stories, essays and poems have appeared in more than a dozen literary publications, including Arroyo Literary Review, Dogwood Journal and Farallon Review. Visit laurieanddoyle.com for more information.

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INSTRUCTOR BIOGRAPHIES

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Ephrem Fernandez, Ph.D., is a professor of clinical/health psychology at the University of Texas at San Antonio. He has conducted anger workshops in the United States and abroad. He is the editor of Treatments for Anger in Specific Populations: Theory, Application, and Outcome (Oxford University Press, 2013) and the author of more than 70 publications.

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Elizabeth Fishel, Extension Honored Instructor, has contributed essays to numerous national magazines, including Vogue and Child, where she was a contributing editor. She co-edited (with Terri Hinte) two collections of personal essays: Something That Matters: Life, Love, and Unexpected Adventures in the Middle of the Journey (Harwood, 2007) and Wednesday Writers: 10 Years of Writing Women’s Lives (Harwood, 2003). She is also the author of four nonfiction books, including Reunion (Random House, 2000).

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John Ford mediates, trains and consults to organizations that have accepted the inevitability of conflict and are seeking to approach it with greater clarity and confidence. He is the trainer of the Northern California Human Resources Association’s two-day Mastering Mediation seminar. Ford was the managing editor of Mediate.com from 1999–2011 and is a past president of the Association for Dispute Resolution of Northern California.

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Thaisa W. Frank is a bestselling author, who has been published in numerous journals and anthologies. Her sixth book, Enchantment (Counterpoint, 2012), was chosen by the San Francisco Chronicle for Best Books of 2012. The foreign rights for Heidegger’s Glasses (Counterpoint, 2010) have been sold to 10 foreign countries.

Perri Franskoviak, Ph.D., is a trained harm reductionist and a full-time faculty member at Holy Names University. She also maintains a private psychotherapy, consultation and training practice in which she combines her perspec- tive on harm reduction psychotherapy with an analytic frame to assist individuals and organizations in the process of change. She has worked in community-based settings for 24 years.
INSTRUCTOR BIOGRAPHIES

Maurizio Franzini, Ph.D., is a scientist at Elan. Previously, he worked in medicinal chemistry research at Exelixis Pharmaceuticals, engaged in the discovery of novel small molecules to treat cancer and auto-immune diseases. Franzini is interested in the development of policies to contain and reduce the environmental impact of chemicals from any industry.

Eric Freed, B.Arch., is a licensed architect and pioneer of Organic Architecture, first developed by Frank Lloyd Wright. He has served as founding chair of architecture for the San Francisco Design Museum.

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Deborah French, Ph.D., DABCC, is assistant director of chemistry and director of mass spectrometry at the University of California, San Francisco, Clinical Laboratories. She completed a postdoctoral fellowship at St. Jude Children's Research Hospital in Memphis, Tenn., studying the pharmacogenetics of pediatric acute lymphoblastic leukemia. In July 2008, she began a ComACC clinical chemistry postdoctoral fellowship at UCSF, and in July 2010, she became board certified in clinical chemistry by the American Board of Clinical Chemistry.

Nigel French, M.A., is the author of InDesign Type (Adobe Press, 2006) and Adobe Photoshop Unmasked (Adobe Press, 2006) and of several titles in the Lynda.com online training library. He lives in Brighton, England, where he works as a freelance graphic designer and publishing consultant.

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David Goldberg, B.A., is a Bay Area landscape and garden photographer. His photography has appeared in numerous books, calendars and magazines. He has been solo photographer for three books, the latest of which is Wildly Successful Plants: Northern California (Sasquatch, 2004). He received the California Horticulture Society Photography Award in 2007.

Daniel Goldstein, M.Arch., has worked at architectural offices in Barcelona and San Francisco. He is an expert at employing 3-D modeling software and combining digital- and hand-rendering techniques. Previously, he taught media, spatial composition and structures at the University of Oregon. Goldstein also has been actively involved in Architecture for Humanity.

Gary S. Goodman, J.D., M.B.A., Ph.D., is an internationally sought-after speaker; attorney; and negotiation, sales and customer satisfaction consultant. He is the best-selling author of 13 books, including Dr. Gary S. Goodman’s 77 Best Practices in Negotiation, and has published hundreds of articles.

Cheryl Gordon, B.A., B.F.A., IIDA, LEED AP, is interior design director with K2A Architecture + Interiors. Her work in commercial art emphasizes color and surface ornamentation. A second degree in Interior Architecture, California College of the Arts, has led to a 20-year career in interior design with an emphasis on educational and health care projects. She was honored by the Northern California Chapter of the International Interior Design Association for her leadership and service.


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 Number, Fourth Edition (Lawdable Press, 2004) and co-authored and published Litigation by the Numbers Substantive Companion.

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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.

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Mohsin Hafeez, M.B.A., CFP,® is a financial adviser at Morgan Stanley Smith Barney. He has more than 22 years of experience in the financial services arena. His exposure to a diversified scope of financial services with corporations such as American Express and Citi provides him with an edge to better understand the holistic dynamics of the overall financial services discipline.

Rachael Hagner, M.Arch., AIA, IIDA, has worked as an architect and interior designer for commercial 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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Kedar Hastak, Ph.D., is a postdoctoral fellow in the Stanford University’s Division of Oncology. He has been involved in cancer research for more than 10 years. Hastak is investigating therapeutic strategies for breast cancer. His research is also aimed at identifying mechanisms of drug resistance in breast cancers.

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.

Austin Hedeman, M.A., is a graduate student at UC Berkeley with a passion for teaching. He has been a teaching assistant for large undergraduate Berkeley physics courses for more than 12 semesters.

Heike Held, Ph.D., conducted postdoctoral research in protein engineering at Genentech. Her primary scientific interest lies in the chemistry of biomolecules. Held has taught chemistry courses at San Francisco Bay Area community colleges since 2008.

Gene Hendrix, Ph.D., Extension Honored Instructor, has served as a consultant to the international oil industry for 20 years in organizational change, management development and project management. He has also taught at McGill University and is an adjunct professor in the M.B.A. programs of several Bay Area colleges.

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Susie Meserve, M.F.A., has taught at the University of Massachusetts; the University of Oslo in Oslo, Norway; and the Academy of Art University in San Francisco. She is the author of Faith (Finishing Line Press, 2008).

Barbara Miller, M.A., is president of Artemis Management Consultants and co-founder of Virtual Connection. She has 30 years of experience helping organizations manage change, redesign work processes, build teams, develop leaders and plan strategically. She has worked in health care, finance, academia and the public sector.

Bonnie Miller, M.S., RN, is president of BMGCR, Bonnie Miller Clinical Research Consulting, LLC, and vice president-elect, NCA Chapter ACRP. Previously director of clinical standards and training for Elan Pharmaceuticals, she has 18 years of clinical research experience in many sectors of industry after a 15-year nursing career.

Erich Miller, M.F.A., teaches memoir-writing for the Saint Mary’s College Lifelong Learning program, serves as a writing adviser for a national online university, and works as a freelance technical writer and editor. He was named both the Jim Townsend and Agnes Butler scholar for his work in creative nonfiction at Saint Mary’s College. Miller spent 15 years working in social services in San Francisco, the last six of which were spent working at a transitional housing program for 18–23 year olds working on their GED or enrolled in local colleges. As part of his duties, Miller tutored clients in essay-writing and grammar skills.

Merlin Miller, M.A., has co-authored two mathematics textbooks; received grants from the National Science Foundation; worked at the UC Berkeley Radiation Laboratory in Livermore, Calif.; and participated in an evaluation of the Harvard approach to teaching calculus. He is also a former U.S. Air Force pilot.

Neil Miller, CADC-II, is case manager of the Marin County Adult Drug Court. He has also served as program instructor for the California Association of Addiction Recovery Resources (CAARR) and worked in a variety of addiction treatment settings during the past several years.

Patrick Miller, M.L.A., is a landscape architect and partner with the design firm 2M Associates, Landscape Architects, Berkeley.

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David Mish, M.B.A., a seasoned executive with extensive experience in pharmaceuticals and biotechnology, has advised organizations along the extended health care value chain: hospitals, distributors, retailers, exchanges and manufacturers (diagnostic, consumable, pharmaceutical and biotech). With more than 20 years of consulting experience, he brings a great diversity of experience to U.S. and international clients.

Amit Mohindra, M.A., is vice president of workforce intelligence at McKesson, a Fortune 14 company helping to create a health care system with higher quality, fewer mistakes and lower costs. Prior to joining McKesson, he led Nelson Touch Consulting, a consultancy specializing in strategy, analytics and incentives. Mohindra has been applying human capital analytics as a researcher, consultant and HR leader at leading organizations such as The World Bank, IBM and Goldman Sachs.

Kay Monroe, M.B.A., has held positions as vice president of operations, project management and quality assurance, and has extensive experience with team management, clinical development and operations functions in the biotech, medical device and pharmaceutical industries.

Susan Moore, M.A., FT, has been the grief-counseling director for the Contra Costa Crisis Center for the past 30 years. She has written a handbook for grief support groups and is a trainer for the California SIDS program. Moore is certified as a Fellow in Thanatology with the Association for Death Education and Counseling.

Teresa Moore, Ph.D., teaches UC Berkeley Extension courses in ancient-Egyptian history, language and culture, along with additional topics related to the ancient Near East. She has taught ancient-Egyptian language at UC Berkeley and received fellowships for research in Egypt.

Christina Morales, Ph.D., serves as the lead microbiologist for the drinking water program for the California Department of Public Health, and has taught for University of San Francisco, UC Davis, UC Berkeley and St. Mary’s College. Morales has also spoken at the American Society for Plant Biology Conference and at UC Berkeley’s Microbiology Symposium.

Amy S. Morgan, Ph.D., has taught immunology at UC Berkeley Extension for more than 10 years, in both the classroom and online formats. She has more than 15 years of experience in medical research, covering such areas as immunobiology, oncology and regulation of cell differentiation.

Joseph Mudd, B.S., is a program and project manager with more than 20 years of experience working for several large engineering and construction companies, venture-capital-funded software startups and biotechnology companies. His experience includes microelectronics, biotechnology, light industrial, food and petrochemical projects for customers in the United States, Europe and Asia.

Kimberly Mulligan, Ph.D., is currently a post-doctoral scholar at UCSF where she investigates the molecular basis of neural development, with a focus on a group of genes implicated in autism, bipolar disorder and schizophrenia. Mulligan has taught courses in developmental biology at San Francisco State University and UC Berkeley Extension.

Katy Murphy, M.A., is the director of college counseling at Bellarmine College Preparatory in San Jose, Calif. She has more than 30 years of college admission and counseling experience. Murphy is a frequent presenter at professional meetings of the National Association for College Admission Counseling (NACAC), the Western Association for College Admission Counseling (WACAC) and the College Board.

Reggie Murray, B.S., M.B.A., Ed.D., recently served as CEO of an international children’s charity based in Dublin, Ireland. As an early employee at two Silicon Valley startups and a founder of another, he has 25 years of experience in the high-tech industry serving in a variety of senior-management roles.

Patricia Muscatelli, M.B.A., M.S., Extension Honored Instructor, has extensive experience in financial planning for large organizations and has worked on several large mergers. She has also served as a consultant to businesses in the areas of cash management and strategic and financial planning. Her professional background includes working as a vice president and finance officer for the Corporate and Commercial Banking Groups of Wells Fargo Bank.

Ann Neumann, M.A., J.D., teaches technical writing for engineers at Cal Poly, San Luis Obispo, Calif., as well as forensic report writing for UC Davis, a class she developed for the university’s graduate program. She also teaches for the California Criminalistics Institute, Department of Justice, and for many state and county agencies, presenting courses in business and technical writing.

Lucie Newcomb, M.A., president of The NewComm Global Group Inc., has been working with startups and industry leaders such as IBM and Cisco for more than 25 years. She is a mentor for TechWomen, an initiative of the U.S. State Department, and U.S. Market Access Center.
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Jennifer Ng, B.A., is a landscape designer who has worked on a variety of small- and large-scale projects at CMG Landscape Architecture. Prior to joining CMG, she worked with Hargreaves Associates in New York City. She also co-founded DesignConnect, a nonprofit experiential learning program.

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Alanna Nimau Vigil, M.S., RD, owns a private practice that provides personalized online nutrition counseling to help people live healthier lifestyles. Previously, she was a clinical diettian at California Pacific Medical Center, where she specialized in caring for cancer and surgical patients and provided nutritional care and support for pediatric, neonatal and adult patients.

Rick Nizzardini, J.D., LCSW, is a clinical counselor and faculty member at San Francisco State University Counseling and Psychological Services, former founder and coordinator of the Men’s Sexual Trauma Program at the San Francisco Rape Treatment Center and former director of the Continuum HIV Adult Day Services Center.

George Noceti, M.A., M.B.A., CRPSR, is a financial adviser with Morgan Stanley in Walnut Creek, Calif. In addition to advising individuals and couples, he also presents retirement-planning workshops at employers’ worksites. Noceti specializes in retirement planning and helps individuals develop a retirement action plan. He received the Tim Kochis Award for Teaching Excellence in 2011.

Edwin Ochong, Ph.D., is a post-doctoral scholar at the UCSF, where his research focuses on the application of tagged sequencing tools to identify novel alleles in P. falciparum drug-resistance genes. Linked to these studies is the interest in understanding the interplay between antifolate resistance and fitness.

Larry O’Connell, M.A., M.S., M.B.A., has more than 25 years of experience in business, government and nonprofit organizations. In addition to his work as the project manager for major infrastructure projects, he has prepared multimillion-dollar capital and operating budgets for long-range projects. He serves on several nonprofit boards, and provides literacy training courses to underserved high school students in concert with the Federal Reserve Bank of New York.

Donna H. Odierna, Dr.P.H., M.S., is associate specialist and assistant adjunct professor in the Department of Clinical Pharmacy at University of California, San Francisco. Dr. Odierna has designed and evaluated training workshops to improve and expand health literacy. She has also worked in the areas of women’s holistic health, harm reduction and HIV prevention.

Jim O’Donnell, M.B.A., has an extensive background in managing sales and marketing projects at high-tech companies, including Infotext Systems. He is director of instructional design at MSI Learning, where he manages the development of online project management content.

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Daniela Owen, Ph.D., license PSY 23748, has worked on multiple research studies, taught undergraduate courses and was a clinician at the Psychological Center at Stony Brook University. She has served as a primary therapist in several clinical settings including Long Island Jewish Zucker-Hillside Hospital; Mount Sinai Hospital; Child and Family Psychological Services; and Kaiser Permanente in Walnut Creek, Calif. Owen treats attention and concentration problems, oppositional behavior, social skills deficits, anxiety disorders, mood disorders, adjustment to transitions, enuresis and eating disorders in children and adolescents. She is currently on staff at the San Francisco Bay Area Center for Cognitive Therapy.

Judith Owiti, Ph.D., is an adjunct faculty member at Merritt College. She has taught the Introduction to Biology course (both lecture and laboratory) at Merritt College and Microbiology Laboratory at University of San Francisco.

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Lynn Paringer, Ph.D., CFP, is a financial planner with Prime Wealth Management and a professor of Economics at California State University, East Bay. Paringer’s research interests include health insurance markets and planning for health expenses in retirement.

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Jay Parrish, M.B.A., Ph.D., has 10 years of experience in the pharmaceutical industry, where he has held roles as an antiviral drug discovery scientist and in business development. Parrish is passionate about sharing his love of organic chemistry with students.

Francesca Pastine, M.F.A., is a visual artist, curator and art educator who has taught at California College of the Arts, San Francisco Art Institute, City College of San Francisco and Dominican University. She was the recipient of a Pollock Krasner Grant in 2009 and a Kala Fellowship in 2011. Her work has been exhibited nationally and internationally. Recently, she had a solo exhibition at Pentimenti Gallery in Philadelphia and at Eleanor Harwood Gallery in San Francisco. Pastine is represented by Eleanor Harwood Gallery in San Francisco.

Rosa Peay-Wainwright, B.A., has led and instructed change initiatives and administration operations within academic, business, nonprofit and public organizations, including the University of Maryland, Bank of America, KQED/PBS, Family Service Agency of San Francisco and the San Francisco Art Institute. She has an extensive background as a senior HR practitioner.
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Margo Perin is the contributing editor of Only the Dead Can Kill: Stories From Jail (Community Works, 2008/Digital Work Fund) and How I Learned to Cook and Other Writings on Complex Mother-Daughter Relationships (Tarcher/Penguin, 2004). Her work has appeared in O Magazine, The Washington Post and Psychology Today, and on KRON 4 TV, NPR’s Talk of the Nation and other public media.

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Ronald Petty, M.B.A., M.S., is a senior IT manager and engineer. He has provided business analysis services in the fields of finance and energy, and he currently works in the Bay Area startup scene focusing on developing cloud-based services.

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Catherine Pinkas, M.B.A., PMP, has been a project management professional for more than 15 years, managing projects in a variety of industries, including finance, construction, information technology, hospital management, business development and events management. She has led curriculum development and training for numerous companies, including Apple, Cisco Systems, Bank of America, Network Appliances, IBM and Lawrence Berkeley Laboratory.

Nancy A. Pietrowski, Ph.D., is a clinical psychologist and lead faculty in general psychology focusing on addictions at Capella University. She is past-president of Division 50 (Addictions) of the American Psychological Association, a seasoned teacher of more than 20 years, and has conducted clinical research related to psychology and addictions for more than 25 years.

Jessica Pishko, M.F.A., J.D., has taught a variety of composition classes and personal-statement writing workshops at Columbia. Her fiction and nonfiction have appeared in various publications, including Woodblock, Elmae, The L.A. Review of Books and The Rumpus.

John S. Placyk Jr., Ph.D., has taught genetics, human anatomy and physiology, general biology, evolution, statistics, and various other ecological and evolutionary courses for both biology majors and nonbiology majors in the classroom and online formats since 1998. He has close to 15 years of experience conducting research in the fields of animal behavior, herpetology, phylogenetics, conservation genetics and evolution.

David Polifko, M.S., M.F.A., has a diverse background spanning engineering, research and development, venture capital, construction and interior design. Trained as an electrical engineer and interior architect, he is also a licensed general contractor and owner of David Polifko Design + Fabrication, offering design services, custom fabrications and consulting.

L. Thomas Pollard, Ph.D., is professor of social, cultural and literary studies at National University in San Jose, Calif.

Steven Pon, Ph.D., is an assistant professor in residence at the University of Connecticut. He is doing research in algebraic combinatorics and mathematics education.

Vicki Pontius, Ed.D., has extensive K–12, adult and vocational education, and post-secondary teaching experience. Her research interests include the impact of the California High School Exit Exam and college preparedness, as well as working closely with business and industry to help bridge the gap between what employers need and what schools can offer.

Sedique Popal, Ed.D., Extension Honored Instructor, has been a teacher and educator since 1980, and has taught ESL and EFL in Asia and Europe. He has made presentations to TESOL, CATESOL, NABE and CASE organizations. Popal also teaches at the College of Alameda and the University of San Francisco.

Kelly Pope, Ph.D., CPA, has been teaching financial and managerial accounting for various universities throughout the country for more than 10 years. Her research in the field of forensic accounting has been published in numerous scholarly publications. She regularly consults and develops training courses for companies and governmental agencies.

Tom Portante, M.A., is a management analyst and business-services developer with deep expertise in evaluating the business potential of technology tools and procedures. At senior positions within different global management consultancies, Portante’s experience ranges from executing strategic scenario planning programs to selecting and deploying social media to foster collaboration and both inter- and intraorganizational best-practices exchanges.

Roberta Celest Powell, Ph.D., MSW, is a behavioral medicine specialist in primary care at Kaiser Permanente Medical Group Northern California. Powell also worked as a psychiatric social worker at Mental Health Services of Alameda County.

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Sandra Poza, B.S., ASID, Extension Honored Instructor, has taught at UC Berkeley Extension since 1994. She is the principal of a space planning and design consulting firm in San Francisco, and lectures at the Fine Arts Museums of San Francisco on oil painting, sculpture and furniture.

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Carrie Priestley, M.A., M.Litt, has taught ESL and trained teachers worldwide. She has also worked as a program director for TESOL certificate and diploma programs and as coordinator of an Intensive English Program. Priestley currently divides her time between ESL teaching and online teacher training and curriculum development.

Wayne Price, M.B.A., is president of Price Graves & Company, which conducts security analyses and valuations. He is also an adviser in security issuances and investment portfolio asset allocations.

James Prost, M.B.A., two-time Extension Honored Instructor, was formerly director of marketing and sales for the Technology Products Group at Dataquest. He held positions as vice president of sales for PowerUp Software and marketing manager for Qume. He has more than 20 years of experience in marketing and sales management.

Michael Ragan Quigley, Ph.D., is director of statistical modeling and data mining for home equity lending at Wells Fargo in San Francisco. He has taught statistics and economics at Northern Illinois University and finance at Aurora University.

Richard Ragan, M.S., CPT, Extension Honored Instructor, is principal of the Ragan Group, specializing in building high-performance work teams, conducting executive and strategic coaching, and training HR development professionals. He has been a UC Berkeley Extension instructor for more than 20 years.
Lali Ramrattan, Ph.D., is an economist with the U.S. Department of Housing and Urban Development in San Francisco.

Monica Ranes-Goldberg, Ph.D., has taught biology and microbial genetics at Harvard University, where she received a certificate of distinction in teaching. She pursued postdoctoral studies at the Pasteur Institute in Paris, where she developed vaccines for infectious diseases.

Hillel Raz, Ph.D., has research interests in mathematical physics and is currently working on spectral properties of quantum and discrete graphs. Raz has been a math instructor since 2003.

David Redline, B.A., CCPR, has more than 20 years of clinical and clinical research experience in hospital, academic medical center and industry settings. He is the director of clinical affairs for Volcano Corporation, a medical device company specializing in interventional cardiology. In addition, Redline is a board member and president-elect for the Society of Clinical Research Associates (SoCRA).

Robert Reiser, Ph.D., is associate professor at the Pacific Graduate School of Psychology and director of the Kurt and Barbara Gronowski Psychology Clinic. He is also the co-author of Bipolar Disorder: Advances in Psychotherapy, Evidence-Based Practice (Hogrefe & Huber Publishing, 2005).

Thomas Renau, Ph.D., project manager in the product portfolio management group at Genentech, has taught graduate and undergraduate chemistry and biology for the past 17 years. He has taught Drug Design and Discovery at UC Berkeley Extension since the course’s inception.

Darrel Dean Richards, Ph.D., is a lecturer in the Department of Psychology, California State University, Northridge.

David Richo, Ph.D., MFT, is a teacher, workshop leader and writer who works as a psychotherapist in Santa Barbara, Calif., and San Francisco. He combines Jungian, transpersonal and mythic perspectives in his work, and is the author of more than a dozen books including How to Be an Adult in Love (Shambala, 2013).

Julie Robbins, LCSW, has been practicing psychotherapy for more than 30 years. She has expertise in all areas of family violence and child maltreatment, as well as extensive experience in the areas of depression, divorce, high-conflict custody disputes, adoption and parenting. She has served as the victim services director for the San Francisco Department of Public Health and is on the adjunct faculty of Alliant University. She is in private practice working with children and adults and serves on the Board of the California Professional Society on the Abuse of Children.

Larry Robinson, M.F.A., has taught painting, drawing and color theory in the Bay Area since 1979. He is owner and director of Oakdale Painting Studio in San Francisco. His work has been exhibited at the Phoenix Museum of Art and Dana Reich Gallery in San Francisco.

Elena Rodriguez, Ph.D., is a breast cancer researcher at UCSF, where she investigates the role of genes that establish cell polarity and cell fate in mammary gland development and mammary carcinogenesis. She has taught physiology, evolution, heredity and general biology at University of San Francisco and College of Marin. Her research interests include understanding how disruption of epithelial polarity may contribute to the progression of breast cancer.

Adhamina Rodriguez, M.S., LEED AP, is a senior project manager and green leader for Swinerton Builders. She is an architect and civil engineer from Seville, Spain. As LEED AP, Rodriguez works on developing and managing green projects. She also teaches and lectures on sustainable construction.

Makan Rokni, Ph.D., has taught courses in mathematics, statistics, information technology and engineering. He has researched and published in a variety of fields, including nonlinear dynamics, spacecraft motion and information technology.

David Rompf, J.D., has published essays and articles in Harvard Review, Newsweek, Los Angeles Times, The Missouri Review, Creative Nonfiction, and many other magazines and newspapers. His essays have been cited in the Best American Essays and the Best American Travel Writing. He is on the editorial and executive boards of the literary journal Memoir (land).

Lorrie Thomas Ross, M.A.O.M., is CEO of WebMarketingTherapy.com. She is the author of The McGraw-Hill 36-Hour Course to Online Marketing (McGraw Hill, 2010). Ross has expertise as a buyer and seller of online media, specializing in results-based marketing. Prior to running her marketing advisory, training and management firm, she was on the founding team at ValueClick Media.

Tamara Roth, B.F.A., LEED AP ID+C, Associate IIDA, is a designer at STUDIOS Architecture, where she works on a wide range of commercial interior projects. Also actively involved in the Northern California Chapter of IIDA, Roth recently co-chaired the 2012 Honor Awards.

David Rowland, M.S., has made a career in software, principally in real-time control systems and telecommunications. He has taught at UC Berkeley Extension for 10 years, and is the author of two iPhone applications.

Barbara Russo, B.A., is an executive, organizational and life coach, trained and certified through New York University’s School of Continuing and Professional Studies. She serves as an adjunct faculty member in the NYU-SCPS Coaching Program, and is certified through the International Coach Federation. She holds additional certifications, including SSI (Strength Deployment Inventory) and Power Coaching.
Michael Savod, B.S., M.B.A., is a marketing communications specialist and the founder of Target Marketing Communications, a consulting firm dedicated to the use of cost-effective communications that embraces integrated marketing communications. He has taught and lectured in graduate-level programs at numerous universities and internationally. He has held senior sales and marketing positions with Ford Motor Company in the United States and Japan, the Chrysler Corporation, Maserati U.S.A. and the Oakland A’s. He currently serves as executive vice president for The Intrinsic Group, a food and beverage development company.

Bill Say, M.A., brings many years of experience to the intersection of diversity awareness, conflict resolution, and leadership and team and community building. He has consulted for health and mental health organizations, educational institutions, communities, nonprofits and international groups, including UN refugee organizations and work in Asia, Europe and the Middle East. He is a former faculty member of JFK and Naropa Universities, and a process work diplomat.

Piero Scaruffi is a cognitive scientist who was the manager of the Olivetti Artificial Intelligence Center in Silicon Valley, held visiting scholarships at several academic centers—notably Harvard and Stanford universities—taught in three continents, and published several books on artificial intelligence and cognitive science. As a music historian, he has published 10 books, the latest ones being A History of Rock Music (second edition, 2009) and A History of Jazz Music (2007). He has also written extensively about cinema, literature and the visual arts on his website, scaruffi.com. His latest book of poems and meditations is Synthesis (2009).

David Scheer, M.Arch., AIA, BEMP, has extensive experience consulting as a design performance and energy modeler for projects worldwide, and has worked broadly in many areas of sustainable design and master planning. Scheer has designed and built a number of residential and commercial projects focusing on energy efficiency, and has designed and installed building performance monitoring and automation systems. Recently, Scheer joined the Autodesk Green Building Studio team as a software developer and subject matter expert in performance-based building design.

Marc Schiffman, M.F.A., has taught a variety of writing and literature courses over the years for the University of Maryland. Schiffman has published short stories and articles in many literary journals. He is the author of The Man Who Controls the Earth (CreateSpace, 2012). Schiffman has lived and worked in Japan, South Korea and Thailand.

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.

Shannon Schmidt, M.F.A., M.F.A.W., is an interdisciplinary artist and writer. She exhibits her installations and collaborations nationally and internationally. Her writing and videos have appeared in magazines, journals, catalogs and blogs. Schmidt has taught courses and workshops in studio art and writing at The Art Institute of Chicago, St. Augustine College and the School of the Art Institute of Chicago.

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.

Julia Scott, Ph.D., is a lecturer at San Francisco State University. She has taught psychology and developmental biology at Mission College and SFSU. She has studied neuroscience and physiology in the context of emerging brain structure. Her research works toward characterizing normal and abnormal brain development in humans using in-vivo imaging techniques.

Tony Scuderi, D.Min., Psy.D., CADC, CCS, is a psychologist 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 Kudan (9th Dan) in Judo with the All Japan Jujitsu International Federation (AJJIF).

Em Segmen, M.A., has taught at Merritt College in Oakland, Calif., since 1989 in the areas of human anatomy, human physiology and cadaver dissection. She prefers teaching with clinical correlations and with special consideration and preparation for those heading for careers in health care professions.

Stephen W. Shaner, Ph.D., is a biological consultant in San Diego. Most of his work concerns the impacts of pollutants on marine organisms and communities. He works with both toxicological and ecological aspects of those impacts.


Gail Hynes Shea, B.A., has been a book editor for more than 30 years. She specializes primarily in structural and earthquake engineering and in maritime history. Shea has worked on landmark documents for the State of California and the Caltrans Seismic Advisory Board. She is the editor of a long-running (20 volumes) oral history series for the Earthquake Engineering Research Institute. She is currently editing a history of the San Francisco Maritime National Historical Park.

Kevin M. Shea, M.B.A., is principal of Effectively Efficient Communications and executive vice president of marketing and sales for Boston Harborfest. He has nearly 30 years of experience in the financial services industry.

Billie Shepard, M.A., founder of Billie Shepard & Associates, has been a professional actor, acting teacher and presentation coach for more than 25 years. Her corporate clients include Cisco Systems, Intuit and Morrison & Foerster. She has founded five acting workshops in four states. Shepard has appeared in numerous Equity and television productions.

William Sherwin, M.F.T., is the co-founder of the Bay Area Narrative Therapy Resource and is the clinical supervisor of Edgewood Center’s Early Childhood Mental Health Consultation program.

Michael Shopshire, Ph.D., is a research analyst at the NIDA Clinical Trials Network at UCSF. He conducts research on anger management, post-traumatic stress disorder and substance abuse. He has taught psychology at the university level for the past 15 years.

Nicki Shovar, Ph.D., has more than 20 years of experience spanning all phases of marketing research using consumer research methods to support marketing and product design decisions. She directs all U.S. research for Ubisoft Entertainment in San Francisco.

Megan Siler, M.F.A., an independent producer, director and writer, has been teaching screenwriting and film production at colleges around the Bay Area for more than 10 years. Her award-winning narrative and documentary films have been screened internationally and have appeared on public television. Siler won the Emerging Talent Award from the Los Angeles Outfest for her feature-length film The Midwife’s Tale.

Gregory Sinclair, M.B.A., CPA, has taught at UC Berkeley Extension; at California State University, East Bay; and at San Francisco State University. His business experience includes controller and analyst positions at Wells Fargo, Crocker Trust Company and the Federal Home Loan Bank. He also provides consulting and tax services to businesses.

Gurnam Singh, Ph.D., has been teaching chemistry at Berkeley City College since January 2008. He has also taught the subject of chemistry to undergraduates at Chabot College, as well as to undergraduates and postgraduates at the various institutes affiliated with the University of Bombay (India) and Guru Nanak Dev University, Amritsar (India) for more than two decades before coming to the United States.

Siu Po Sit, Ph.D., is the vice president of clinical affairs responsible for the clinical development of neurovascular devices at Penumbra Inc., where his focus has been on the clinical development of endovascular therapy for the treatment of acute ischemic stroke and intracranial aneurysm.

Cathleen Small, M.A., has been a freelance editor for 12 years and has edited more than 200 nonfiction books, as well as numerous Web articles, technical reports and even some novels. She has taught freshman composition, mechanics and research-based writing at the college level.
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