I’m very grateful this program is here, because I would have given up on writing many times along the road.”

—KRISTINA TATE, p. 2
Post-Baccalaureate Certificate Program in Writing Student
Free Information Sessions

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

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Welcome
From the Dean

Join Our Community

It's not quite move-in day for our newest San Francisco Campus, but we're well on the way to opening up our new classrooms for early fall courses. Right now, we’re picking out wall colors and pictures, ordering furniture, and exploring the new neighborhood. You can find all the details about this location on p. 246 in this catalog or at extension.berkeley.edu/static/locations. And we hope you’ll come to see us in person in late August.

This fall is shaping up to be a busy one for Extension. We’ve scheduled more free events than ever before, with topics that range from green building to the Affordable Care Act to the latest trends in philanthropy. There's sure to be a topic that intrigues you. Visit pp. 8–9 for the complete list. When I look over the list of speakers, I'm impressed by the depth of Bay Area talent and experience.

Part of our mission is to use our skills to help unlock your potential. To that end, we hire some of the brightest and most engaging people to lead our classes. Every fall, we celebrate the best of the best as our Honored Instructors of the year. Meet the latest members of this distinguished group on p. 6. Then, as you browse through our course listings, look for previous Honored Instructors hard at work bringing their expertise into our centers and classrooms.

Whether you've already taken courses from our talented pool of instructors or just thinking of starting on your educational path, we'd like to meet you this fall. We've been providing courses for the community for more than 125 years, and I've seen firsthand the effect that our community has on people just like you. Come to an event, enroll in a course, and discover just how much you can achieve.

Diana Wu, Ed.D.
Dean, UC Berkeley Extension
Kristina Tate’s dream to be a writer is becoming a reality, thanks to courses in the Post-Baccalaureate Certificate Program in Writing. Recently accepted into Columbia University’s M.F.A. program in creative writing, Tate credits the Extension coursework with steering her on this path.

“I decided I was going to take a couple formal writing courses to see if I had the enjoyment to pursue a career,” Tate says. “That’s how I found Extension. In Writing Skills Workshop with Lindsey Crittenden, she reignited my passion for writing and inspired me. Then I took Introduction to Creative Nonfiction with Stephen Albert, and he helped me hash out what I wanted from an M.F.A. program. He’s been my muse.”

Tate credits the certificate coursework in helping her prepare to be a professional writer. “I would not have gotten into the M.F.A. without this program,” she says. “I’m very grateful this program is here, because I would have given up on writing many times along the road. I’m going to an Ivy League school!”
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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
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- Certificate Program in Project Management
- Certificate Program in Personal Financial Planning
- Professional Program in Business Process Management
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- Professional Sequence in Agile Management
- Professional Sequence in Managing Marketing Communications
- Professional Sequence in Marketing Metrics and ROI
- Professional Sequence in Project Human Resource Management
- Professional Sequence in Sales Management
- Professional Series in Strategic Online Marketing
- Program in Professional Communication

## 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

## 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

## Behavioral Health Sciences
- Certificate Program in Alcohol and Drug Abuse Studies
- Post-Baccalaureate Program for Counseling and Psychology Professions
- Professional Program in Aging and Mental Health
- Professional Program in Child and Adolescent Treatment
- Professional Program in Eating and Weight Disorders
- Professional Program in Evidence-Based Therapy for Anxiety and Mood Disorders
- Professional Program in Health Advocacy
- Professional Program in Neuropsychological Assessment
- Professional Program in the Study of Loss and Grief
- Professional Program in Trauma-Informed Interventions
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
- Advanced Biosciences Program
- Certificate Program in Clinical Research Conduct and Management
- Clinical Laboratory Scientist Preparatory Program
- Post-Baccalaureate Health Professions 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 Data Administration and Management
- Professional Program in Quantitative Analysis
- Professional Sequence in Business Intelligence and SAS Analytics Software
- Professional Series in Smart Grid Technology
- 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
Every year, UC Berkeley Extension celebrates instructors who display outstanding teaching talent, dedication to their students and commitment to Extension’s goals of outreach to the community. Take this opportunity to get to know our Honored Instructors, and look for them in upcoming courses.

2014 Honored Instructors
Recognizing the Best of the Best

JAMES ILER
EDUCATION
Jim Iler’s student evaluations consistently reflect his teaching effectiveness, as students praise him for his practical advice and real-world application. He mentors students outside of classroom hours, assists new instructors, and actively participates in curriculum and program development at Extension. Jim is always looking to update his courses with new methodologies and has effectively incorporated technology into his curriculum. He has received numerous awards during his teaching career, and his students appreciate his innate ability to explain complex concepts in a simple manner.

DAVID JULL-PATTERSON
BEHAVIORAL HEALTH SCIENCES
David Jull-Patterson always receives the highest evaluations from his students. In addition to his care and attention to the learning outcomes of his students, he brings years of clinical experience in the field of mental health to the classroom. David is not only passionate about what he does but also is able to transfer his passion and commitment to his students. He is an award-winning clinical professor at UCSF who is involved in interprofessional health sciences student education as well as faculty development. David works with adults and adolescents diagnosed with cancer, HIV, cystic fibrosis, lupus and other life-threatening diseases.

CLYDE SUGAHARA
FALL PROGRAM FOR FRESHMEN
Clyde Sugahara is warm, welcoming and sensitive to the needs of incoming Berkeley freshmen. He is calm and clear in his explanations, and his jokes and fun examples help put students at ease. Clyde strives to create a small community-oriented atmosphere in his classes. Perhaps it’s the care and attention that he devotes outside of class that most highlights his 25-year tenure at Extension. He checks in with his students on a regular basis to ensure that they are adjusting to university life.

TONY YEH
BUSINESS
Tony Yeh’s enthusiasm for teaching and mentoring his students is apparent to anyone taking his courses. He takes time outside of class to mentor students and offer advice. With over 20 years of experience advising governments and corporations on management and investment strategy, he brings past deals to life in his courses. Top executives from his network provide his students insights into the best practices in industry. He is a respected researcher whose work has been published by the Harvard Business Review and CFO Magazine. Outside of class, Tony advises successful executives on issues in wealth management.
EXHIBITS

Birds Do It, Bees Do It: A Century of Sex (Mis)Education in the USA
Bernice Layne Brown Gallery, Doe Library
From junior high school hygiene films to websites, public health campaigns, scientific studies, children’s books, bodice-ripper novels and (sometimes) parents, Americans have always found ways to learn about sex. This exhibit draws from campus libraries, academic programs and student services to explore sex education and the larger political or moral agendas involved.

A Handful of Clay: The Legacy of Edith Heath
Environmental Design Library, 210 Wurster Hall
Through Sept. 19, 2014
Ceramicist Edith Heath pioneered a design aesthetic that continues to inspire. This exhibit explores her life as an artist and ceramicist, as well as her collaborations with architects. Her focus on simplicity, functionality and durability blends the line between daily use and Sunday best and continues to influence the design community. Heath products, manufactured since 1948 in Sausalito, have been recognized internationally for their quality and vision.

Visit lib.berkeley.edu for hours.

STORY HOUR IN THE LIBRARY
Morrison Library in Doe Library
Monthly on Thursday, 5–6 pm

Oct. 9, 2014
Joyce Maynard is the author of eight novels, including Labor Day and The Good Daughters, and four books of nonfiction. Her bestselling memoir, At Home in the World, has been translated into 16 languages. Maynard makes her home in California.

Nov. 13, 2014
Vikram Chandra is the author of this year’s Geek Sublime: The Beauty of Code, The Code of Beauty, as well as three celebrated works of fiction. He teaches creative writing at UC Berkeley and co-hosts the Story Hour reading series.

Dec. 4, 2014
Tom Barbash is the author of the award-winning novel The Last Good Chance, as well as On Top of the World: Cantor Fitzgerald, Howard Lutnick, and 9/11—a New York Times best seller. His stories and articles have been widely published and performed on NPR.

All events are free and open to the public. To learn more, contact email@library.berkeley.edu.
You’re invited to attend any or all of our fall 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.

**The Affordable Care Act: Access and Consumer Issues**
The Affordable Care Act (ACA) federal health reform law was passed five years ago. What has the ACA accomplished in California, what progress has been made under Covered California, and what are some of the key access and consumer issues that lay ahead? Learn how health reform will affect you and others in California in the context of a changing health care system.

Sandra R. Hernández, M.D., is president and CEO of the California HealthCare Foundation. Prior to joining CHCF, Hernández was CEO of The San Francisco Foundation, which she led for 16 years. She previously served as director of public health for the City and County of San Francisco. Hernández is also an assistant clinical professor at UCSF’s School of Medicine. She co-chaired San Francisco’s Universal Healthcare Council, which designed Healthy San Francisco, an innovative health access program for the uninsured.

Wednesday, Sept. 10, 4:30–6 pm
Berkeley: Golden Bear Center • FREE

**Current Topics in Cybersecurity**
The 21st century is characterized by the use of the Internet for nearly everyone’s personal and professional daily lives. National security depends on a stable, safe and resilient cyberspace. Society relies on this vast array of networks to communicate, socialize, network, travel, automate homes, run the world economy, and provide many government programs and services. Unfortunately, cyber intrusions and attacks have increased dramatically during the past decade, exposing sensitive personal and business information, disrupting critical business operations, and disrupting economies. Get an overview of cybersecurity from multiple perspectives in this timely lecture.

Pratap Chillakanti, M.S., is founder of the consulting company GENI. He 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. Previously, Chillakanti was a training program manager at Hewlett-Packard and has held leadership roles on enterprise software development teams.

Thursday, Oct. 9, 6:30–9:30 pm
San Francisco: San Francisco Campus • FREE

**LASER: Leonardo Art Science Evening Rendezvous**
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.

Piero Scaruffi is a cognitive scientist who was the manager of the Olivetti Artificial Intelligence Center in Silicon Valley. He has held visiting scholarships at several academic centers, lectured in three continents, and published several books on artificial intelligence and cognitive science. 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.

Wednesday, Oct. 8, 7–9 pm
Berkeley: Golden Bear Center • FREE

Wednesday, Dec. 10, 7–9 pm
Berkeley: Golden Bear Center • FREE

**Philanthropy, Volunteering and UniversalGiving™**
Learn how you can create a better, healthier world through philanthropy and volunteerism. This free public program shows how you can donate and volunteer your time with top-performing, global projects. Learn how to scale corporate social responsibility programs all across the world.

Pamela Hawley, M.A., is the founder and CEO of UniversalGiving™, an award-winning nonprofit helping people to donate and volunteer with top-performing, vetted organizations all over the world. UniversalGiving Corporate helps manage global CSR for companies and has been featured on the homepage of *BusinessWeek*, Oprah.com, CBS, *The Wall Street Journal* and *The New York Times*. Hawley is a winner of the Jefferson Award and has attended three social innovation events at the White House.

Thursday, Oct. 9, 6–7 pm
San Francisco: San Francisco Campus • FREE

**Readings at Litquake**
UC Berkeley Extension’s Writing department is pleased to be a sponsor of Litquake, the largest literary festival on the West Coast. Join us for a special reading event featuring instructors and students from the Post-Baccalaureate Certificate Program in Writing.

Oct. 10–18
Various locations in San Francisco • FREE
Genomic and Precision Medicine
Discover how advances in genomic science are affecting health care today by dramatically changing the prevention, diagnosis and treatment of disease. This is an important issue for everyone in the community to understand, as it will enable everyone to make better and more educated decisions about their personal health. This program is appropriate for a lay audience; practicing health care professionals; researchers; and prehealth students in medical, nursing and clinical laboratory science.

Jeanette McCarthy, M.P.H., Ph.D., is an adjunct associate professor of medicine at Duke University and a visiting faculty member in the Division of Medical Genetics at UCSF. She trained in genetic epidemiology at UC Berkeley and has taught courses in epidemiology, genetic epidemiology, computational genomics and genomic medicine. She currently runs a consulting business, working with academic centers, health care institutes and industry partners to help fill the education gap in genomic and precision medicine.

Thursday, Oct. 23, 6:30–8:30 pm
Berkeley: Golden Bear Center • FREE

Discover Oxford: Oxford Berkeley Program Social
Join us for an entertaining, illustrated lecture on the history of the University of Oxford, with a special emphasis on the Oxford Berkeley Program. Learn about Oxford’s early origins in art, literature and science; its 18th-century grandeur; and the 20th-century technological revolution that greatly influenced the city and its environs.

For more than 42 years, the Oxford Berkeley Program has brought two of the world’s great universities together, uniting them in the shared experience of academic discovery and rich history. Presenter Christopher Day has had a storied role in this project, beginning with his assignment to Oxford’s International Programmes in 2006. Today, he supervises this learning immersion, as well as graduate and doctoral students within the university. He is sure to bring his light and slightly irreverent presentation skills to this engaging lecture, as well as an informative aspect regarding the program.

Christopher Day is University Lecturer in Local History and Fellow of Kellogg College at Oxford University. He is also director of Academic Programs, International Programs, for the Department for Continuing Education at Oxford and the co-director of the Oxford Berkeley Program.

Saturday, Nov. 8, 1:45–4 pm
San Francisco: San Francisco Campus • FREE

LEED v4: The Future of Green Building Is Here
Learn about LEED’s evolution, global impact, and the future opportunities for organizations and professionals to engage with LEED to adopt green building and maintenance strategies.

Kelly S. Gearhart, B.A., LEED AP, is a principal with Triple Green Building Group LLC. Gearhart has consulted with hundreds of clients on commercial and residential green building strategies. She teaches LEED and green building courses, facilitates green building charrettes, administers LEED projects domestically and internationally, presents at conferences, and serves on U.S. Green Building Council boards and councils.

Thursday, Dec. 4, 6:30–8:30 pm
San Francisco: San Francisco Campus • FREE

50th Anniversary of the Free Speech Movement
Since 2012, UC Berkeley’s On the Same Page program has sparked discussion and community among incoming freshmen, including those in the Fall Program for Freshmen. The theme for fall 2014 is the 50th anniversary of the Free Speech Movement. Throughout the year, campus hosts events reflecting the chosen theme that are open to the general public. Visit the On the Same Page site to learn more about this yearlong series of educational and inspirational events: fsm-onthesamepage.berkeley.edu/events.
Gladys Mercier is director of the software management program at Carnegie Mellon University’s Silicon Valley campus by day, but she is indulging her passion for landscape design at night with UC Berkeley Extension. Thanks to overlapping course requirements, she is able to progress concurrently through the Certificate Program in Landscape Architecture and the Professional Sequence in Cultural Landscape Preservation and Management.

“I didn’t even know this subject area existed before,” Mercier says of the preservation program. “This has given me a totally new perspective on history and culture in terms of landscape and has proved very useful in my design projects.”

For both the landscape architecture certificate and the cultural preservation program, Mercier is enthusiastic about the quality of the instructors—especially being an instructor herself. “I’m grateful to the individual instructors who have shown an authentic interest in teaching us about the process of becoming a successful designer,” she says. “They are so perceptive and help us at each step along the way. They are working in the industry and share their current experiences in the classroom. We are learning enduring principles, but we have to apply them to real problems.”
**Art and Design**

extension.berkeley.edu/art

**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 an organization 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.

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- Intermediate Front-End Web Development, see p. 19
- Introductory Landscape Design Studio, see p. 28
- Neighborhood Design Studio, see p. 28
- Photoshop for Photographers, see p. 16
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. 004
Wednesday, Aug. 20, 6:30–8 pm
San Francisco: Art and Design Center

Wednesday, Aug. 27, 12–12:45 pm
Online

Certificate Program in Landscape Architecture and Professional Sequence in Cultural Landscape Preservation and Management

Sec. 004
Thursday, Aug. 28, 6:30–8 pm
San Francisco: Art and Design Center

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

Sec. 002
Monday, Aug. 25, 6:30–8 pm
San Francisco: Art and Design Center

Professional Sequence in Graphic Design

Sec. 004
Monday, Aug. 25, 6:30–8 pm
San Francisco: Art and Design Center

Visual Arts

COURSE INFORMATION
(415) 284-1041
extension-visualarts@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 and Specialized Programs in Digital Photography, in Drawing and in Painting

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. 17 or visit extension.berkeley.edu/cert/visualarts.html.

Sec. 002
1 meeting
Monday, 6:30–7:30 pm
Sept. 15
San Francisco: Art and Design Center • FREE

Art History and Museum Studies

Modern Art: History and Theory

HISTART X.441 • 2 semester units in History of Art
A requirement in the Post-Baccalaureate Certificate in Visual Arts

The European and American modernist revolution that began in the late-19th century and continued into the 20th subverted traditional art and laid the groundwork for contemporary art. Through illustrated lectures and class discussions, you examine important artworks from the Romantic period through the pop-art era. You also explore the cultural conditions that produced these works—including the artists’ lives—and investigate the critical and theoretical writings that shaped the aesthetic discourse and subsequent art history.

Sec. 002
Terri Cohn, M.A.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 25–Dec. 4 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $455

Art by Women

HISTART X.429 • 2 semester units in History of Art
(Formerly Women Artists)

An elective in the Post-Baccalaureate Certificate in Visual Arts

Discover women artists from the Middle Ages to the present, and investigate their art from historical, aesthetic and gender-specific perspectives. Explore the inequity of female artists in worldwide museum collections and within the conversation on the history of art. Debate the existence of a female artistic sensibility. Gain an understanding of how multicultural artists and women such as Louise Bourgeois, Cindy Sherman, Kara Walker, Kiki Smith and Hung Liu have pierced the contemporary art scene and changed it forever.

Sec. 002
Sophie Touzé, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
Oct. 6–Dec. 8
San Francisco: Art and Design Center • $455


HISTART X.450 • 2 semester units in History of Art
An elective in the Post-Baccalaureate Certificate in Visual Arts

Paradigmatic shifts in museum practices are forcing museum professionals to develop innovative programs and challenge assumptions. Get an introduction to the field of museum science and the social, political and cultural issues associated with museums. Explore a wide variety of careers, including curation, exhibit design, collection management, education, administration, development and research. Most class meetings take place at Bay Area museums, giving you an opportunity to meet museum professionals while learning about potential careers.

Sec. 002
Sophie Touzé, M.F.A.
10 meetings
Fridays, 10 am–1 pm
Oct. 3–Dec. 12 (no meeting on Nov. 28)
San Francisco: Art and Design Center • $455

The Art of Film

FILM X.20 • 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 screenwriting. You are responsible for renting and viewing films as part of this course.

Sec. 002
L. Thomas Pollard, Ph.D.
Enroll anytime
Online • $715
Drawing

Drawing Fundamentals
ART X405 • 2 semester units in Art Practice
A requirement in the Special 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. 006
Pamela Lanza, M.F.A.
12 meetings
Mondays, 6:30–9:30 pm
Sept. 22–Dec. 8
San Francisco: Art and Design Center • $455

Drawing Intermediate
ART X406 • 2 semester units in Art Practice
A requirement in the Special Program in Drawing

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. 002
Sheila Ghidini, M.F.A.
12 meetings
Thursdays, 6:30–9:30 pm
Sept. 25–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $455

Large-Scale Drawing
ART X408.1 • 2 semester units in Art Practice
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing

Drawing has become a medium of equal importance in contemporary art with more removed-from-the-hand directions such as digital imaging, installation and multimedia works. In this intermediate to advanced drawing course, you examine contemporary drawing methods and concepts. You also explore the personal and societal meanings of these perceived trends in art making as they mix with, and are informed by, large-format drawing.

Prerequisite: Drawing Intermediate ART X406 or consent of instructor

Sec. 002
Pamela Lanza, M.F.A.
12 meetings
Saturdays, 10 am–1 pm
Sept. 20–Dec. 13 (no meeting on Nov. 29)
San Francisco: Art and Design Center • $455

Working in Series
ART X413.3 • 2 semester units in Art Practice
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing

The process of working in series is an effective vehicle to unlock creative potential, capitalize on unexpected discoveries and uncover new forms of self-expression. Illustrated lectures introduce you to contemporary artists who work in series and to the ideas behind this approach. Through course assignments you expand your innovative thinking and delve into your own serial explorations.

Prerequisites: Experimental Drawing ART X433 and Painting Workshop ART X470 or consent of instructor

Sec. 002
Pamela Lanza, M.F.A.
12 meetings
Wednesdays, 6:30–9:30 pm
Sept. 24–Dec. 10
San Francisco: Art and Design Center • $455

Open Admissions Policy
Take a course just for fun! You may enroll in individual courses without registering for a certificate or specialized program of study. Courses available without prerequisites in drawing, painting, digital photography and other media.
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

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
extension-visualarts@berkeley.edu

Drawing on Nature
ART X414.6 • 2 semester units in Art Practice
(Formerly Nature Journaling)
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing
Learn to observe and record the natural Bay Area environment through the practice of journaling. Field trips to local sites expand your skills of perception through a variety of sketching exercises that immerse you in the ephemeral beauty of the landscape. These field studies alternate weekly with studio sessions for lecture demonstrations, projects and critiques of finished work. Topics covered include contour line, value and shading, texture, negative space and compositional dynamics.

Sec. 002
Sheila Ghidini, M.F.A.
12 meetings
Saturday, 1:30–4:30 pm
Sept. 20–Dec. 13 (no meeting on Nov. 29)
San Francisco: Art and Design Center • $455

Pen and Ink Drawing
ART X432 • 2 semester units in Art Practice
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Drawing
Explore traditional and innovative approaches to line drawing with pen and ink. Demonstrations introduce you to the different types of pens, papers and inks. Course projects cover a full repertoire of line-making techniques, including gesture, contour, hatching, stippling, and developed freestyle lines, as well as the use of ink washes for grounds and shading. Note: Bring black felt-tip, gel or rollerball drawing pens and a 9x12-inch sketchbook to the first class.

Prerequisite: Drawing Fundamentals ART X405 or consent of instructor

Sec. 002
Glenn Hirsch, M.F.A.
12 meetings
Tuesday, 6:30–9:30 pm
Sept. 23–Dec. 16 (no meeting on Nov. 11)
San Francisco: Art and Design Center • $455

Painting

Painting Fundamentals
ART X410 • 2 semester units in Art Practice
A requirement in the Specialized Program in Painting
Get an introduction to the essential materials and techniques of painting, including building and stretching a canvas, mixing color, underpainting, glazing and washing, dry brushing and using a palette knife. Explore the use of composition, line, contrast, texture and color. Demonstrations, slide-illustrated lectures, and individual and group critiques provide a basis to develop your visual awareness.

Sec. 006
Larry Robinson, M.F.A.
12 meetings
Wednesday, 6:30–9:30 pm
Sept. 24–Dec. 10
San Francisco: Art and Design Center • $455

Material Fictions
ART X411.3 • 1 semester unit in Art Practice
(Formerly Encaustic Painting)
An elective in the Post-Baccalaureate Certificate in Visual Arts and in the Specialized Program in Painting
The substance of art making, its medium, is a means by which something is communicated or expressed. Explore the idea of medium and material as a carrier of meaning and metaphor. Through demonstrations and applied hands-on techniques you learn the practical skills of working with a variety of media such as encaustic, plaster and collage to produce rich layering and textural effects in your paintings. Class discussions, readings and course projects investigate the use of medium as an inspiration for creative self-expression.

Sec. 001
Kathleen Thompson, M.F.A.
5 meetings
Tuesday, 6:30–9:30 pm
Sept. 30–Oct. 28
San Francisco: Art and Design Center • $295
**Light and Space**

**ART X411.4 • 2 semester units in Art Practice**

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

Focus on both the concepts and techniques of creating light and space in your artwork. Use the narrative language of photography and film—such as backlighting, shadow casting and deep focus—to conceptualize and apply these effects to any genre of work. Use color and composition to create works that can convey the infinite or circumscribe your space. This course is intended for intermediate and advanced students.

**Prerequisite:** Painting Fundamentals ART X410 or consent of instructor

**Sec. 002**
Glenn Hirsch, M.F.A.
12 meetings
Mondays, 6:30–9:30 pm
Sept. 22–Dec. 8
San Francisco: Art and Design Center • $455

**Mixed-Media Painting**

**ART X440 • 2 semester units in Art Practice**

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

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

**Prerequisite:** Painting Fundamentals ART X410 or consent of instructor

**Sec. 005**
Glenn Hirsch, M.F.A.
12 meetings
Saturdays, 10 am–1 pm
Sept. 20–Dec. 13 (no meeting on Nov. 29)
San Francisco: Art and Design Center • $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. 002**
Francesca Pastine, M.F.A.
12 meetings
Thursdays, 10 am–1 pm
Sept. 25–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $455

**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. 006**
Larry Robinson, M.F.A.
12 meetings
Mondays, 7–10 pm
Sept. 22–Dec. 8
Berkeley Campus: 375 Kroeber Hall • $455

**VISIT OUR WEBSITE**

Up-to-date course and schedule information with easy enrollment

extension.berkeley.edu

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**Specialized Program in Digital Photography**

Digital technology dramatically alters the accessibility and possibilities of photography. The Specialized Program in Digital Photography explores the essentials of digital imaging, including getting the most out of new technologies. Deepen your understanding of the aesthetics and pictorial strategies of photography. The curriculum provides the opportunity to expand your perceptual awareness and technical range so you can confidently produce images that express your artistic vision.

**Curriculum Requirements**

The curriculum comprises 3 required courses and a minimum of 2 electives for a total of 10 semester units (150 hours of instruction).

**Required Courses**

- Digital Photography Fundamentals ARCH X405 (offered this term)
- Digital Photography Intermediate ARCH X405.2
- Digital Photography in Practice and Context ARCH X405.7 (offered this term)

**Electives**

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

**Learn More and View the Flyer**

extension.berkeley.edu/spos/digitalphoto.html

(415) 284-1041
extension-visualarts@berkeley.edu
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.

Sec. 006
David Papas
10 meetings
Saturdays, 10 am–1 pm
Sept. 20–Nov. 22
San Francisco: Art and Design Center • $455

NEW THIS TERM

Photoshop for Photographers

ARCH X406.2 • 2 semester units in Architecture

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

Learn to more effectively use Photoshop in your digital photography workflow. This course is ideal for digital photographers who want to become more proficient at utilizing this essential program. Through instructor demonstration and hands-on practice, you learn raw processing with Adobe Camera Raw, Photoshop tools, palettes, masks, smart objects and high-dynamic-range imaging, as well as basic retouching, tone and color correction.

Sec. 001
Emmanuelle Namont Kouznetsov, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Oct. 1–Dec. 3
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

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.

Bring samples of your current work to the first class.

Prerequisite: Digital Photography Fundamentals ARCH X405 or consent of instructor

Sec. 003
Emmanuelle Namont Kouznetsov, M.F.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 23–Dec. 2
San Francisco: Art and Design Center • $455

Other Media

Monoprinting Fundamentals

ARCH X417.1 • 2 semester units in Architecture

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

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

Sec. 002
Heather Wilcoxen, M.F.A.
9 meetings
Saturdays, 1–5 pm
Sept. 23–Dec. 3
San Francisco: Art and Design Center • $455

Post-Baccalaureate Core Courses

Post-Baccalaureate Seminar 1: Portfolio and Visual Dynamics

ART X401 • 2 semester units in Art Practice

A requirement in the Post-Baccalaureate Certificate in Visual Arts

Explore the dynamics of aesthetic expression, perception and process through interdisciplinary study. Learn the essential principles of visual design and composition, narrative and conceptual intent that inform and enrich your artistic practice. Course topics investigate form and content issues, problem-solving methods and strategies for developing a cohesive body of work.

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

Sec. 002
Amy Berk, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 29–Dec. 1
San Francisco: Art and Design Center • $525

Post-Baccalaureate Mentorship

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

A requirement 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 in Visual Arts

Sec. 006
3 meetings
Scheduled in consultation with instructor
Contact program office for more details • $325

Open Admissions Policy

Take a course just for fun! You may enroll in individual courses without registering for a certificate or specialized program of study. Courses available without prerequisites in drawing, painting, digital photography and other media.
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 San Francisco. 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 (offered this term)
- Contemporary Art: History and Theory ART X442
- Post-Baccalaureate Seminar 1: Portfolio and Visual Dynamics ART X401 (offered this term)
- Post-Baccalaureate Seminar 2: Portfolio and Critique ART X495
- Post-Baccalaureate Seminar 3: Portfolio Development and Professional Practices ART X495.1
- Portfolio Review ART 801

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

### Prepare for Graduate School
- Rigorous studio practice
- Conceptual and historical framework
- Portfolio development

### Pursue Your Passion
- Drawing
- Film
- Painting
- Photography
- Printmaking
- Video

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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.”
### Graphic and Interactive Design

**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 knowledge of Adobe Illustrator, InDesign or Photoshop strongly recommended  
**Sec. 005**  
Charlene Lowe, B.A.  
12 meetings  
Thursdays, 6–9 pm  
Sept. 4–Nov. 20  
San Francisco: Art and Design Center • $700

### Professional Sequence in Graphic Design

**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 and advance in the field. For program details, see p. 19 or visit extension.berkeley.edu/spos/graphicps.html.

**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 firsthand 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.  
This course does not include computer instruction, however, software demos are provided.  
**Sec. 004**  
Jesse Gottesman, M.F.A.  
15 meetings  
Tuesdays, 6:30–9:30 pm  
Sept. 2–Dec. 16 (no meeting on Nov. 11)  
San Francisco: Art and Design Center • FREE

**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 knowledge of Adobe Illustrator, InDesign or Photoshop strongly recommended  
**Sec. 004**  
Socorro Soberano, M.F.A.  
10 meetings  
Mondays, 6:30–9:30 pm  
Oct. 6–Dec. 8  
San Francisco: Art and Design Center • $700

**Graphic Design Studio III**  
DESIGN X411 • 2 semester units in Design  
A requirement in the Professional Sequence in Graphic Design  
This advanced course simulates the demands of the contemporary design market. Refine your design and presentation skills by working on a complex project involving multiple components. Develop and produce design proposals for a specific real-world project involving two and three dimensions. Working in teams, you create an appropriate goal, time line and final presentation for a dynamic design-identity program. The instructor selects and facilitates the design project and leads group and individual critiques of student work.  
**Prerequisites:** Graphic Design Studio I DESIGN X401.2, and Graphic Design Studio II DESIGN X401.3  
**Sec. 004**  
Jackson Riker, M.F.A.  
9 meetings  
Saturdays, 9:30 am–1:30 pm  
Oct. 11–Dec. 13 (no meeting on Nov. 29)  
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 typeographic design decisions.  
**Prerequisites:** Graphic Design Studio I DESIGN X401.2, and knowledge of Adobe Illustrator or InDesign  
**Sec. 002**  
Ivan Trujillo, M.F.A.  
10 meetings  
Tuesdays, 6:30–9:30 pm  
Oct. 7–Dec. 16 (no meeting on Nov. 11)  
San Francisco: Art and Design Center • $700

**Principles of Publication Design**  
DESIGN X405 • 2 semester units in Design  
An elective in the Professional Sequence in Graphic Design  
Learn typography and page composition, including grid layout and the principles of contrast, repetition, alignment and proximity. Through lectures, hands-on projects and classroom critiques, learn how to design books, brochures, magazines, periodicals and collateral pieces. Learn how to copy-fit and write design specifications. Guest speakers give presentations of their work.  
**Prerequisite:** InDesign DESIGN X496; Typography Fundamentals DESIGN X450.9 strongly recommended  
**Sec. 001**  
Nancy Cutler, B.S.  
10 meetings  
Wednesdays, 6:30–9:30 pm  
Oct. 1–Dec. 10 (no meeting on Nov. 26)  
San Francisco: Art and Design Center • $750
Design and Business: Establishing and Maintaining Successful Client Relationships

DESIGN X440.1 • 2 semester units in Design
An elective in the Professional Sequence in Graphic Design
Learn business and relationship management skills and strategies needed for successful client relationships. Client-relations-management best practices are presented through case studies and lectures covering proposals, creative briefs, portfolio presentations and design process management. Using role-playing, research, writing and graphic design, you create and manage a project from a client management perspective.

Prerequisites: Basic knowledge of one of these software programs: Adobe Illustrator or InDesign
Sec. 003
Susan Brand, M.A.
5 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Oct. 2
San Francisco: Art and Design Center • $825

Computer Courses

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. 006
Michael Starkman, M.F.A.
10 meetings
Mondays, 2:30–5:30 pm
Sept. 8–Nov. 17 (no meeting on Oct. 13)
San Francisco: Art and Design Center • $825

Sec. 007
Michael Starkman, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Nov. 17 (no meeting on Oct. 13)
San Francisco: Art and Design Center • $825

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.

Sec. 003
Instructor to be announced
10 meetings
Thursdays, 6:30–9:30 pm
Oct. 9–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $790

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.

This course and the supporting textbook are based on the Microsoft operating system. If you have a Macintosh computer, you must have a text editor such as SimpleText or purchase Microsoft Office Professional for Macintosh. The instructor cannot provide technical support for Macintosh users. Also, you must have access to a Web host.

Sec. 004
Catherine Chasse, M.A.
Sept. 23–Dec. 16
Online • $595

NEW THIS TERM

Intermediate Front-End Web Development

DESIGN X496.2 • 2 semester units in Design
An elective in the Professional Sequence in Graphic Design
Learn front-end production techniques and best practices for creating mobile-first, responsive websites using HTML, CSS and JavaScript. Learn how to leverage front-end frameworks to develop projects rapidly; produce scalable style sheets; and create dynamic, user-driven interactions.

Prerequisite: Designing Websites With HTML and CSS EL ENG X453.1
Sec. 001
Nicholas Gutierrez, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Oct. 1–Dec. 10 (no meeting on Nov. 26)
San Francisco: Art and Design Center • $850

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extension.berkeley.edu/online

FREE INFORMATION SESSIONS
Certificate Program in Interior Design and Interior Architecture

UNEX 1243
Organized and moderated by noted design book author and lecturer, Diane Dorrans Saeks, this forum features four leading designers discussing newest trends, ideas and concepts in design and décor. Top San Francisco interiors designers—Jay Jeffers, David Oldroyd, Antonio Martins and Catherine Kwong—show images of their most recent work and discuss how their businesses are being influenced, expanded and enhanced by the Internet and social media. You get the opportunity to meet the designers for further discussion, questions and inspiration at an informal reception after the event.

Sec. 001
1 meeting
Saturday, 12:45–4 pm
Nov. 8
San Francisco: San Francisco Campus • FREE

General Interest

Inside Views of Design

ARCH 1005 • 0.4 ceu
Noted design book author, Diane Dorrans Saeks, hosts this afternoon seminar and tour that offers inspiration, ideas and the latest concepts on a broad range of residential and commercial design by San Francisco’s leading architecture and design practitioners. The afternoon begins at ODADA (Orlando Diaz-Azcuy Design Associates), an internationally recognized, award-winning firm that has been designing elegant and intelligent spaces with an avant-garde vision since 1990. The firm’s signatures: serene elegance and edited clarity for both luxury residential and commercial interiors. At the dramatic new headquarters of BAMO founded in 1991, we view stylistically varied ultra-luxurious commercial and residential work, including new work on the boards. We complete the afternoon at The Wiseman Group headed by Paul Wiseman and founded in 1980. We also meet his team whose extraordinary aesthetic is based on a quiet rigor, highly customized décor, and a precision that is intellectual, emotionally engaging and intuitive.

Refreshments are served at the end of the tour as the group discusses current design topics with the designers.

After meeting at ODADA’s downtown studio, the group carpools to the other studios located in South of Market and Potrero Hill.

Sec. 003
Diane Dorrans Saeks, B.A.
1 meeting
Saturday, 12:45–5 pm
Oct. 4
San Francisco: See Web for location • $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. 24.

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. 25.

Open Admissions Policy
Take a course just for fun! You may enroll in individual courses without registering for a certificate or specialized program of study.
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 6 semester units of electives 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)
- History of Architecture, Interiors and Decorative Arts I ARCH X412.4 (offered this term)
- Digital Presentation Techniques ARCH X481

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
- 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

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

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

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

Meet Certificate Program in Interior Design and Interior Architecture Graduate Alisa Tanphanich on p. 25.

Find the Quality You Want
- Part-time enrollment option
- Structured for adult learners
- Competitive cost
- Real-world practical skills

Get the Knowledge You Need
- Architectural history
- Manual and digital drawing
- Design studios
- Business practices
Professional Development

IDEX Examination Preparation

ARCH 1003 • 0.8 ceu

Take a one-day, comprehensive prep course for the IDEX California exam taught by an industry professional who was part of the exam task force. This class highlights exam topics and focuses on building codes, ethics questions and business practices that are part of the test. Get an introduction to methods that maximize your preparation time, help you remember pertinent information and give you confidence on exam day.

Sec. 002
Deborah Ogden, B.A., CID
1 meeting
Saturday, 8:30 am–5 pm
Sept. 13
San Francisco: See Web for location • $275

Advanced Presentation Skills

ARCH X443.3 • 1 semester unit in Architecture

Learn how to select, prepare and organize high-quality images and presentations for effective communication by combining CAD, 3-D modeling and graphic-editing software.

For course schedule, see p. 25.

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. 009
James Freed, M.A.Ed.
15 meetings
Mondays, 2–5 pm
Sept. 8–Dec. 15
San Francisco: Art and Design Center • $825

Sec. 010
Instructor to be announced
15 meetings
Thursdays, 6–9 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
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 architectural vocabulary and mechanical drawing in this basic drafting course. 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. 008
George Soskin, B.Arch, AIA, LEED AP, and Jennifer Mahoney, B.A.
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
San Francisco: Art and Design Center • $850

Sec. 009
Johanna Forman, M.Arch.
15 meetings
Wednesdays, 2–5 pm
Sept. 3–Dec. 17 (no meeting on Nov. 26)
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. Understand how light transforms color. Two-dimensional exercises teach you to apply theory to using color in interior space.

Sec. 005
Vesta Kirby, M.F.A.
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
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.

Prerequisites: Basic knowledge of PCs and Graphic Communication I ARCH X476.1. We recommend you take this class before Revit ARCH X479.2. Course is taught only on PCs.

Sec. 006
Stephen Wong, M.Arch.
15 meetings
Thursdays, 6–9 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $950

Sec. 007
Jennifer Dye, M.A.
15 meetings
Mondays, 1–4 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $950

San Francisco: Art and Design Center

“...This program has given me a great foundation and skills to build upon. It has given me the confidence as I move forward. I know that I can rely on the education I got from Extension.”

—Mark Santa Ana, Certificate Program in Interior Design and Interior Architecture Student

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
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. 005
Jennifer Mahoney, B.A.
13 meetings
Wednesdays, 6:15–9:15 pm
Sept. 10–Nov. 19 (also Saturdays, Oct. 4 and Nov. 15, 9:30 am–4 pm)
San Francisco: Art and Design Center • $850

History of Architecture, Interiors and Decorative Arts I
ARCH X412.4 • 3 semester units in Architecture

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

Take an integrated approach to the design of the built environment, from ancient Egypt through the Renaissance to the late-18th century and English Neoclassicism, French Empire and the American Federal Period styles. In slide-illustrated lectures, you examine the major designs of leading architects and artisans and explore the significance of function, form and ornamentation in relation to social and economic conditions.

Prerequisite: Graphic Communication II ARCH X476.2

Sec. 002
Sandra Poza, B.S., ASID, Extension Honored Instructor
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15 (also Saturday, Dec. 6, 10 am–1 pm; no meeting on Dec. 8)
San Francisco: Art and Design Center • $875

Phase II

Design Studio I
ARCH X482.1 • 3 semester units in Architecture

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

Learn to apply fundamental design principles to space, architecture and the environment through a series of design problems. Emphasis is on conceptual design and human factors of scale, materials and structure. Progress from abstract theory to problem solving through analysis and critiques. Use your manual and digital drawing skills to develop models communicating your ideas.

Prerequisites: Design Principles and Elements ARCH X475, Graphic Communication II ARCH X476.2, AutoCAD ARCH X479.1 or Revit ARCH X479.2, and Digital Presentation Techniques

Sec. 004
Georgia Goldberg, M.Arch.
15 meetings
Wednesdays, 6–9 pm
Sept. 3–Dec. 17 (no meeting on Nov. 26)
San Francisco: Art and Design Center • $950

Interior Finishes and Materials
ARCH X480 • 3 semester units in Architecture

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

Learn to apply fundamental design principles to space, architecture and the environment through a series of design problems. Emphasis is on conceptual design and human factors of scale, materials and structure. Progress from abstract theory to problem solving through analysis and critiques. Use your manual and digital drawing skills to develop models communicating your ideas.

Prerequisites: Design Principles and Elements ARCH X475, Graphic Communication I ARCH X476.1, AutoCAD ARCH X479.1 or Revit ARCH X479.2, and Digital Presentation Techniques ARCH X481 are highly recommended.

Sec. 003
Cheryl Gordon, B.A., B.F.A., IIDA, LEED AP
15 meetings
Thursdays, 6–9 pm
Sept. 4–Dec. 18 (field trips on Oct. 9 and Nov. 6 are held from 1–5 pm; no meetings on Sept. 25 and Nov. 27 and the evening of Nov. 6)
San Francisco: Art and Design Center • $880

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. 006
Tamara Roth, B.F.A., Associate IIDA, LEED AP ID+C
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
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. 003
Julie Barron, B.F.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Dec. 17 (no meeting on Nov. 26)
San Francisco: Art and Design Center • $950

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
**Fundamentals of Lighting Design**
ARCH X484 • 2 semester units in Architecture

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

Gain familiarity with architectural lighting techniques in this introductory course. Learn the fundamentals of lighting—such as luminaire sources and types, regulations and technical terminology—and how to apply them to practical situations for residential and commercial interiors. Specific exercises and case studies train you to draw lighting plans, write specifications and mock-up study models. Field trips reinforce classroom learning and provide study opportunities.

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

**Sec. 002**
Kerry A. Roussellot, B.Arch.
12 meetings
Tuesdays, 6:30–9:30 pm
Sept. 23–Dec. 16 (no meeting on Nov. 11)
San Francisco: Art and Design Center • $865

**Phase III**

**Design Studio III**

ARCH X482.3 • 3 semester units in Architecture

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

Develop a conceptual and schematic design for mobile workers in an urban environment. Investigate how work spaces can borrow from other societal sectors to create a workplace that appeals to the evolving expectations of the modern worker. Instructors lead you through a process that includes research and synthesis, conceptual design exploration, and program and schematic design development.

**Prerequisites:** Design Studio II ARCH X482.2, Fundamentals of Lighting Design ARCH X484, Building Components and Systems for Interior Architecture ARCH X483 and Digital Presentation Techniques ARCH X481; experience with software such as Microsoft PowerPoint, Adobe InDesign or Apple Keynote

**Sec. 004**
Julie Barron, B.F.A.
15 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $1,100

**Business Practices for Interior Designers**

ARCH X409 • 3 semester units in Architecture

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

Develop the skills and knowledge to address the broad range of business and legal needs of the interior design professional. You gain exposure to residential and commercial design practice, as well as insights into marketing yourself and your designs. You cover basic aspects of the design business, including project management and construction administration, legal aspects of the profession, fee estimating, proposal writing, record keeping, liability, ethics, professional responsibility and licensing requirements.

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

**Sec. 002**
Shari Canepa, M.A.Ed., ASID, CID, CGBP, LEED
15 meetings
Wednesdays, 6:30–9:30 pm
Sept. 10–Dec. 17
San Francisco: Art and Design Center • $850

**Design Studio IV**

ARCH X482.4 • 3 semester units in Architecture

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

Combine space planning, color theory, lighting, material selection, design and construction in this final studio that challenges you to apply these skills to a multimedia, mixed-use project exploring the complexities of multiple user experiences in a holistic project. Work to reconcile two contrary programs—a residential space and a bar/nightclub—in a downtown Oakland storefront location. Learn how multiple experiences within a single space create complexities that make the design both challenging and exciting. Acoustics and lighting play an important part in this project.

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

**Sec. 002**
Amy Kwok, M.Arch., and Nambi Gardner, M.Arch., LEED AP
15 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
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. 009**
Jayne Bunce, B.A., B.F.A., ASID, CID
Sept. 16–Oct. 28
Online • $565

**Sec. 008**
Jayne Bunce, B.A., B.F.A., ASID, CID
6 meetings
Tuesdays, 2–5 pm
Oct. 14–Nov. 25 (no meeting on Nov. 11)
San Francisco: Art and Design Center • $565

**Sketching for Interiors**

ARCH X476.1 • 1 semester unit in Architecture

An elective in the Certificate Program in Interior Design and Interior Architecture

This freehand sketching class, you learn 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 and is helpful if you are planning to take Graphic Communication II ARCH X476.2.

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

**Sec. 002**
Douglas Wittnebel, M.Arch., AIA, LEED AP
6 meetings
Mondays, 6–9 pm
Oct. 13–Nov. 17
San Francisco: Art and Design Center • $500
**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. 003  
David Waldorf, M.Arch., BSID, CGBP  
Nov. 4–Dec. 16  
Online • $550

**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. 005  
Rachael Hagner, M.Arch., AIA, IIDA  
2 meetings  
Scheduled in consultation with instructor  
San Francisco: Art and Design Center • $500

**Advanced Presentation Skills**  
ARCH X443.3 • 1 semester unit in Architecture  
An elective in the Certificate Program in Interior Design and Interior Architecture  
Learn how to select, prepare and organize high-quality images and presentations for effective communication by combining CAD, 3-D modeling and graphic-editing software. Understand how to carefully use fonts, colors, layout, image and information flow to create effective visual deliverables. Gain efficient work-flow techniques to quickly produce and organize artwork for client presentations. You also learn effective verbal presentation strategies.  
**Prerequisites:** AutoCAD ARCH X479.1 or basic proficiency in Google SketchUp, and Digital Presentation Techniques ARCH X481  
Sec. 003  
David Polifko, M.F.A., M.S.  
6 meetings  
Wednesdays, 2–5 pm  
Sept. 3–Oct. 8  
San Francisco: Art and Design Center • $600

Impressed with what she saw and heard at a Certificate Program in Interior Design and Interior Architecture information session, Alisa Tanphanich is now a certificate graduate with a successful career change to interior design. Tanphanich is excited to explore the many facets of interior design—from sustainable practices to fine arts—in her new field.  
“As I took more classes, I fell in love with the different types of work that are part of an interior designer’s job,” she says. “The certificate program taught me practical knowledge and skills, such as how to draft construction documents, understand structural components of a building, communicate graphically through software and have a keen eye for editing. It makes me a better interior designer.”  
Tanphanich brings this wealth of knowledge to her current position as an interior designer at high-end residential firm ScavulloDesign Interiors. “The ability to analyze my designs critically, communicate my ideas orally and make deliberate decisions when putting together a presentation are skills that also benefit me in other areas of my life,” she says.
### 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. 005**

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

10 meetings

Mondays, 6:30–9:30 pm

Sept. 22–Nov. 24

San Francisco: Art and Design Center • $685

#### 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. 002**

Stephen Albert, M.F.A.

15 meetings

Wednesdays, 6:30–9:30 pm

Sept. 3–Dec. 17 (no meeting on Nov. 26)

San Francisco: Art and Design Center • $870

### Autumn Plants and Applications

**LD ARCH X446** • 3 semester units in Landscape Architecture

_A requirement in the Certificate Program in Landscape Architecture_

This field-trip course presents a detailed study of the visual characteristics, nomenclature, cultural requirements and design applications of 125 landscape plant species. You pay particular attention to plants valued for their autumn foliage, color, blooms or fruit. Learn to recognize the plants in several situations and stages of maturity, and develop a plant palette varied enough to be used in preparing basic planting plans.

Class meeting locations change weekly. Wear walking shoes.

**Sec. 002**

Quin Ellis, A.S.

12 meetings

Saturdays, 9 am–1 pm

Sept. 13–Dec. 13 (no meetings on Sept. 27 and Nov. 29)

San Francisco: Art and Design Center • $860

### Landscape Graphics I

**LD ARCH X458** • 2 semester units in Landscape Architecture

_A requirement in the Certificate Program in Landscape Architecture_

Learn graphic communication methods unique to landscape architectural analysis, design and client presentation. Focus on orthographic drawing, such as plan, section and elevation; lettering; and drafting. Plan to purchase drawing equipment and tools; a list is provided at the first meeting. Bring pencils and ink pens to the first class.

**Sec. 002**

Eddie Chau, M.L.A., PLA

15 meetings

Tuesdays, 6:30–9:30 pm

Sept. 2–Dec. 16 (no meeting on Nov. 11)

San Francisco: Art and Design Center • $780
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 semester 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
- Landscape Graphics I LD ARCH X458 (offered this term)
- Spring Plants and Applications LD ARCH X444 OR Summer Plants and Applications LD ARCH X445
- Autumn Plants and Applications LD ARCH X446 (offered this term)
- AutoCAD for Landscape Architecture: Level I LD ARCH X428 (offered this term)
- Digital Landscape Graphics LD ARCH X465
- Introductory Landscape Design Studio LD ARCH X466 (offered this term)

**Advanced Courses**
- Planting Design LD ARCH X401
- Social Factors in Environmental Design LD ARCH X402 (offered this term)
- Construction Technology I LD ARCH X404
- Construction Technology II LD ARCH X405
- Green Roof Systems LD ARCH X470
- Neighborhood Design Studio LD ARCH X468 (offered this term)
- Site Design Studio LD ARCH X464
- Professional Practice in Landscape Architecture LD ARCH X427 (offered this term)
- Environmental Analysis and Design Studio LD ARCH X474 (offered this term)
- Site Planning Practicum Studio LD ARCH X467

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

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

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
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 training in field and office skills, 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 3 required courses for a total of 6 semester units (93 hours of instruction).

Required Courses
- The Cultural Landscape: Preservation and Sustainable Practice, LD ARCH X455
- History of Landscape Architecture, LD ARCH X473
- Cultural Landscape Documentation and Studio, LD ARCH X452 (offered this term)

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

AutoCAD for Landscape Architecture: Level I
LD ARCH X428 • 2 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture

Get an introduction to CAD techniques that augment traditional drafting skills. Learn how to create landscape architectural drawings; use layers, linetypes and color to display drawings for plotting; use commands to draw and edit objects; and develop a symbol library. Note: Bring a portable USB drive to the first class.

Class is only taught on PCs.
Prerequisites: Landscape Graphics I, LD ARCH X458 and working knowledge of PCs

Sec. 002
Maki Boyle, M.L.A., PLA
14 meetings
Mondays, 6:30–9:30 pm
Sept. 15–Dec. 15
San Francisco: Art and Design Center • $1,210

NEW THIS TERM
Introductory Landscape Design Studio
LD ARCH X466 • 3 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture

Get an introduction to environmental analysis and site-specific design projects for small and large scale projects. Through lectures, discussions, a series of exercises and studio critiques, you examine the landscape architectural design process and basic design vocabulary, including site analysis; program development; and concepts of spatial order, scale, complexity, perception and visual presentation.

Prerequisites: Principles and Elements of Design, LD ARCH X463 or equivalent, Landscape Graphics I, LD ARCH X458, one course in plant materials and applications, and History of Landscape Architecture, LD ARCH X473

Sec. 001
Achva Stein, M.L.A., Fellow of the ASLA
15 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
San Francisco: Art and Design Center • $1,210

Advanced Courses
Social Factors in Environmental Design
LD ARCH X402 • 2 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture

Landscape architects connect people to each other and to places, and the profession is increasingly instrumental in bringing urban populations in contact with nature. In this course, examine your own experiences with the outdoors to understand human interactions with the environment. You also study the needs of populations that are currently underserved by the profession.

Sec. 002
Patricia Algara, M.L.A.
10 meetings
Tuesdays, 6–9 pm
Sept. 16–Nov. 25 (no meeting on Nov. 11)
San Francisco: Art and Design Center • $720

NEW THIS TERM
Neighborhood Design Studio
LD ARCH X468 • 4 semester units in Landscape Architecture
A requirement in the Certificate Program in Landscape Architecture

Understand landscape design and real-world landscape architectural process through neighborhood-related projects. Strengthen your design, communication, graphic production and technical skill, and explore contemporary landscape architectural practice and theory through readings and discussions.

Prerequisite: Construction Technology II, LD ARCH X405

Sec. 001
Chris Hardy, M.L.A., CA, PLA, and Jennifer Ng, B.S.L.A.
24 meetings
Mondays and Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 24 (1 Saturday meeting to be arranged; no meeting on Sept. 22)
San Francisco: Art and Design Center • $1,400
**Professional Practice in Landscape Architecture**

LD ARCH X427 • 2 semester units in Landscape Architecture

A requirement in the Certificate Program in Landscape Architecture

Explore and understand the possibilities of the landscape architect’s role in contemporary society by examining current forms of practice and emerging trends in the profession. Key topics of discussion include contractual relationships, ethical responsibilities, office-management practices and promotions. Examine issues specifically related to the ethical and responsible practice of the landscape architecture profession. Explore real-world case studies to closely examine some of the central issues of professional practice.

**Prerequisite:** Construction Technology II LD ARCH X405

**Sec. 002**
Andreas Stavropoulos, M.L.A., PLA
10 meetings

**Thursdays, 6:30–9:30 pm**

Sept. 18–Nov. 20
San Francisco: Art and Design Center • $750

**NEW THIS TERM**

**Environmental Analysis and Design Studio**

LD ARCH X474 • 5 semester units in Landscape Architecture

A requirement in the Certificate Program in Landscape Architecture

Take a multidisciplinary design approach by integrating data from several fields that influence the design and development of the landscape. Class projects involve a series of progressive steps in which you learn and analyze regional considerations, along with large amounts of contextual information, and then creatively address those considerations in a comprehensive master plan.

At the first class meeting, you must submit up to five samples of work showing your drafting and design skills. These samples should be on sheets no larger than 11x17 inches; reductions of larger work are acceptable. Label each with your name and phone number. You must successfully complete all prerequisites and display adequate skills to be admitted to the course.

**Prerequisites:** Neighborhood Design Studio LD ARCH X468 and Site Design Studio LD ARCH X464, or equivalent or consent of instructor

**Sec. 001**
Samuel Mathau, M.Arch., M.City Planning/Urban Design, AIA, APA
30 meetings

**Mondays and Wednesdays, 6:30–9:30 pm**

Sept. 3–Dec. 15
San Francisco: Art and Design Center • $1,650

**Electives**

**NEW THIS TERM**

**Cultural Landscape Documentation and Studio**

LD ARCH X452 • 2 semester units in Landscape Architecture

A requirement in the Professional Sequence in Cultural Landscape Preservation and Management; an elective in the Certificate Program in Landscape Architecture

Learn the fundamental tools and processes for the preservation of historic landscapes. Gain an understanding of the need for cohesive and unified documentation that can help identify and prioritize potential preservation sites. Review the hierarchy of treatment strategies such as preservation, rehabilitation, restoration and reconstruction, and work on projects that develop your ability to identify, document, analyze, treat and maintain threatened or endangered sites. In the first half of the course, you choose a historic landscape site for documentation; in the second half, you develop treatment recommendations.

**Sec. 001**
Douglas Nelson, B.F.A., B.L.A., ASLA, LEED AP, and Gretchen Hilyard, M.S.
12 meetings

**Thursdays, 6:30–9:30 pm**

Sept. 4–Nov. 20
San Francisco: Art and Design Center • $900

**Graphics Boot Camp**

LD ARCH X456 • 1 semester unit in Landscape Architecture

An elective in the Certificate Program in Landscape Architecture

Gain confidence, speed and skill in your overall drawing capabilities in this fast-paced, skill-building workshop. This two-day intensive course focuses on hand-drawing techniques and time-saving tips that help structure the graphic portion of your design work. Through in-class projects—including drafted, freehand and gesture drawings of landscape elements, buildings, people and furnishings—you develop a succinct and effective graphic lexicon, allowing you to quickly create and convey design ideas.

**Prerequisite:** Landscape Graphics I LD ARCH X458 or equivalent

**Sec. 001**
Vera Gates, B.S., LEED AP, PLA
2 meetings

**Saturdays, 9 am–5:30 pm**

Sept. 6 and 13
San Francisco: Art and Design Center • $395

**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 that help you for future employment in the field of landscape architecture. Prospective students should present a résumé and portfolio to a professional landscape architecture or related office that will sponsor an internship. Upon approval of an internship, students will meet with instructor and classmates three times during the term, prepare written analysis and complete a minimum of 90 hours of internship work experience.

**Sec. 004**
Eddie Chau, M.L.A., PLA
Scheduled in consultation with instructor
San Francisco: Art and Design Center • $350

**Open Admissions Policy**

Take a course just for fun!

You may enroll in individual courses without registering for a certificate or specialized program of study. Courses available without prerequisites in drawing, painting, digital photography and other media.
Despite being nervous about returning to school at 40, single mother Debbi Bonjour feels embraced within the supportive community of the Certificate Program of Alcohol and Drug Abuse Studies. Bonjour’s desire to help others is matched by those of her fellow classmates and instructors.

“I am continually inspired and enthralled by both instructors and students,” says Bonjour, who is in long-term recovery. “I became the type of student who sat in the front on the edge of my seat, obtaining invaluable tools from instructors, as well as CAADAC, harm-reduction and abstinence-treatment professionals. I belong to an eclectic community of students who share our experience and insight with each other.” Bonjour also notes that the flexible class schedule allows her to put herself wholeheartedly into the certificate while balancing her children’s needs.

A recent certificate graduate, Bonjour is working as a registered recovery worker. She is finishing her A.S. degree and working toward licensure in social work. “I don’t think I could have chosen a better path,” she says. “It enables me to have a broader perspective on my own life and the lives of others. It was a dream that has become attainable.”
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.

**NEW COURSES AND PROGRAM**

Addressing Eating and Weight Disorders in Multicultural Populations, see p. 38

Case Seminar on Health Advocacy, see p. 50

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Introduction to Health Care Advocacy, see p. 49

A Narrative Therapy Approach to Trauma and Addiction, see p. 36

Research Practicum: Applying Research Methods and Conducting Empirical Investigations in Psychology, see p. 42

Treatment Models for Addictions and Co-Occurring Disorders Among Women, see p. 44

Using Electronic Media in Health Care Advocacy, see p. 50

Working in Forensic Settings, see p. 32

Professional Program in Evidence-Based Therapy for Anxiety and Mood Disorders, see p. 35

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Counseling and Psychotherapy

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

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

Continuing Education Workshops

ONLINE INFORMATION SESSION
CEU Workshop Series for Licensed Mental Health Clinicians
Find out how UC Berkeley Extension’s CEU workshops can strengthen your knowledge in specific presenting problems and help you care for your clients and expand your practice.
Visit extension.berkeley.edu/counseling to register.

Wednesday, 12–1 pm
Oct. 1
Online • FREE

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 can 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. 004
Janet K. Long, M.A., ATR-BC, CTP, MFT
2 meetings
Saturday and Sunday, 9 am–5 pm
Oct. 18–19
Berkeley: Golden Bear Center • $345

NEW THIS TERM
Clinical Work With Transgender Clients: The Basics and Beyond

PSYCH 1111
0.6 ceu • 6 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

Understand how to best engage individuals who identify across the gender spectrum. Study language and terminology; the differences between biological sex, gender and sexual orientation; and specific issues that some transgender clients face, including poverty, trauma and substance-abuse issues. You are challenged to explore your own gender biases to gain awareness of how to appropriately and effectively help transgender people in the clinical setting. In addition, you explore trans-identified clients’ experiences of oppression, prejudice and discrimination, as well as strengths that are prominent within the trans community that can be sources of support for your clients. The instructors use various methods to engage the participants, including film and discussion, small and large group exercises, and exploration and analysis of case vignettes.

Sec. 001
Rick Nizzardini, J.D., LCSW, and Robyn L. Stukalin, M.S., LCSW
1 meeting
Saturday, 9 am–4 pm
Oct. 4
San Francisco: San Francisco Campus • $195

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.

CEU Workshop Series for Licensed Mental Health Clinicians
Wednesday, Oct. 1, 12–1 pm
Online

Certificate Program in Alcohol and Drug Abuse Studies
Tuesday, Aug. 26, 7:30–9 pm
Berkeley: Golden Bear Center

Post-Baccalaureate Program for Counseling and Psychology Professions
Monday, July 28, 6–7:30 pm
Berkeley: Golden Bear Center
Wednesday, Aug. 20, 12–1 pm
Online

Professional Program in Health Advocacy
Tuesday, Aug. 26, 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.
NEW THIS TERM
Integrating Mindfulness Into Your Professional Practice
PSYCH 1114
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the Certificate Program in Alcohol and Drug Abuse Studies and the professional programs in Eating and Weight Disorders, in Trauma-Informed Interventions and in Evidence-Based Therapy for Anxiety and Mood Disorders

Learn how to better support clients with weight loss, eating disorders, anxiety and mood disorders, and comorbid diagnoses, such as chemical dependency. Discover easy and practical ways to integrate mindfulness into your work with patients, individually or in groups, to help encourage emotional regulation. Immerse yourself in an inside-out learning environment that offers an opportunity to explore the implications—personally and professionally—of assimilating mindfulness practices and mindful eating skills into professional work. Because a personal practice is held to be the foundation from which to deliver mindfulness skills in the clinical setting, mindful movement, meditations and mindful eating are core components of the training. Learn through didactic instruction, experiential meditation and eating exercises, group inquiry and dialog, current research, and personal reflection.

Guest Lecturer
Christopher Harrison, Ph.D., License PSY23743

Sec. 001
Carley Hauck, M.A.
1 meeting
Saturday, 9:30 am–4 pm
Nov. 8
Berkeley: Golden Bear Center • $215

Assessment and Treatment of Mental Illness in Older Adults
PSYCH 1007
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Aging and Mental Health

Learn how to identify the difference between normal aging and some of the medical or psychiatric illnesses commonly associated with aging. Geriatric mental health focuses on the medical, psychological and social concerns that older adults, their families and their caregivers face. The most common psychiatric disorders associated with aging are anxiety, depression, memory loss, delirium, dementia, delusions, hallucinations and behavioral problems. Gain familiarity with useful diagnostic tools, and learn some of the major approaches to working with older adults.

This workshop runs concurrently with Licensure Workshop on Aging and Long-Term Care PSYCH 1043.

Sec. 002
Melinda Ginn, Ph.D., License PSY16272, Extension Honored Instructor
2 meetings
Saturday and Sunday, 9 am–4 pm
Dec. 13–14
Berkeley: Golden Bear Center • $305

Clinical and Ethical Approaches to End-of-Life Care
PSYCH 1013
1.4 ceu • 14 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

World Hospice and Palliative Care Day is Oct. 11, 2014. Concurrent with this awareness-building event, learn how to assess the overall quality of end-of-life care, identify sources of suffering, and determine what decisions need to be made and who needs to be involved in making and implementing them. Develop the ability to incorporate psychosocial care into the medical treatment team, and gain the skills and understanding necessary to achieve standards of care for mental health services at life’s end, including interpersonal strategies; clinical knowledge; technical proficiency; and respect for the culture of individuals, their families and their communities.

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

Sec. 002
David Jull-Patterson, Ph.D., FT, Extension Honored Instructor
2 meetings
Saturday and Sunday, 9 am–5 pm
Oct. 11–12
Berkeley: Golden Bear Center • $320

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

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 (offered this term)
- 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
extension-counspsych@berkeley.edu
Cross-Cultural Neuropsychological Assessment

PSYCH 1023  
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists  
An elective in the Professional Program in Neuropsychological Assessment  
Learn techniques for cross-cultural psycho-diagnostic and neuropsychological assessment. Understand when to refer for this type of assessment, what to expect and look for, what types of information can be collected, and how to verify the reliability and validity of this information. Learn to adapt traditional information-gathering techniques and tools for cross-cultural assessment purposes.  
Sec. 002  
Shelley Peery, Ph.D.  
1 meeting  
Saturday, 9 am–4 pm  
Sept. 13  
San Francisco: San Francisco Campus • $195  

Neuropsychological Assessment

Introduction to Neuropsychological Assessment

PSYCH 1041  
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists  
A requirement in the Professional Program in Neuropsychological Assessment  
Take the opportunity to 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.  
Sec. 002  
Simon Tan, Psy.D., ABPP  
1 meeting  
Saturday, 9 am–5 pm  
Sept. 27  
San Francisco: San Francisco Campus • $215

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, and advances in understanding sensory perception and the neuroscience of the mind, gain an intuitive appreciation for how the brain operates and how it changes as a result of experience. This one-day class provides a solid foundation for further learning about neuropsychology, enables clinicians to incorporate the latest neuroscientific knowledge into their practices and presents the latest research on the mind-body connection.  
Sec. 003  
David Presti, Ph.D., license PSY12835, Extension Honored Instructor  
1 meeting  
Friday, 9 am–5 pm  
Oct. 17  
Berkeley: Golden Bear Center • $215

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.  
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  
• Introduction to Neuropsychological Assessment PSYCH 1041  
  (offered this term)  
• Advances in Human Brain Science for Clinicians PSYCH 1002  
  (offered this term)  
• Neuropsychological Assessment, Rorschach and MMPI-2: An Update for Advanced Clinical Practice PSYCH 1052  
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  
extension-counspsych@berkeley.edu  

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 that you need.
Evidence-Based Therapy for Anxiety and Mood Disorders

**DISCONTINUATION NOTICE**

The professional programs in the Treatment of Anxiety Disorders and in the Treatment of Mood Disorders are being discontinued, effective July 7, 2014. No further registrations to these two programs will be accepted. Some of the workshops in each program are transferable to the new Professional Program in Evidence-Based Therapy for Anxiety and Mood Disorders. For all questions, email extension-counspsych@berkeley.edu or call (510) 643-3883.

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**NEW THIS TERM**

**Professional Program in Evidence-Based Therapy for Anxiety and Mood Disorders**

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 Evidence-Based Therapy for Anxiety and Mood Disorders, you and fellow clinicians learn about some of the major causes, diagnostic issues, and prevention and treatment approaches.

**Curriculum Requirements**

The curriculum comprises 4 required workshops and a minimum of 4 electives for a total of 4.9 ceu (49 hours of instruction).

**Required Workshops**

- Clinical Case Seminar: Anxiety and Mood Disorders PSYCH 1112 (offered this term)
- Evidence-Based Psychotherapy for Mood Disorders PSYCH 1083 (offered this term)
- Pharmacological Approaches in the Treatment of Anxiety and Mood Disorders PSYCH 1113
- A Universal Treatment for Anxiety, Panic and Fear PSYCH 1083 (offered this term)

**Electives**

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

**Learn More and View the Flyer**

extension.berkeley.edu/spos/anxiety_mood.html

(510) 643-3883

extension-counspsych@berkeley.edu

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**A Universal Treatment for Anxiety, Panic and Fear**

**PSYCH 1083**

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

A requirement in the Professional Program in Evidence-Based Therapy for Anxiety and Mood Disorders

Research shows that cognitive-behavioral treatments can help most people recover from anxiety disorders. New treatments, however, target core factors thought to maintain anxiety disorders in general. Get an overview of features of a transdiagnostic approach to the cognitive-behavioral treatment of anxiety disorders in this workshop, which uses role playing, exercises and video to demonstrate and practice the key strategies of this treatment approach.

**Sec. 002**

Michael Tompkins, Ph.D.,
Extension Honored Instructor
1 meeting
Saturday, 9 am–4 pm
Oct. 4
Berkeley: Golden Bear Center • $195

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**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 Evidence-Based Therapy for Anxiety and Mood Disorders; an elective in the professional programs in the Study of Loss and Grief and in Trauma-Informed Interventions

Examine post-traumatic stress disorder (PTSD) definitions, identify clinical manifestations and highlight treatment considerations. 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. 002**

Mark Balabanis, Ph.D.
1 meeting
Saturday, 9 am–5 pm
Sept. 20
Berkeley: Golden Bear Center • $215

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**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 Evidence-Based Therapy for Anxiety and Mood Disorders

Review best practices for the treatment of mood disorders in adults, with particular emphasis on evidence-based psychosocial treatments. Learn specific evidence-based treatment strategies for unipolar and bipolar depression in adults, as well as cognitive-behavior therapy (CBT) techniques. This workshop is aimed at a broad clinical audience that might want to introduce some CBT treatment elements into their practice by offering a more practice-oriented, experiential workshop where traditional teaching methods are combined with video modeling, experiential exercises and role play.

**Sec. 002**

Robert Reiser, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Dec. 13
San Francisco: San Francisco Campus • $195

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**Clinical Case Seminar: Anxiety Disorders**

**PSYCH 1016**

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

A requirement in the Professional Program in Anxiety Disorders

In this follow-up to a series of workshops on anxiety disorders treatment, you review your own cases with a master clinician and your peers. The format is open-ended to allow ample time for discussion, though the workshop does highlight principles associated with cognitive-behavioral therapy of anxiety disorders and the use of medications.

This is your final opportunity to take this course in its present form before it undergoes revision for future terms.

**Sec. 001**

Scott Granet, LCSW
1 meeting
Saturday, 9 am–5 pm
Oct. 25
Berkeley: Golden Bear Center • $215

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**Integrating Mindfulness Into Your Professional Practice**

**PSYCH 1114**

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

Learn how to better support clients with weight loss, eating disorders, anxiety and mood disorders, and comorbid diagnoses, such as chemical dependency.

For course schedule, see p. 33.
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 42 ceu (42 hours of instruction).

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

**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
extension-counspych@berkeley.edu

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**Trauma-Informed Interventions**

**NEW THIS TERM**

**A Narrative Therapy Approach to Trauma and Addiction**

PSYCH 1115
0.7 CEU • 7 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the Certificate Program in Alcohol and Drug Abuse Studies and in the Professional Program in Trauma-Informed Interventions

Examine a narrative approach to trauma and addictions treatment that not only can provide immediate relief for clients but also is sustainable for counselors and therapists. Within narrative therapy, the telling of a traumatic story is not focused on what was done to the person, which can retraumatize, but rather on their responses. Narrative therapists help people reauthor traumatic experiences into stories about their intentions and values. This approach decentralizes the therapist, helping the therapist become less vulnerable to feelings of overresponsibility and thus preventing burnout. The workshop is accessible for people new to narrative therapy.

**Guest instructor**
Maxwell Keller, MFT, is director of outpatient services at Bayside San Francisco

**Sec. 001**
Julia Wallace, LCSW, and William Sherwin, MFT
1 meeting
Saturday, 9 am–5 pm
Sept. 27
San Francisco: San Francisco Campus • $215

**NEW THIS TERM**

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

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

Examine PTSD definitions, identify clinical manifestations and highlight treatment considerations.

For course schedule, see p. 35.

**NEW THIS TERM**

**Integrating Mindfulness Into Your Professional Practice**

PSYCH 1114
0.7 CEU • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Learn how to better support clients with weight loss, eating disorders, anxiety and mood disorders, and comorbid diagnoses, such as chemical dependency.

For course schedule, see p. 33.

**NEW THIS TERM**

**Treatment Models for Addictions and Co-Occurring Disorders Among Women**

PB HLTH 1037
0.6 CEU • 6 hours CE credit: BRN, LCSW/MFT and psychologists

Learn about distinctive treatment needs for women in the area of alcohol and drug use as well as psychiatric disorders.

For course schedule, see p. 44.
**Behavioral Health Sciences**

**Child and Adolescent Treatment**

**Psychiatric Disorders in Children and Adolescents: Diagnostic Evaluation and Treatment**

**PSYCH 1058**
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists

*An elective in the Professional Program in Child and Adolescent Treatment*

In this course, you will learn to identify, classify and diagnose specific psychiatric conditions and understand treatment options for children and adolescents with mental illness. Gain knowledge of the neurobiology and neurochemistry of common conditions. Learn how mental disorders manifest at different developmental stages, and examine helpful screening and diagnostic tools for your practice. At the end of the course, you should be able to define diagnosis in terms of specific disorders and their developmental variations, select appropriate interventions and evaluate outcomes.

Section 002
Michael Levin, M.D.
2 meetings
Fridays, 9 am–4 pm
Oct. 3 and 10
Berkeley: Golden Bear Center • $305

**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*

In this course, you will 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 will 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.

Section 004
Maria-Pilar Bernal-Estevez, M.D.
1 meeting
Saturday, 9 am–5 pm
Nov. 15
San Francisco: San Francisco Campus • $215

**Loss and Grief With Children, Youth and Families**

**PSYCH 1044**
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists

Gain insight from a developmental perspective into the world of the grieving child and the grieving adolescent.

For course schedule, see p. 39.

**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 (72 hours of instruction).

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

**Required Workshops**

- Psychiatric Disorders in Children and Adolescents: Diagnostic Evaluation and Treatment PSYCH 1058 (offered this term)
- Treatments That Work: Evidence-Based Psychotherapy for Children and Adolescents PSYCH 1071

**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
extension-counspsych@berkeley.edu

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

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
extension-counspsysch@berkeley.edu

Eating and Weight Disorders

The Psychology of Weight Reduction: Eating, Exercise and Body Image

PSYCH 1066
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Eating and Weight Disorders

Although clients rarely consult mental health professionals for the sole purpose of losing weight, eating and body image issues frequently emerge in the course of treatment. In addition to anorexia nervosa, binge-eating disorder and bulimia nervosa, weight issues often play a role in disorders such as depression, sexual difficulties and body dysmorphic disorder. Following a brief summary of epidemiological data and an overview of pharmaceutical and medical treatments of obesity, you focus on psychological issues associated with weight regulation in this workshop. You also cover childhood obesity and eating disorders.

Sec. 001
Edward Abramson, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Oct. 11
Berkeley: Golden Bear Center • $195

Assessment, Etiology and Diagnosis of Eating Disorders

PSYCH 1008
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

A requirement in the Professional Program in Eating and Weight Disorders

The treatment for eating disorders requires understanding their associated underlying issues, physiology and behaviors. Learn how to make a differential diagnosis by identifying Diagnostic and Statistical Manual of Mental Disorders criteria of eating disorders, how to evaluate the intensity of a disorder as a precursor to making treatment recommendations and how to apply various treatment options. Make detailed assessments by discovering the depth and intensity of the disorder and its associated behaviors, making the proper referrals, understanding the dangers and damage already done, and assessing the potential for future damage.

Sec. 002
Diederre Moriarty, Ph.D.
1 meeting
Saturday, 9 am–4 pm
Oct. 25
Berkeley: Golden Bear Center • $195

NEW THIS TERM

Addressing Eating and Weight Disorders in Multicultural Populations

PSYCH 1110
0.6 ceu • 6 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the Professional Program in Eating and Weight Disorders

Review current research on eating disorders and body image issues in multicultural populations focusing on cultural and psychosocial dynamics, especially media. Examine evidence-based treatment models for serving multicultural populations with eating disorders through interactive vignettes and class participation. You and the other participants share your experiences and viewpoints with the aim of increasing your diagnostic and treatment skills.

Sec. 001
Marcella M. Raimondo, M.P.H., Ph.D.
1 meeting
Saturday, 9 am–4 pm
Nov. 15
Berkeley: Golden Bear Center • $195

NEW THIS TERM

Integrating Mindfulness Into Your Professional Practice

PSYCH 1114
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Learn how to better support clients with weight loss, eating disorders, anxiety and mood disorders, and comorbid diagnoses.

For course schedule, see p. 33.
Loss and Grief

Loss and Grief With Children, Youth and Families

PSYCH 1044
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists

An elective in the professional programs in the Study of Loss and Grief and in Child and Adolescent Treatment

The experience of grieving challenges children and adolescents in ways unique to their developmental stages. As a result, it is not uncommon for their perceptions and behavior to be misunderstood, unacknowledged or overlooked by family members and other influential adults. This workshop offers insight from a developmental perspective into the world of the grieving child and the grieving adolescent.

Sec. 002
Erika Hauck Maslan, Ph.D.
2 meetings
Saturday and Sunday, 9 am–4 pm
Nov. 1–2
Berkeley: Golden Bear Center • $305

Clinical and Ethical Approaches to End-of-Life Care

PSYCH 1013
1.2 ceu • 12 hours CE credit: BRN, LCSW/MFT and psychologists

Learn how to assess the overall quality of end-of-life care, identify sources of suffering, and determine what decisions need to be made and who needs to be involved in making and implementing them.

For course schedule, see p. 33.

An Experiential Introduction to Art Therapy

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

Study psychodynamic, analytic, humanistic, behavioral and mind-body techniques that can open up new pathways for working with your clients.

For course schedule, see p. 32.

Vicarious and Secondary Trauma

Vicarious and Secondary Trauma
PSYCH 1076
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

Review the risk factors for developing vicarious trauma, how to recognize it in yourself and the systems in which many people work, and how to address it at both individual and institutional levels.

For course schedule, see p. 36.

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 disorders; recognize clinical manifestations of the disorder; and review considerations for treatment, including psychotherapy and medications.

For course schedule, see p. 35.

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

• Introduction to Loss and Grief Issues: Refreshing Old Skills, Learning New Skills PSYCH 1040

• Clinical Case Seminar in Loss and Grief PSYCH 1014

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
extension-counspsych@berkeley.edu

Convenient Locations in Berkeley, Belmont and San Francisco
extension.berkeley.edu/locations

Get Berkeley Quality Online
extension.berkeley.edu/online
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 course runs concurrently with Assessment and Treatment of Mental Illness in Older Adults PSYCH 1007.

**Sec. 005**
Melinda Ginne, Ph.D., license PSY15272,
Extension Honored Instructor

1 meeting
Saturday, 9 am–12 pm
Dec. 13
Berkeley: Golden Bear Center • $95

**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. 005**
Rick Nizzardini, J.D., LCSW
Enroll anytime
Online • $285

**Assessment and Treatment of Alcohol and Drug Problems**

**PB HLTH X437** • 1 semester unit in Public Health
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 and 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. 002**
Nancy A. Piotrowski, Ph.D.
Enroll anytime
Online • $365

**Supporting Patients With HIV and Other Chronic Illnesses:**

**Practical Skills for Mental Health Clinicians**

**PSYCH 1078**
0.7 ceu • 7 hours CE credit: BRN, LCSW/MFT and psychologists

HIV—like diabetes, heart disease and asthma—has become a manageable chronic illness. To make the best use of current treatments, patients often require clinical support in managing their ongoing treatment. Learn the skills to increase medication adherence, perform a spiritual assessment, incorporate psychosocial care into the medical team system, and build a framework for discussions related to living and thriving with HIV and other serious illnesses.

This course satisfies the seven-hour HIV/AIDS continuing education course requirement for MFTs, LCSWs and LPCCs that is required in the first license-renewal period. It also satisfies the ethics continuing education course requirement for psychologists that is required every license-renewing period.

**Sec. 003**
David Jull-Patterson, Ph.D., FT,
Extension Honored Instructor

1 meeting
Saturday, 9 am–5 pm
Dec. 6
San Francisco: San Francisco Campus • $215

**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 signs of abuse and neglect, and review guidelines for interviewing children.

**Sec. 005**
Allison Briscoe-Smith, Ph.D.
Enroll anytime
Online • $205

**For Course and Schedule Information**

Visit extension.berkeley.edu/CATALOG
General Psychology

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

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

FREE INFORMATION SESSIONS
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 p. 42 or visit extension.berkeley.edu/spos/psychologyprofessions.html to register.

Sec. 004
Richard Chiavarelli, Psy.D.
3 meetings
Saturday and Sunday, 9 am–5 pm
Nov. 1–2 (also Sunday, Nov. 16, 9 am–1 pm)
Berkeley: Golden Bear Center • $385

Career Seminar in Counseling and Psychology
PSYCH 1009 • 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 you 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. 003
Richard Chiavarelli, Psy.D.
2 meetings
Sundays, 9 am–12 pm
Sept. 28 and Oct. 5
Berkeley: Golden Bear Center • $195

Abnormal Psychology
PSYCH X146 • 3 semester units in Psychology
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. 007
Michael Shopshire, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $675

Research Methods in Psychology
PSYCH X106 • 3 semester units in Psychology
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. 008
Bernadette M. Guimberteau, Ph.D.
Sept. 9–Dec. 2
Online • Proctored final exam • $745

Sec. 007
Bernadette M. Guimberteau, Ph.D.
10 meetings
Saturdays, 2–6:30 pm
Oct. 4–Dec. 13 (no meeting on Nov. 29)
Berkeley Campus: 100 Wheeler Hall • $675

Open Admissions Policy
UC Berkeley Extension serves the continuing education needs of adults in our community. You do not have to be matriculated to enroll, and there is no admission process to take individual courses.
Post-Baccalaureate Program for Counseling and Psychology Professions

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 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
extension-counspsy@berkeley.edu

Psychology of Personality
PSYCH X176 • 3 semester units in Psychology
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 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. 009
Instructor to be announced
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $675

Sec. 008
Christopher Gade, Ph.D.
Sept. 9–Dec. 2
Online • Proctored final exam • $730

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

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

Study the life-span 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. 008
Richard Sprott, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Dec. 17 (no meeting on Nov. 26)
Berkeley: Golden Bear Center • $675

Sec. 007
Instructor to be announced
Enroll anytime
Online • $730
Biological Psychology
PSYCH X155 • 3 semester units in Psychology
45 hours CE credit: BRN
An elective in the Post-Baccalaureate Program for Counseling and Psychology Professions
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 amnesias. Beginning with the basic structure and function of the nervous system, you examine the organic bases of behavior.

Sec. 004
Nicola Wolfe, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Dec. 18 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $675

Sec. 005
Robert Blumenfeld, Ph.D.
Sept. 16–Dec. 9
Online • Proctored final exam • $730

Positive Psychology
PSYCH X402 • 3 semester units in Psychology
45 hours CE credit
An elective in the Post-Baccalaureate Program for Counseling and Psychology Professions
Gain an understanding of the academic field of positive psychology, which is the study of optimal human functioning. Although psychologists have traditionally focused on fixing what is wrong with people by understanding the roots of suffering, positive psychology concentrates on building what is right in people by scientifically studying strengths and values, such as optimism, resilience and courage. Gain an understanding of the research into the different dimensions of happiness and subjective well-being, and acquire skills to implement positive-psychology-based concepts in your life and practice.

Sec. 003
Lori Felton, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Berkeley: Golden Bear Center • $675

Psychology of Communication
PSYCH X156.1 • 3 semester units in Psychology
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. You 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. 003
Michael Swett, Ph.D.
Enroll anytime
Online • Proctored final exam • $730

Adolescent Psychology
PSYCH X139.1 • 3 semester units in Psychology
An elective in the Post-Baccalaureate Program for Counseling and Psychology Professions
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. 003
Darrel Richards, Ph.D.
Enroll anytime
Online • Proctored final exam • $730

General Psychology
PSYCH XBW1 • 3 semester units in Psychology
45 hours CE credit: BRN
Important: Special academic policies apply to XBW courses. See p. 240 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. 002
Gwynne Pacheco, Ed.D.
Enroll anytime
Online • Proctored final exam • $730

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 that you need.
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 that you need.
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 the Treatment of Substance Abuse Disorders 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
- 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 (offered this term)
- Family Recovery in Chemical Dependency PB HLTH X116 (offered this term)
- Group Process and Practice With Chemically Dependent Populations PB HLTH X144
- 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) OR 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 extension-alcoholdrug@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
BEHAVIORAL HEALTH SCIENCES

NEW THIS TERM
Integrating Mindfulness Into Your Professional Practice

PSYCH 1114
0.7 ceu • 7 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

Learn how to better support clients with weight loss, eating disorders, anxiety and mood disorders, and comorbid diagnoses.

For course schedule, see p. 33.

NEW THIS TERM
A Narrative Therapy Approach to Trauma and Addiction

PSYCH 1115
0.7 ceu • 7 hours CE credit: CAADAC, BRN, LCSW/MFT and psychologists

Examine a narrative approach to trauma and addictions treatment that not only can provide immediate relief for clients but also is sustainable for counselors and therapists.

For course schedule, see p. 36.

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.

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. Learn how to integrate this complex medical model with 12-step programs and other approaches to recovery, and review basic neuroanatomy and physiology.

Sec. 004
Mark Stanford, Ph.D., Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 10–Nov. 19 (no meeting on Oct. 29)
San Francisco: San Francisco Campus • $395

Introduction to Counseling Techniques in the Treatment of Substance Use Disorders

PB HLTH X129 • 1 semester unit in Public Health
(Formerly Introduction to Counseling Techniques in Chemical Dependency)

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. 004
Jimmie Turner, Ph.D., Extension Honored Instructor
4 meetings
Tuesdays, 6:30–9:30 pm
Sept. 9–30 (also Saturday, Sept. 27, 9 am–4 pm; no meeting on Sept. 23)
Berkeley Campus: 101 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. 005
John de Miranda, M.Ed., LAADC
9 meetings
Thursdays, 6:30–9:30 pm
Sept. 11–Nov. 6 (also Saturday, Nov. 1, 9 am–4 pm; no meeting on Oct. 30)
San Francisco: Art and Design Center • $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. 005
Valerie Gruber, M.P.H., Ph.D.
10 meetings
Tuesdays, 6–9 pm
Oct. 7–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $395
Level II

Career Preparation and Self-Care in Addictions Counseling

PB HLTH X104 • 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 certificate 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
Wednesday, 6:30–8:30 pm
Dec. 3
Berkeley: Golden Bear Center • $65

Continuing Care and Case Coordination in Chemical Dependency

PB HLTH X134 • 2 semester units in Public Health
30 hours CE credit: BRN and LCSW/MFT
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. 003
Instructor to be announced
9 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Nov. 3 (also Saturday, Oct. 18, 9 am–4 pm; no meeting on Oct. 20)
Berkeley Campus: 101 Wheeler Hall • $395

Diagnosis and Assessment in Chemical Dependency

PB HLTH X132 • 2 semester units in Public Health
30 hours CE credit: BRN, LCSW/MFT
A requirement in the Certificate Program in Alcohol and Drug Abuse Studies
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. You pay particular attention to the use of the Diagnostic and Statistical Manual of Mental Disorders (DSM 5) and difficulties in dual-diagnoses.

Sec. 004
Steven Allen, Ph.D.
9 meetings
Wednesdays, 6:30–9:30 pm
Sept. 10–Nov. 5 (also Saturday, Oct. 4, 9 am–4 pm; no meeting on Oct. 1)
Berkeley Campus: 101 Wheeler Hall • $385

Family Recovery in Chemical Dependency

PB HLTH X116 • 1 semester unit in Public Health
15 hours CE credit: BRN, LCSW/MFT
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 co-dependency; 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. 003
Dean Blumberg, Ph.D., LMFT
6 meetings
Thursdays, 6:30–9:30 pm
Oct. 2–Nov. 13 (no meeting on Oct. 30)
San Francisco: San Francisco Campus • $335

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. 005
James Sorensen, Ph.D.
4 meetings
Saturday, 9 am–4 pm
Nov. 22 (also Wednesdays, Dec. 3–17, 6:30–9:30 pm)
San Francisco: San Francisco Campus • $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
Explore the social, political and economic factors that contribute to the rise of alcohol and other drug problems in communities. Investigate a range of policy options used to prevent alcohol and other drug problems, including conditional-use permits, responsible beverage-service programs, and restrictions on alcohol-industry marketing and advertising practices. You also review basic community-organizing approaches to support progressive prevention policies.

Sec. 005
Instructor to be announced
5 meetings
Thursdays, 6:30–9:30 pm
Nov. 13–Dec. 18 (no meeting on Nov. 27)
Berkeley: Golden Bear Center • $295

Group Process and Practice With Chemically Dependent Populations

PB HLTH X144 • 1 semester unit in Public Health
15 hours CE credit: BRN, LCSW/MFT and psychologists
This course will be offered in spring 2015.

Addressing Co-Occurring Disorders in Addictions Counseling

PB HLTH X143 • 1 semester unit in Public Health
15 hours CE credit: BRN, LCSW/MFT
This course will be offered in spring 2015.

VISIT OUR WEBSITE
Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu
The Affordable Care Act: Access and Consumer Issues

UNEX 1230

The Affordable Care Act (ACA) federal health reform law passed five years ago. What has the ACA accomplished in California, what progress has been made under Covered California, and what are some of the key access and consumer issues that lie ahead? Learn how health reform will affect you and others in California in the context of a changing health care system.

Sandra R. Hernández, M.D., is president and CEO of the California HealthCare Foundation. Prior to joining CHCF, Hernández was CEO of The San Francisco Foundation, which she led for 16 years. She previously served as director of public health for the City and County of San Francisco. Hernández is also an assistant clinical professor at UCSF’s School of Medicine. She co-chaired San Francisco’s Universal Healthcare Council, which designed Healthy San Francisco, an innovative health access program for the uninsured.

Sec. 001
1 meeting
Wednesday, 4:30–6 pm
Sept. 10
Berkeley: Golden Bear Center • FREE

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 applying 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. 003
Jimmie Turner, Ph.D.,
Extension Honored Instructor
11 meetings
Thursdays, 6:30–9:30 pm
Oct. 2–December 18 (also Saturdays, Oct. 18 and Nov. 15, 9 am–5 pm; Saturday, Nov. 1, 6–9 pm; no meetings on Oct. 16 and Nov. 13 and 27)
Berkeley: Golden Bear Center • $695

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 of 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.

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

Sec. 003
Peter Goetz, M.S., MFT
6 meetings
Saturdays, 9 am–5:30 pm
Sept. 13, Oct. 4 and 25, Nov. 8 and 22, and Dec. 20
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 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. 005
Neil Miller, CADC-II
1 meeting
Saturday, 9 am–4 pm
Dec. 13
Berkeley: Golden Bear Center • $185
Health Advocacy

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

UPDATE NOTICE
The Professional Program in Health Advocacy has been expanded, effective July 7, 2014. New curriculum requirements are listed on this page and at extension.berkeley.edu/spos/healthadvocacy.html. For all questions, email extension-publichealth@berkeley.edu or call (510) 642-1061.

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 this page or visit extension.berkeley.edu/spos/healthadvocacy.html.

Sec. 004
1 meeting
Tuesday, 6–7 pm
Aug. 26
Berkeley: Golden Bear Center • FREE

NEW THIS TERM
Introduction to Health Care Advocacy
PB HLTH X478 • 2 semester units in Public Health
30 hours CE credit: BRN
A requirement in the Professional Program in Health Advocacy

Navigating the Health Care System
PB HLTH X404.7 • 1 semester unit in Public Health
15 hours CE credit: BRN
A requirement 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. 003
Frances Franco, M.S.W.
5 meetings
Wednesdays, 6:30–9:30 pm
Sept. 24–Oct. 22
Berkeley: Golden Bear Center • $265

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.

EXPANDED FOR FALL 2014
Professional Program in Health Advocacy

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, research, cultural 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 9 required courses (10 semester units) and 1 elective (0.6 ceu) for a total of 10 semester units and 0.6 ceu (199 hours of instruction).

Required Courses
• Introduction to Health Care Advocacy
  PB HLTH X478 (offered this term)
• Families and Health Care Advocacy
  PB HLTH X404.6
• Overview of Health Care Insurance Options
  PB HLTH X403.3 (offered this term)
• Navigating the Health Care System
  PB HLTH X404.7 (offered this term)
• Ethical and Legal Issues in Health Care
  PB HLTH X403.4
• Case Seminar on Health Advocacy
  PB HLTH X400.7 (offered this term)
• Health Care Advocacy and the Role of Cultural Diversity
  PB HLTH X403.6 (offered this term)
• Evaluating Health Information for Health Care Communication and Decision Making
  PB HLTH X411
• Pediatric Health Care Advocacy
  PB HLTH X477
  OR
• Geriatric Health Care Advocacy
  PB HLTH X474.1

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
extension-publichealth@berkeley.edu
Overview of Health Care Insurance Options
PB HLTH X403.3 • 1 semester unit in Public Health
15 hours CE credit: BRN
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. 003
Todd Landreneau, Ph.D., CHC, CPHQ
3 meetings
Sat., 9 am–2 pm
San Francisco: San Francisco Campus • $265

Health Care Advocacy and the Role of Cultural Diversity
PB HLTH X403.6 • 1 semester unit in Public Health
15 hours CE credit: BRN
A requirement in the Professional Program in Health Advocacy
Understand how characteristics such as race, ethnicity, gender, language preferences, religion and socioeconomic status can affect people’s access to health care services. Examine strategies to assess an organization’s efforts to provide culturally competent care to diverse patients, and learn to become a more effective advocate for those populations.
Sec. 002
Marcella M. Raimondo, M.P.H., Ph.D.
4 meetings
Sat., 9 am–4 pm
Sept. 27 (also Thursdays, Oct. 2–16, 6:30–9:30 pm)
Berkeley: Golden Bear Center • $265

NEW THIS TERM
Using Electronic Media in Health Care Advocacy
PB HLTH 1036
0.6 ceu • 6 hours CE credit: BRN
An elective in the Professional Program in Health Advocacy
Learn to incorporate online tools and electronic media into your work with patients and clients. Understand how patients can benefit from the wealth of resources and how health advocates can take advantage of the research, databases and process tools at their fingertips. Gain a basic understanding of user-experience criteria, examine the range of options for utilizing electronic media, and learn how to optimize these media into your business.
Sec. 001
Linda Adler, M.A., M.P.H.
1 meeting
Sat., 9 am–4 pm
Oct. 25
San Francisco: San Francisco Campus • $185

NEW THIS TERM
Case Seminar on Health Advocacy
PB HLTH X400.7 • 1 semester unit in Public Health
15 hours CE credit: BRN
A requirement in the Professional Program in Health Advocacy
Apply the skills and knowledge acquired in other courses in the Professional Program in Health Advocacy to increase your self-assessment and intervention skills in your work as a health advocate. Using case presentations and role-play as primary teaching methods, you enhance your ability to work with patients and clients in a variety of agency, hospital, clinic and private practice settings. Examine your own practice skills and expand your ability to work with the health care field. As part of the curriculum, you discuss topics such as chronic disease, death and dying, pediatrics, elder care, insurance issues and traumatic brain injury.
Prerequisites: Completion of Overview of Health Care Advocacy PB HLTH X403.5, enrollment in Introduction to Health Care Advocacy PB HLTH X478 and at least two of the required courses in the Professional Program in Health Advocacy, or permission of instructor
Sec. 001
James Bachman, LCSW, and Joanna Smith, M.P.H., CHA, LCSW
2 meetings
Sun., 9 am–5 pm
Oct. 5 and 12
Berkeley: Golden Bear Center • $285

Public Health and Health Management
COURSE INFORMATION
(510) 643-3883
extension-counspysch@berkeley.edu
extension.berkeley.edu/counseling
ONLINE COURSE INFORMATION
(510) 643-4957
extension.berkeley.edu/online

Health Policy in the United States
PB HLTH XS5 • 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 a 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 they impact the cost, quality and access to services to better understand and critique them from an informed perspective.
Sec. 005
Dana Hughes, M.P.H., M.S., Ph.D.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 11–Nov. 13
Berkeley Campus: 101 Wheeler Hall • $395

Sec. 006
Robin Flagg, M.P.H., Ph.D.
Sept. 9–Dec. 2
Online • $575

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. 003
Alanna Namau Vgjil, M.S., RD
Enroll anytime
Online • Proctored final exam • $770
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.

Please bring a calculator to class. Enrollment is limited.

Sec. 005
Paul Gilbert, Sc.M., Ph.D.
10 meetings
Saturdays, 9 am–12 pm
Sept. 20–Dec. 6 (no meetings on Oct. 11 and Nov. 29)
Berkeley Campus: 24 Wheeler Hall • $385

Location Guide  For detailed information, see p. 246.

Belmont: Belmont Center 1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus See campus map, p. 247. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center 1995 University Ave., Berkeley
San Francisco: Art and Design Center 95 Third St., San Francisco
San Francisco: San Francisco Campus 160 Spear St., Floors 5, 6 and 7, 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.
Robert Meteau Jr. credits his thirst for knowledge for bringing him to UC Berkeley Extension’s Certificate Program in Human Resource Management. Working in HR for the past six years—currently as director of human resources for the Alum Rock Union Elementary School District in San Jose—Meteau Jr. is looking to refine his skills and expand current best practices.

“I want to continue to grow and develop, and Berkeley’s tradition is steeped in excellence,” says Meteau Jr., who also holds a doctorate in public administration and a master’s in education administration. “The certificate was also a tremendous opportunity to learn what’s happening in the private sector and the tech world.” Commuting from San Jose to Berkeley to take courses, Meteau Jr. appreciates the certificate’s flexible course schedules.

On track to complete the certificate in October 2014, Meteau Jr. enjoys the diversity of his fellow classmates. “We had people from Google, nonprofits and startups,” he says. “It was a good exchange of information and real-world applications.” Not one to rest on his education laurels, Meteau Jr. also plans to enroll in an accounting course to help him in his executive role.
UC Berkeley Extension provides the education to succeed in an ever-changing workplace. Earn a professional certificate that not only meets your profession’s highest standards but also commands the respect of your peers. Acquire technical savvy and the leadership and communication skills that make the difference in getting ahead. Take a course focused on exactly what you need to know now.

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

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

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NEW COURSES

Agile Change Management and Transformation in Organizations, see p. 61
Business Law for Startups and Entrepreneurs, see p. 72
Claritas Fundamentals, see p. 75
Creating an Advertising Campaign, see p. 99
Foundations of Web and Mobile Startups, see p. 72
Introduction to Human Capital Analytics, see p. 84
Managing Organizational Change Projects, see p. 109
The Mature Entrepreneur: How to Start Your Own Successful Business at Any Age, see p. 74
A Practical Workshop in Marketing Services, see p. 95
Project Stakeholder Management, see p. 108
Search Engine Optimization for Real Business, see p. 98
Strategic Marketing for Launching Startups, see p. 95
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
Tuesday, July 22, 5:30–6:30 pm
Online
Tuesday, Aug. 26, 7:30–8:15 pm
Berkeley: Golden Bear Center
Thursday, Nov. 20, 7:30–8:15 pm
Berkeley: Golden Bear Center

Certificate Program in Business Administration
Thursday, Aug. 28, 5:30–6:15 pm
Berkeley: Golden Bear Center
Thursday, Dec. 4, 6:30–7:15 pm
Berkeley: Golden Bear Center

Certificate Program in Entrepreneurship and Small Business Management
Monday, Aug. 11, 5:30–6:30 pm
San Francisco: San Francisco Campus
Monday, Dec. 8, 5:30–6:30 pm
San Francisco: San Francisco Campus
Wednesday, Nov. 19, 12–12:45 pm
Online

Certificate Program in Finance
Tuesday, Aug. 26, 5:30–6:15 pm
Berkeley: Golden Bear Center
Thursday, Nov. 20, 5:30–6:30 pm
Berkeley: Golden Bear Center

Certificate Program in Financial Planning and Analysis
Wednesday, Aug. 6, 5:30–6:30 pm
Online
Tuesday, Aug. 26, 6:30–7:15 pm
Berkeley: Golden Bear Center
Thursday, Nov. 20, 6:30–7:15 pm
Berkeley: Golden Bear Center
Wednesday, Dec. 3, 5:30–6:30 pm
Online

Certificate Program in Human Resource Management
Monday, Aug. 11, 6:45–7:45 pm
San Francisco: San Francisco Campus
Monday, Dec. 8, 6:45–7:45 pm
San Francisco: San Francisco Campus

Certificate Program in Leadership and Management
Monday, Aug. 18, 5:30–6:30 pm
San Francisco: San Francisco Campus
Monday, Dec. 15, 5:30–6:30 pm
San Francisco: San Francisco Campus

Certificate Program in Marketing and Professional Sequences in Marketing Metrics and ROI and in Managing Marketing Communications
Monday, Aug. 18, 6:45–7:45 pm
San Francisco: San Francisco Campus
Monday, Dec. 15, 6:45–7:45 pm
San Francisco: San Francisco Campus

Certificate Program in Paralegal Studies
Wednesday, Aug. 13, 12–12:45 pm
Online
Wednesday, Oct. 15, 12–12:45 pm
Online

Certificate Program in Personal Financial Planning
Thursday, Aug. 28, 6:30–7:15 pm
Berkeley: Golden Bear Center
Tuesday, Dec. 2, 5:30–6:30 pm
Berkeley: Golden Bear Center

Certificate Program in Project Management
Thursday, Aug. 28, 6–7 pm
Belmont: Belmont Center
Tuesday, Sept. 9, 6–7 pm
San Francisco: San Francisco Campus
Wednesday, Dec. 17, 6–7 pm
Berkeley: Golden Bear Center

Claritas Fundamentals Program
Wednesday, Aug. 27, 6:30–7:30 pm
San Francisco: San Francisco Campus

Fiduciary Studies
Wednesday, Aug. 20, 5:30–6:15 pm
Berkeley: Golden Bear Center
Thursday, Dec. 4, 5:30–6:15 pm
Berkeley: Golden Bear Center

Professional Sequence in Agile Management
Thursday, Aug. 28, 7–8 pm
Belmont: Belmont Center
Tuesday, Sept. 9, 7–8 pm
San Francisco: San Francisco Campus
Wednesday, Dec. 17, 7–8 pm
Berkeley: Golden Bear Center

Program in Professional Communication
Wednesday, Sept. 24, 12–12:45 pm
Online

FREE INFORMATION SESSIONS
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. 57 or visit extension.berkeley.edu/cert/account.html.
Tuesday, 5:30–6:30 pm
July 22
Online • FREE

Sec. 004
1 meeting
Tuesday, 7:30–8:15 pm
Aug. 26
Berkeley: Golden Bear Center • FREE

Wednesday, 5:30–6:30 pm
Nov. 12
Online • FREE

Sec. 005
1 meeting
Thursday, 7:30–8:15 pm
Nov. 20
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 UGBA XB102B before you register for the Certificate Program in Accounting.

**Important:** Special academic policies apply to XBW courses. See p. 240 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. 007**
Ronald Macaluso, M.B.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Dec. 10
Berkeley: Golden Bear Center • $900

**Sec. 004**
Andrew Barnett, Ph.D., CPA,
Extension Honored Instructor
Enroll anytime
Online • Proctored final exam • $900

**Sec. 005**
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 UGBA XB102A before you register for the Certificate Program in Accounting.

**Important:** Special academic policies apply to XBW courses. See p. 240 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 UGBA XB102A or equivalent is strongly recommended.

**Sec. 005**
Gregory Sinclair, M.B.A., CPA
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Berkeley: Golden Bear Center • $900

**Sec. 002**
Martha S. Doran, Ph.D., CPA
Enroll anytime
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 UGBA 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 UGBA XB102A or equivalent

**Sec. 020**
Nancy Batch, M.B.A., M.S., CPA
Sept. 2–Dec. 9
Online • Proctored final exam • $900

**Sec. 018**
Dongha Lee, M.B.A., Ed.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $900

**Sec. 022**
Instructor to be announced
Sept. 9–Dec. 16
Online • Proctored final exam • $900

**Sec. 021**
Marc Hyman, M.B.A.
Sept. 9–Dec. 16
Online • Proctored final exam • $900

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**FULLY CUSTOMIZABLE COURSES**

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For more information, visit extension.berkeley.edu/corporate.
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, accounting changes and error corrections.

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

Sec. 014
Yan Gelman, B.S., M.B.A.
Sept. 2–Dec. 9
Online • Proctored final exam • $900

Sec. 017
Yan Gelman, B.S., M.B.A.
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $900

Sec. 015
Nancy Batch, M.B.A., M.S., CPA
Sept. 9–Dec. 16
Online • Proctored final exam • $900

Sec. 016
Instructor to be announced
Sept. 9–Dec. 16
Online • Proctored final exam • $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 nonprofits. Limited time is devoted to exploring certain tax aspects of consolidated financial statements.

Sec. 009
Marjorie Bailey, CPA
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $900

Sec. 010
Gary J. Bong, B.Sc.
Sept. 2–Dec. 9
Online • Proctored final exam • $900

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 institution’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
Marjorie Bailey, CPA
12 meetings
Saturdays, 9 am–3 pm
Sept. 6–Nov. 22
San Francisco: San Francisco Campus • $1,025

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.

Prerequisites: Intermediate Accounting I BUS ADM X421.1 or Intermediate Accounting II BUS ADM X421.2

Sec. 005
Harry Lorsbach, M.B.A., CIA, CPA
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
San Francisco: San Francisco Campus • $900

Sec. 004
Harry Lorsbach, M.B.A., CIA, CPA
Sept. 2–Dec. 9
Online • Proctored final exam • $900

Visit Our Website
Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu
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
extension-business@berkeley.edu

Professionalize Your Skills
- Meet new industry requirements
- Prepare for the CPA or CMA Exam
- Advance your career
- Available online or in classroom

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.
BUSINESS

Principles of Management Accounting
BUS ADM X421.5 • 3 semester units in Business Administration
Learn the basics of financial accounting, and examine how to use accounting information for effective management.
For course schedule, see p. 62.

Financial Statement Analysis
BUS ADM X419.2 • 2 semester units in Business Administration
Examine the analytical tools to assess a company’s performance, the concept of quality of earnings, approaches to valuation and other issues.
For course schedule, see p. 80.

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.
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 selected 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 Examination.

- **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.
  - Sec. 004
  - Anna Lee, M.B.A.
  - 6 meetings
  - Sundays, 9 am–12 pm
  - Sept. 7–Oct. 5 (also Sunday, Oct. 12, 9 am–4 pm)
  - Berkeley: Golden Bear Center • $750

- **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 required accounting treatment 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. 004
  - Anna Lee, M.B.A.
  - 6 meetings
  - Sundays, 9 am–12 pm
  - Nov. 2–Dec. 7 (also Sunday, Dec. 14, 9 am–4 pm; no meeting on Nov. 30)
  - Berkeley: Golden Bear Center • $750

- **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. 004
  - Anna Lee, M.B.A.
  - 6 meetings
  - Sundays, 9 am–12 pm
  - Sept. 7–Oct. 5 (also Sunday, Oct. 12, 9 am–4 pm)
  - Berkeley: Golden Bear Center • $750

- **Auditing and Attestation (AUD) Module**
  - BUS ADM X422.7
  - 1 semester unit in Business Administration
  - Study auditing and attestation standards and their organization.

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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 that you need.
Agile Management

COURSE INFORMATION

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

FREE INFORMATION SESSIONS

Professional Sequence in Agile Management

UNEX 1066
Attend a 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. 006
1 meeting
Thursday, 7–8 pm
Aug. 28
Belmont: Belmont Center • FREE

Sec. 007
1 meeting
Tuesday, 7–8 pm
Sept. 9
San Francisco: San Francisco Campus • FREE

Sec. 008
1 meeting
Wednesday, 7–8 pm
Dec. 17
Berkeley: Golden Bear Center • FREE

Lean Using Kanban

BUS ADM X483.9 • 1 semester unit in Business Administration
30 pdu: PMI provider 1173
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. 003
Daniel Vacanti, M.B.A.
2 meetings
Friday and Saturday, 9 am–5 pm
Dec. 12–13
Berkeley: Golden Bear Center • $500

Agile Management: Principles and Practices

BUS ADM X486.1 • 2 semester units in Business Administration
30 pdu: PMI provider 1173
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 more effectively respond to change, work collaboratively with customers and increase productivity. Learn the core principles of Agile management and how to apply them in an organization. Through highly interactive exercises, discover how to use the Agile framework to successfully leverage change, improve team interaction and satisfy customers.

Sec. 006
Sonja Koppensteiner, M.S., Ph.D., PMP, and Ainsley Nies, M.S., PMP
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 11–Nov. 13
Belmont: Belmont Center • $750

Sec. 007
Ainsley Nies, M.S., PMP, and Balasubramanian Swaminathan, B.S., CSM, PDDM, PMI-ACP, PMP
5 meetings
Saturdays, 9 am–4 pm
Oct. 4–Nov. 1
Berkeley Campus: 106 Wheeler Hall • $750

Agile Management Mastery

BUS ADM X489.8 • 2 semester units in Business Administration
30 pdu: PMI provider 1173
A requirement in the Professional Sequence in Agile Management; an elective in the Certificate Program in Project Management
Work with Agile experts to deepen your understanding and experience with Agile management. Delve into the Agile framework through case studies and action-based experiential learning techniques to master an Agile management mind-set. Explore the intrinsic motivators of autonomy, mastery and purpose, and the impact of a values-based strategy on organizational performance. Learn techniques to help you create, promote and sustain a culture of Agility and customer value at your organization.

Sec. 003
Patricia Reed, M.B.A., and Walter Wyckoff, M.B.A., CISA, CISSP, CPO-CSM, CTM, PMP
5 meetings
Saturdays, 9 am–4 pm
Sept. 27–Oct. 25
Berkeley: Golden Bear Center • $750

Sec. 004
Instructor to be announced
10 meetings
Wednesdays, 6:30–9:30 pm
Oct. 15–Dec. 17
Belmont: Belmont Center • $750
**Introduction to Agile Management**

BUS ADM X486.6 • 1 semester unit in Business Administration

15 pdu: PMI provider 1173

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

Agile is a management philosophy that encourages self-organization, collaboration, frequent inspection and adaptation to achieve successful solutions, with a focus on customer needs and business value. This interactive two-day learning experience introduces you to the benefits of Agile thinking, and gives you practical experience applying Agile concepts and techniques. You gain an understanding of key Agile management competencies, values and principles that can empower you to anticipate and more effectively leverage change in any organization.

**Sec. 005**
Balasubramanian Swaminathan, B.S., CSM, PDDMM, PMI-ACP, PMP

2 meetings
Saturdays, 9 am–5 pm

Sept. 6 and 13
Berkeley: Golden Bear Center • $500

**Sec. 006**
Balasubramanian Swaminathan, B.S., CSM, PDDMM, PMI-ACP, PMP

2 meetings
Sundays, 9 am–5 pm

Sept. 28 and Oct. 5
Berkeley: Golden Bear Center • $500

**NEW THIS TERM**

**Agile Change Management and Transformation in Organizations**

BUS ADM X486.6 • 2 semester units in Business Administration

15 pdu: PMI provider 1173

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

Transforming an organization to Agile practices and values can be a significant effort, as these techniques require changes to the way people work at all levels, from executive stakeholders to members of the technical staff. Learn approaches and critical success factors of Agile transformation and techniques to design and manage individual and organizational change and create a culture of continuous value delivery, learning and improvement. You learn to develop a methodology that involves customers, embraces change, and engages teams for optimal performance and competitive advantage. You are encouraged to bring real-world Agile transformation case studies to class for use in the exercises.

**Prerequisite:** Familiarity with Agile management

**Sec. 001**
Karen Walton, M.S., CSM, CSPO, PMP®, and Patricia Reed, M.B.A.

5 meetings
Saturdays, 9 am–4 pm

Nov. 15–Dec. 20 (no meeting on Nov. 29)
Berkeley: Golden Bear Center • $750

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**Business Administration**

**COURSE INFORMATION**

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

**ONLINE COURSE INFORMATION**

(510) 644-4979
extension.berkeley.edu/online

**FREE INFORMATION SESSIONS**

**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. 65 or visit extension.berkeley.edu/cert/busad.html.

**Sec. 004**
1 meeting
Thursday, 5:30–6:15 pm
Aug. 28
Berkeley: Golden Bear Center • FREE

**Sec. 005**
1 meeting
Thursday, 6:30–7:15 pm
Dec. 4
Berkeley: Golden Bear Center • FREE

**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. 017**
Eric Yap, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
Berkeley: Golden Bear Center • $800

**Sec. 018**
Mark Bettini, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Nov. 6
Berkeley: Golden Bear Center • $800

**Sec. 015**
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

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. 015**
Robert Coackley, B.S.
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 30–Dec. 9 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $800

**Sec. 016**
Susanna Wong, M.B.A., M.S.
8 meetings
Saturdays, 12–3:45 pm
Sept. 13–Nov. 1
Berkeley: Golden Bear Center • $800

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**VISIT OUR WEBSITE**

Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu
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. 008
Gregory Sinclair, M.B.A., CPA
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $900

Sec. 009
Reggie Murray, B.S., Ed.D., M.B.A.
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Belmont: Belmont Center • $900

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. 015
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
Belmont: Belmont Center • $800

Sec. 016
Derek Day, M.B.A.
Sept. 9–Dec. 2
Online • $800

Sec. 014
Gene Hendrix, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Nov. 15–Dec. 20 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $800

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.

For course schedule, see p. 70.

Introduction to Marketing

BUS ADM X460.1 • 2 semester units in Business Administration

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.

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. 78.

Investment Portfolio Management

BUS ADM X431.2 • 2 semester units in Business Administration

Get an overview of investment management. Topics include modern portfolio theory, fundamental and technical analysis of equities, concentrated equity positions, fixed-income analysis, benchmarking, capital markets, the appropriate use of mutual funds, the importance of asset allocation, IRAs, 401(k)s and tax-efficient portfolio design.

For course schedule, see p. 75.

Certificate Program in Project Management

Acquire the skills to complete a high-quality project on task, on time and within budget. Most Extension project management courses apply toward professional development units (PDUs) recognized by the Project Management Institute.

See p. 107 for complete certificate details.

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. 005
Christopher Lai, M.B.A., Ph.D.
Enroll anytime
Online • $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. 003
Gwynne Pacheco, Ed.D.
Enroll anytime
Online • Proctored final exam • $800

Exporting Food as a Small Business

BUS ADM 1078 • 0.8 ceu

Explore proven tactics and tools to effectively test your product while eliminating the problems and risks commonly associated with exporting.

For course schedule, see p. 74.
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
- Essentials of Business BUS ADM X406.6 (offered this term)
- Principles of Management Accounting BUS ADM X421.5 (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, visit extension.berkeley.edu/cert/busad.html.

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

Find the Quality
You Want
- Approved by UC Berkeley Haas School of Business
- Overseen by business and education leaders
- Taught by experienced business professionals
Business Analysis Essentials and Planning

BUS ADM X448.1 • 3 semester units in Business Administration

A requirement in the Certificate Program in Business Administration; an elective in the Certificate Program in Project Management and in the Professional Program in Business Process Management

Learn business analysis fundamentals and the planning and monitoring knowledge areas. 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.

Sec. 008
Ashley Wright, B.S., M.B.A.
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 009
Ashley Wright, B.S., M.B.A.
Oct. 23–Dec. 18
Online • Proctored final exam • $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®).

Sec. 007
David Zhu, B.S., CBAP, CISA, PMP
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 008
David Zhu, B.S., CBAP, CISA, PMP
Oct. 23–Dec. 18
Online • Proctored final exam • $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®).

Sec. 007
David Zhu, B.S., CBAP, CISA, PMP
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 008
David Zhu, B.S., CBAP, CISA, PMP
Oct. 23–Dec. 18
Online • Proctored final exam • $995

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 fits 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 meet 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®).

Sec. 007
Ashley Wright, B.S., M.B.A.
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 008
Ashley Wright, B.S., M.B.A.
Oct. 23–Dec. 18
Online • Proctored final exam • $995

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 that you need.
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)

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Get the Focus You Need
- Decision-quality insight
- Enterprise opportunity analysis

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

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

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

ONLINE INFORMATION SESSION
Program in Professional Communication
Learn how this program can improve your communication skills and benefit your career. For program details, see p. 67 and visit extension.berkeley.edu/spos/professional_communication.html to register for this information session.

Wednesday, 12–12:45 pm
Sept. 24
Online • FREE

Essential Business Communication Skills
BUS ADM X404.1 • 2 semester units in Business Administration
A requirement 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. 003
Dan Clurman, M.A.
5 meetings
Saturdays, 9:30 am–4:30 pm
Oct. 25–Nov. 22
Berkeley: Golden Bear Center • $800

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. 004
Barbara Nelson, M.A.
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
San Francisco: San Francisco Campus • $800

Business Writing Review
ENGLISH 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. 002
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. 85.

 Convenient Locations in Berkeley, Belmont and San Francisco
extension.berkeley.edu/locations

Get Berkeley Quality Online
extension.berkeley.edu/online

Business Negotiating
BUS ADM X451.3 • 2 semester units in Business Administration
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.
For course schedule, see p. 88.

Marketing and Communications Writing for Professionals
BUS ADM X416.3 • 1 semester unit in Business Administration
Learn effective writing techniques to improve short- and long-form marketing and communications documents, including articles, case studies, data sheets, Web copy and email deployments.
For course schedule, see p. 94.

Organizational Communication Strategies for Managers
BUS ADM X498.9 • 2 semester units in Business Administration
Learn to communicate effectively in a complex business environment.
For course schedule, see p. 89.

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG


**Competency**

**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. 005
Margaret Steen, M.J., Extension Honored Instructor
2 meetings
Monday and Thursday, 9 am–4 pm
Oct. 13 and 16
San Francisco: San Francisco Campus • $550

**Communicate Effectively: Connecting in Personal and Work Life**

BUS ADM 1008 • 0.8 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. 005
Neil Fiore, Ph.D.
2 meetings
Fridays, 9 am–1:30 pm
Oct. 31 and Nov. 7
Berkeley: Golden Bear Center • $295

**Communication Without Words: How Body Language Influences Your Message**

BUS ADM 1033 • 0.6 ceu

*(Formerly Nonverbal Communication: Messages Beyond Words)*

*An elective in the Program in Professional Communication*

Nonverbal behavior sends messages above and beyond the words spoken. People communicate nonverbally whether they’re aware of it or not, and what is not said may be as important as what is said. Gain insight into your nonverbal communication, and learn how to use it to improve nonverbal effectiveness and help smooth your day-to-day work life.

Sec. 005
Janene Frahm, M.A.
1 meeting
Wednesday, 9 am–4 pm
Nov. 19
San Francisco: San Francisco Campus • $295

**The Power of Listening**

BUS ADM 1055 • 0.6 ceu

*An elective in the Program in Professional Communication*

Listening is an important business skill that 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. 005
Janene Frahm, M.A.
1 meeting
Wednesday, 9 am–4 pm
Oct. 15
San Francisco: San Francisco Campus • $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. 005
Ed Alter, B.A.
2 meetings
Monday and Wednesday, 9 am–4 pm
Nov. 3 and 5
San Francisco: San Francisco Campus • $625

**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 6.0 ceu (90 hours of instruction).

**Required 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
extension-business@berkeley.edu
Effectiveness

Diversity Awareness for Effective Leadership
BUS ADM 1014 • 1.2 ceu
An elective in the Program in Professional Communication
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 strengths, support collaboration and create more welcoming environments.

Sec. 005
Bill Say, M.A.
2 meetings
Fridays, 9 am–4 pm
Oct. 10 and 17
Berkeley: Golden Bear Center • $595

Grant Writing for Professionals
BUS ADM 1024 • 1.3 ceu
An elective in the Program in Professional Communication
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 scheduling the grant proposal project, writing and editing effective proposals. 

Sec. 005
Melanie Wise, M.A.
2 meetings
Fridays, 9 am–4:30 pm
Nov. 7 and 14
San Francisco: San Francisco Campus • $425

Business

Business

• San Francisco: San Francisco Campus
Nov. 7 and 14
Fridays, 9 am–4:30 pm
2 meetings
Melanie Wise, M.A.
Sec. 005
writing strategies, not program development.
Class time focuses on research, planning and narrative sections that sell and editing effectively.
and scheduling the grant proposal project, writing
involved in finding funding opportunities, managing
and planning the grant proposal project, writing
narrative sections that sell and editing effectively.

Business

• Update skills
• Increase efficiency
• Increase retention

ON-SITE TRAINING
Bring UC Berkeley Extension to your workplace to gain lasting benefits for your company and your teams:
• Increase employee satisfaction

Learn More
extension.berkeley.edu/corporate
**Influence**

**Facilitating Groups: An Intensive Practice Lab**
BUS ADM 1020 • 2.4 ceu
*An elective in the Program in Professional Communication*
Gain an understanding of group facilitation in this experiential workshop. Through hands-on labs and simulated practices, you learn to assess, design, prepare and conduct group facilitation to enhance collaboration, effectiveness and performance within an organization.

**Sec. 003**
Andrea Graff, M.B.A.
3 meetings
*San Francisco: San Francisco Campus • $595*

**Preventing and Resolving Conflict Using Restorative Justice Principles**
BUS ADM 1010 • 1.6 ceu
*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.

**Sec. 003**
Sonoo Thadaney, M.B.A.
2 meetings
*San Francisco: San Francisco Campus • $525*

**Scenarios Planning for Better Decision Making**
BUS ADM 1066 • 0.6 ceu
*An elective in the Program in Professional Communication*
Companies live and die on how well today’s decisions fit tomorrow’s realities. In this workshop, you learn practical and replicable steps for discovering and evaluating the assumptions that influence decision making. Acquire expertise in the tools used to create and describe multiple business futures, and learn the framework for understanding how different enterprises react to a range of plausible business scenarios.

**Sec. 003**
Tom Portante, M.A.
1 meeting
*San Francisco: San Francisco Campus • $295*

**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 a 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. 004**
Barbara Russo, B.A.
8 meetings
*San Francisco: San Francisco Campus • $450*

**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. 004**
Gary S. Goodman, J.D., M.B.A., Ph.D.
1 meeting
*San Francisco: San Francisco Campus • $295*

**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 improvisation with emotional intelligence and business management skills to enhance your leadership toolkit.

**Sec. 004**
Allison Gilmore, B.A.
1 meeting
*San Francisco: San Francisco Campus • $295*

**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. 004**
Denise Brouillette, M.B.A.
1 meeting
*San Francisco: San Francisco Campus • $295*
Business Process Management

COURSE INFORMATION
(510) 642-4231
extension-business@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 time-line issues, and learn how to identify short- and long-term improvements.

Sec. 003
Shelley Sweet, M.A.
2 meetings
Saturdays, 8:30 am–5 pm
Sept. 20 and Oct. 4
San Francisco: San Francisco Campus • $445

Moving Up to an IT Leadership Role
EL ENG X458.8  2 semester units in Electrical Engineering
This interactive framework-building course provides a suite of nine mini-frameworks that you use to professionally overcome representative IT management issues that occur throughout the year. For course schedule, see p. 176.

Economics

COURSE INFORMATION
(510) 643-8916
extension-business@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. 016
Ashish Sahni, M.P.P.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
San Francisco: San Francisco Campus • $800

Sec. 015
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $800

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. 004
Martin A. Medeiros, M.A., Extension Honored Instructor
Enroll anytime
Online • $800

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 Courses 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
extension-techeng@berkeley.edu
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 to your everyday business dealings to make more effective decisions.

Sec. 007
Lall Ramrattan, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Berkeley Campus: 109 Wheeler Hall • $900

Sec. 006
Edward Derbin, M.A., M.B.A.
Enroll anytime
Online • Proctored final exam • $900

Introduction to Macroeconomics
ECON 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. 007
Lall Ramrattan, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Dec. 10
Berkeley Campus: 109 Wheeler Hall • $900

Sec. 006
Larry O’Connell, M.A., M.S., M.B.A.
Enroll anytime
Online • Proctored final exam • $900

Entrepreneurship and Small Business Management

FREE INFORMATION SESSIONS
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. 73 or visit extension.berkeley.edu/cert/entrepreneur.html.

Sec. 004
1 meeting
Monday, 5:30–6:30 pm
Aug. 11
San Francisco: Downtown Center • FREE

Sec. 005
1 meeting
Monday, 5:30–6:30 pm
Dec. 8
San Francisco: San Francisco Campus • 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 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. You also learn how to implement a specific business action plan that focuses on effective management solutions.

Sec. 005
Paul Terry, B.Comm.
10 meetings
Mondays, 6–9 pm
Oct. 13–Dec. 15
San Francisco: San Francisco Campus • $800

Open Admissions Policy
UC Berkeley Extension serves the continuing education needs of adults in our community. You do not have to be matriculated to enroll, and there is no admission process to take individual courses.
Small Business Owners for Entrepreneurs and Small Business Owners

BUS ADM X475.6 • 1 semester unit in Business Administration
A requirement in the Certificate Program in Entrepreneurship and Small Business Management; an elective in the Professional Program in Health Advocacy

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

You are strongly encouraged to bring a laptop to class.

Sec. 007
Susanna Wong, M.B.A., M.S.
3 meetings
Saturdays, 9:30 am–4:30 pm
Nov. 8–22
San Francisco: San Francisco Campus • $650

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 to your business and website.

Sec. 008
Kathryn Gorges, M.A., M.B.A.
5 meetings
Saturdays, 9 am–4 pm
Oct. 11–Nov. 8
San Francisco: San Francisco Campus • $800

Business Development for Web Startups

BUS ADM X499 • 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, fund-raising 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. 005
Mary Jean Kroontz, D.B.A., M.B.A.
10 meetings
Thursdays, 6–9 pm
Oct. 9–Dec. 18 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $800

Business Law for Startups and Entrepreneurs

BUS ADM X410 • 2 semester units in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management

Gain broad exposure to the many legal challenges associated with starting up and operating a new venture. Delve into topics such as forming and funding the enterprise, protecting its intellectual property, hiring, managing and terminating employees; implementing stock option and incentive compensation plans, negotiating leases and employment agreements; navigating e-commerce laws; understanding the boundaries of unfair competition and false advertising; growing the venture through franchising, venture capital or IPO; managing legal disputes; and exiting the venture through sale or bankruptcy. Through the use of case studies, you learn how real-world entrepreneurs and startups analyze and resolve their real-world legal challenges. You also gain legal literacy skills, including how to assess legal risk and how to select and manage outside counsel.

Sec. 001
Allan Chao, B.A.
3 meetings
Saturdays, 9:30 am–4:30 pm
Sept. 20–Oct. 4
Belmont: Belmont Center • $595

NEW THIS TERM

Foundations of Web and Mobile Startups

BUS ADM X492.2 • 1 semester unit in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management

Learn about Web and mobile startups in a fast-paced, hands-on environment. Explore the context and process of Web startups and learn strategies and actionable steps that can turn a new idea into a profitable company. Discover fundamental concepts for Web-product development drawing on the Silicon Valley Lean Launchpad model to gain an understanding of customer development, product management and business development. Learn about the legal requirements and issues for startups, including incorporation, partnerships, equity and intellectual property. If you are serious about starting your own web business or have an existing startup but lack a structured understanding of the many pieces involved, you can benefit from taking this course.

Sec. 001
Allan Chao, B.A.
3 meetings
Saturdays, 9:30 am–4:30 pm
Sept. 20–Oct. 4
Belmont: Belmont Center • $595

E-Commerce Strategies for Startups

BUS ADM X499.4 • 1 semester unit in Business Administration
An elective in the Certificate Program in Entrepreneurship and Small Business Management

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. 005
LeAnn Hilgers, M.S.
4 meetings
Saturdays, 9 am–3 pm
Nov. 1–22
Berkeley: Golden Bear Center • $595
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 is 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 2 units of electives (usually 1 course) 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

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

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**Find the Quality You Want**
- Overseen by entrepreneurial business leaders
- Taught by entrepreneurs and business professionals

**Gain the Focus You Need**
- Finalize a business plan
- Develop opportunities
- Manage operations

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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.”
NEW THIS TERM
The Mature Entrepreneur: How to Start Your Own Successful Business at Any Age
BUS ADM 1090 • 0.8 ceu
According to a recent study, 80 percent of all businesses are started by people over the age of 35. In this course, you prepare to successfully launch a new business by leveraging your experience and understanding of what it takes to compete and succeed in the business and organizational world. Learn how to evaluate which opportunities can produce ongoing income and how to distinguish between lifestyle-friendly opportunities and lifestyle traps.

Sec. 001
Gary S. Goodman, J.D., M.B.A., Ph.D.
1 meeting
Saturday, 8:30 am–5 pm
Nov. 15
San Francisco: San Francisco Campus • $350

NEW THIS TERM
Web Startup Coding Workshop
BUS ADM 1094 • 0.8 ceu
Practice introductory programming techniques with HTML, CSS, JavaScript, PHP and .NET to build your Web startup application.
For course schedule, see p. 186.

NEW THIS TERM
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. 61.

NEW THIS TERM
Essentials of Business
BUS ADM X406.6 • 2 semester units in Business Administration
Understand the goals, processes and operations of business enterprises.
For course schedule, see p. 61.

NEW THIS TERM
New Product Development
BUS ADM X405.8 • 2 semester units in Business Administration
Explore the product development process, from identifying customer needs to product launch.
For course schedule, see p. 94.

NEW THIS TERM
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. 78.

NEW THIS TERM
Strategic Marketing for Launching Startups
BUS ADM 1088 • 1.0 ceu
Discover ways to create and launch a startup or new product line or expand awareness for your existing company.
For course schedule, see p. 95.

Certificate Program in Project Management
Acquire the skills to complete a high-quality project on task, on time and within budget. Most Extension project management courses apply toward professional development units (PDUs) recognized by the Project Management Institute. See p. 107 for complete certificate details.

Open Admissions Policy
UC Berkeley Extension serves the continuing education needs of adults in our community. You do not have to be matriculated to enroll, and there is no admission process to take individual courses.
Finance

NEW THIS TERM
Claritas Fundamentals
BUS ADM 1096 • 2.1 ceu
The Claritas® Investment Certificate is awarded by the CFA Institute upon successful completion of the Claritas exam. The certificate and exam are designed to give anyone in the financial services, and those who wish to enter the industry, a clearer understanding of the investment industry and the professional responsibilities within it. Prepare by reviewing exam material. You cover ethics and regulation, inputs and tools, investment instruments, industry structure, industry controls and servicing client needs. The course culminates with a mock exam.

Sec. 001
Daniel Beck, M.A., M.B.A.
8 meetings
Tuesdays, 6:30–9:30 pm
Sept. 9–Oct. 21 (also Saturday, Oct. 25, 9 am–1 pm)
San Francisco: San Francisco Campus • $495

Investment Portfolio Management
BUS ADM X431.2 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Investment Management Specialization
Get an overview of investment management. Topics include modern portfolio theory, fundamental and technical analysis of equities, concentrated equity positions, fixed-income analysis, benchmarking, capital markets, the appropriate use of mutual funds, the importance of asset allocation, IRAs, 401(k)s and tax-efficient portfolio design. You also pay attention to interest rates, inflation, Federal Reserve policies and general economic policy as they pertain to course topics.

Sec. 004
John Kramer, Ph.D.
10 meetings
Wednesdays, 6:30–9:30 pm
Oct. 15–Dec. 17
San Francisco: San Francisco Campus • $800

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. 006
Rene-Francois Cervantes, M.B.A.
September 9–December 2
Online • $800

Behavioral Finance
BUS ADM X436.7 • 2 semester units in Business Administration
A requirement in the Certificate Program in Personal Financial Planning; an elective in the certificate programs in Business Administration and in Finance
Look at the financial industry and practice within the context of behavioral theory to understand the individuals’ psychological aspects and reactions 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. 006
Richard Lehman, M.B.A.
10 meetings
Mondays, 6:30–9:30 pm
Oct. 6–December 8
San Francisco: San Francisco Campus • $800

FREE INFORMATION SESSIONS
Certificate Program in Finance
UNEX 1042
Find out how a certificate in finance from UC Berkeley Extension can prepare you for career advancement or an advanced degree. For certificate details, see p. 77 or visit extension.berkeley.edu/cert/finance.html.

Sec. 004
1 meeting
Tuesday, 5:30–6:15 pm
Aug. 26
Berkeley: Golden Bear Center • FREE

Sec. 005
1 meeting
Thursday, 5:30–6:30 pm
Nov. 20
Berkeley: Golden Bear Center • FREE

FREE INFORMATION SESSION
Claritas Fundamentals
UNEX 1239
Understand how studying for the Claritas® Investment Certificate can give you a clearer understanding of the investment industry and your professional responsibilities within it. Discuss the benefits with staff members and instructors to determine if this examination preparation matches your professional goals.

Sec. 001
1 meeting
Wednesday, 6:30–7:30 pm
Aug. 27
San Francisco: San Francisco Campus • FREE
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
This course introduces the concepts and tools used by financial managers to make effective investing, financing, and working capital management decisions. Understand advanced capital budgeting topics, financing decisions, working capital management and multinational finance.
Sec. 012
Instructor to be announced
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $800

Debt Markets and Fixed-Income Securities
BUS ADM X436.3 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Capital Markets Specialization Concentration
Learn to analyze debt instruments and their derivatives, including money-market instruments, government bonds, repurchase agreements, interest-rate swaps, mortgage-backed securities, corporate bonds and credit derivatives. Examine the best ways to invest using these instruments and how they are issued. You emphasize analysis, pricing and hedging during the course.
Sec. 001
Tony Yeh, M.B.A., M.Engr., Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 23–Oct. 21 (also Saturdays, Sept. 27–Oct. 25, 9 am–12 pm)
San Francisco: San Francisco Campus • $800

Advanced Portfolio and Risk Management
BUS ADM X436.6 • 2 semester units in Business Administration
A requirement in the Certificate Program in Finance, Capital Markets Specialization
Learn to manage financial risk from the standpoint of both the corporation and the financial institution. Study risk identification and risk-mitigation techniques for the management of cash flow and portfolio value. Review advanced techniques such as Monte Carlo simulation and state-based risk mapping. Participate in class discussions on the latest developments in financial products and the capital markets as they pertain to financial risk management.
Sec. 002
Tony Yeh, M.B.A., M.Engr., Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Oct. 28–Dec. 2 (also Saturdays, Nov. 1–Dec. 6, 9 am–12 pm; no meetings on Nov. 11 and 29)
San Francisco: San Francisco Campus • $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. 013
Peter Lou, M.B.A., CFA, Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
San Francisco: San Francisco Campus • $645

Sec. 011
Tee Lim, M.B.A., Ph.D.
Sept. 16–Oct. 28
Online • Proctored final exam • $645

Sec. 012
Catherine Pinkas, M.B.A., PMP
Nov. 4–Dec. 16
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. 015
Joseph S. Leung, M.B.A., CFA
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Nov. 4
San Francisco: San Francisco Campus • $800

Sec. 016
Instructor to be announced
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Fundamentals of Risk Management
BUS ADM X436.5 • 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 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. 008
Lawrence Cox, B.S., M.B.A.
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Sec. 009
Wayne Price, M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
Oct. 9–Dec. 18 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $800

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
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
- Investment Portfolio Management BUS ADM X431.2 (offered this term)
- Options and Other Financial Derivatives BUS ADM X435.1 (offered this term)

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

**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
extension-business@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.”
**BUSINESS**

**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, as well as 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 the Silicon Valley, the world’s leading source of venture capital sourcing.

**Sec. 003**
Robert Coackley, B.S.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
San Francisco: San Francisco Campus • $800

**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. 002**
Christian Teeter, Ed.D.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $800

**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. 80.

**Finances for Entrepreneurs and Small Business Owners**
BUS ADM X475.6 • 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. 72.

**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. 103.

**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. 61.

**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 that illustrate the analysis of critical corporate finance decisions.

For course schedule, see p. 80.

**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. 80.

**Financial Planning and Analysis**

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

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

**FREE INFORMATION SESSIONS**
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. 79 or visit extension.berkeley.edu/cert/financial_planning_analysis.html.

Wednesday, 5:30–6:30 pm
Aug. 6
Online

**Sec. 004**
1 meeting
Tuesday, 6:30–7:15 pm
Aug. 26
Berkeley: Golden Bear Center • FREE

**Sec. 005**
1 meeting
Thursday, 6:30–7:15 pm
Nov. 20
Berkeley: Golden Bear Center • FREE

Wednesday, 5:30–6:30 pm
Dec. 3
Online
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
- Corporate Financial Analysis and Modeling BUS ADM X435.6 (offered this term)
- Business Valuation BUS ADM X431.9 (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.

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)

Refine Your Expertise
- □ Accounting
- □ Planning

Gain the Knowledge You Need
- □ Business valuation
- □ Financial statement analysis
- □ International finance

Learn More and View the Brochure
extension.berkeley.edu/cert/financial_planning_analysis.html
(510) 642-4231
extension-business@berkeley.edu
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. 021
Patricia Muscatelli, M.B.A., M.S., Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Nov. 4
San Francisco: San Francisco Campus • $800

Sec. 018
Tee Lim, M.B.A., Ph.D.
Sec. 019
Patricia Muscatelli, M.B.A., M.S.,
Extension Honored Instructor
Sec. 020
Donald R. Byrne, M.B.A., Ph.D.

Sec. 021
Patricia Muscatelli, M.B.A., M.S.,
Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Nov. 4
San Francisco: San Francisco Campus • $800

Sec. 018
Tee Lim, M.B.A., Ph.D.
Sec. 019
Patricia Muscatelli, M.B.A., M.S.,
Extension Honored Instructor
Sec. 020
Donald R. Byrne, M.B.A., Ph.D.

Business Valuation
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. 012
Robert Coackley, B.S.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Nov. 10
San Francisco: San Francisco Campus • $800

Sec. 014
Robert Coackley, B.S.
Sept. 9–Dec. 2
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. 016
Mohsin Hafeez, M.B.A., CFP®
8 meetings
Wednesdays, 6:30–9:45 pm
Sept. 3–Oct. 22
San Francisco: San Francisco Campus • $800

Sec. 015
Mohsin Hafeez, M.B.A., CFP®
5 meetings
Sundays, 10 am–5 pm
Sept. 7–Oct. 5
Berkeley: Golden Bear Center • $800

Sec. 013
Donald R. Byrne, M.B.A., Ph.D.
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Sec. 014
Kenneth Kurtz, M.Acc.
Sept. 16–Dec. 9
Online • Proctored final exam • $800

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 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. 007
Richard Lehman, M.B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Oct. 8–Dec. 10
San Francisco: San Francisco Campus • $800

Sec. 006
Richard Lehman, M.B.A.
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 that 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. You 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. 006
Peter Lou, M.B.A., CFA,
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Nov. 8–Dec. 13 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $800

Sec. 005
Donald R. Byrne, M.B.A., Ph.D.
Enroll anytime
Online • Proctored final exam • $800
Fiduciary Studies

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

**FREE INFORMATION SESSIONS**

**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 series of courses can provide the essential skills to enter the field and offer seasoned fiduciaries enhanced career opportunities.

Sec. 002
1 meeting
Wednesday, 5:30–6:15 pm
Aug. 20
Berkeley: Golden Bear Center = FREE

Sec. 003
1 meeting
Thursday, 5:30–6:15 pm
Dec. 4
Berkeley: Golden Bear Center = FREE

**Survey and Ethics of the Fiduciary Profession**

BUS ADM X416.5 • 1 semester unit in Business Administration
(Formerly Introduction to Being a Private Professional Fiduciary and Special Needs Trust Administration and Public Benefits)
Private Professional Fiduciaries serve in a wide range of capacities, from managing large estates to supervising care for elderly and disabled people living at home. Explore the duties and responsibilities of administering a special needs trust (SNT). Learn how to review an SNT document, distinguish the different ways to handle court-supervised and non-court-supervised estates.

Prerequisite: Survey and Ethics of the Fiduciary Profession BUS ADM X416.5 or consent of instructor

Sec. 002
Kim Schwarcz, B.A.
5 meetings
Wednesdays, 6:30–9:30 pm
Nov. 19–Dec. 17
Berkeley Campus: Barrows Hall • $645

**Fiduciary as Administrator of Estate (Probate, Trust and Conservatorship)**

BUS ADM X416.6 • 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 non-court-supervised estates.

Prerequisite: Survey and Ethics of the Fiduciary Profession BUS ADM X416.5 or consent of instructor

Sec. 002
Patricia McVey-Ritsick, NCG, CLPF #67
5 meetings
Wednesdays, 6:30–9:30 pm
Oct. 15–Nov. 12
Berkeley Campus: Barrows Hall • $645
Human Resources

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

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

FREE INFORMATION SESSIONS
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. 83 or visit extension.berkeley.edu/cert/hrm.html.

Sec. 004
1 meeting
Monday, 6:45–7:45 pm
Aug. 11
San Francisco: Downtown Center • FREE

Sec. 005
1 meeting
Monday, 6:45–7:45 pm
Dec. 8
San Francisco: San Francisco Campus • FREE

Essentials of Human Resources
BUS ADM X450.1 • 2 semester units in Business Administration
A prerequisite for and an elective in the Certificate Program in Human Resource Management
Explore the six core areas of human resources: management practices; selection and placement; training and development; compensation and benefits; employer 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. 009
David Schlocker, M.B.A., GPHR, SPHR
8 meetings
Mondays, 6–9:45 pm
Sept. 8–Oct. 27
San Francisco: San Francisco Campus • $800

Sec. 008
Catherine McKnight, M.A.
Sept. 9–Dec. 2
Online • $800

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, you gain skills and best practices to evaluate your company’s strategic plan and help secure a C-level seat at the table.

Sec. 003
Instructor to be announced
5 meetings
Wednesdays, 6–9 pm
Sept. 3–Oct. 1
San Francisco: San Francisco Campus • $650

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. 005
Terri Lynn Cardona, M.S.
10 meetings
Tuesdays and Thursdays, 6–9 pm
Nov. 4–Dec. 11 (no meetings on Nov. 11 and 27)
San Francisco: San Francisco Campus • $800

Employee Recruitment, Selection and Placement
BUS ADM X454.4 • 1 semester unit 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. 005
Instructor to be announced
10 meetings
Wednesdays, 6–9 pm
Oct. 15–Dec. 17
San Francisco: San Francisco Campus • $800

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. 005
Jun Cruzat, M.S.I.S.E.
10 meetings
Wednesdays, 6–9 pm
Sept. 3–Nov. 12 (no meeting on Oct. 8)
San Francisco: San Francisco Campus • $800
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.

**Certificate Program in Human Resource Management**

**Curriculum Requirements**
The curriculum consists of 8 required core courses (14 units) and 4 semester units of electives (usually 2 courses) for a total of 18 semester units (273 hours of instruction).

**Prerequisite**
Essentials of Human Resources BUS ADM X450.1 (offered this term)

**Required Courses**
- Aligning Human Resource Initiatives With Business Success BUS ADM X493.5 (offered this term)
- Effective Performance Management BUS ADM X452.3 (offered this term)
- Employee Recruitment, Selection and Placement BUS ADM X450.8 (offered this term)
- Employee Relations BUS ADM X454.4 (offered this term)
- Human Resource Systems and Technology BUS ADM X482.2 (offered this term)
- Introduction to Human Capital Analytics BUS ADM X417.5 (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

**Elizabeth Arredondo de Pina** has her eyes set on being a vice president of human resources, and thanks to the Certificate Program in Human Resource Management, she is well on her way. Working full time in human resources at NORCAL Mutual Insurance, Arredondo de Pina credits the flexible course schedule in enabling her to complete the certificate (with distinction) in a year-and-a-half.

Arredondo de Pina also cites her instructors in helping her succeed. “I enjoyed all of my instructors, in particular Terri Lynn Cardona and Jun Cruzat,” she says. “Both are fascinating—great instructors who know how to teach while captivating students with their energy, knowledge and valuable experience.”
NEW THIS TERM

Introduction to Human Capital Analytics

BUS ADM X417.5 • 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. 001
Amit Mohindra, M.A.
10 meetings
Tuesdays, 6–9 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $800

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. 006
Resa Peay-Wainwright, B.A.
5 meetings
Saturdays, 9 am–4 pm
Oct. 11–Nov. 8
San Francisco: San Francisco Campus • $800

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. 006
Jolynn Lenz, B.A.
10 meetings
Thursdays, 6–9 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $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. 003
Richard Takahashi, M.B.A.
Enroll anytime
Online • $800

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. 003
Joseph P. Breen, J.D.
10 meetings
Mondays, 6–9 pm
Oct. 13–Dec. 15
San Francisco: San Francisco Campus • $800

Performance Analysis and Needs Assessment

BUS ADM X491 • 1 semester unit in Business Administration

An elective in the Certificate Program in Human Resource Management

Discover practical and proven concepts, models, approaches, tools and techniques to help determine whether training is the appropriate intervention for your organization’s needs. Identify specific training needs and a process for establishing the necessary support and commitment to make training successful. Learn how to interpret and utilize the results of a systems approach to performance analysis and needs assessment.

Sec. 002
Richard Ragan, M.S., CPT,
Extension Honored Instructor
5 meetings
Wednesdays, 6–9 pm
Nov. 19–Dec. 17
Berkeley: Golden Bear Center • $525

Organization Development and Change

BUS ADM X491.2 • 2 semester units in Business Administration

Develop skills in analyzing the need for introducing change into an organization and learn techniques for implementation.

For course schedule, see p. 89.

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. 68.
Law

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

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

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. 002
Brien Walton, J.D., LL.M.
Enroll anytime
Online • $800

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. 007
Jason Lum, J.D.
Sept. 9–Dec. 2
Online • $800

Sec. 006
Maryann Dresner, J.D.
4 meetings
Saturdays, 9 am–5 pm
Nov. 8–Dec. 6 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $800

Climate Change and Law AB32: What It Means For You

NAT RES X435.1 • 1 semester unit in Natural Resources
Discuss the impact of Law AB32 and the proposed strategies on sustainable communities and sustainable freight, and evaluate the various effects of their implementations.

For course schedule, see p. 115.

Paralegal Studies

FREE INFORMATION SESSIONS

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. See p. 87 for more certificate details or visit extension.berkeley.edu/cert/paralegal.html.

Sec. 003
1 meeting
Monday, 5:30–7 pm
July 14
San Francisco: Downtown Center • FREE

Wednesday, 12–12:45 pm
Aug. 13
Online • FREE

Wednesday, 12–12:45 pm
Oct. 15
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. 006
Tod Zuckerman, J.D.,
Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Oct. 7–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $1,550

See website for available section number
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

See website for available section number

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.

See website for available section number

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, and 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. 006

David Yang, J.D., LL.B.

5 meetings

Thursdays, 6–9 pm

Oct. 7–Nov. 26

San Francisco: San Francisco Campus • $795

See website for available section number

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.

See website for available section number

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.

See website for available section number

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.

See website for available section number

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. 003

Daniel Xu, M.S., J.D.

5 meetings

Thursdays, 6–9 pm

Nov. 13–Dec. 18 (no meeting on Nov. 27)

San Francisco: San Francisco Campus • $795

See website for available section number

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. 005

Larry Sager, J.D.

5 meetings

Thursdays, 6–9 pm

Sept. 1–Oct. 2

San Francisco: San Francisco Campus • $795

See website for available section number

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 certificate.

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

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

FREE INFORMATION SESSIONS
Certificate Program in Leadership and Management
UNEX 1045
Find out how this UC Berkeley Extension professional certificate can help you build the essential skills for effective management and make a tangible difference in your career. For information about the certificate, see p. 91 or visit extension.berkeley.edu/cert/mgt.html.

Sec. 004
1 meeting
Monday, 5:30–6:30 pm
Aug. 18
San Francisco: Downtown Center • FREE

Sec. 005
1 meeting
Monday, 5:30–6:30 pm
Dec. 15
San Francisco: San Francisco Campus • FREE

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 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 systematically. Learn concrete skills to improve your ability to lead teams and achieve business goals.
Course requirements include taking an assessment test, offered at a discounted rate of $100, to track your mastery in essential leadership functions and to create an action plan for your leadership development and improvement.

Sec. 004
10 meetings
Thursdays, 6–9 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $800

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. 005
8 meetings
Tuesdays, 6–9:45 pm
Sept. 2–Oct. 21
San Francisco: San Francisco Campus • $800

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.
Pregrading assignments are listed in the course reader.

Sec. 004
Anna Ewins, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
Sept. 6 and 20
San Francisco: San Francisco Campus • $625

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. 013
Eli W. Asmar, M.S.E., CKM, PMP,
Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
San Francisco: San Francisco Campus • $800
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. 006
Karen B. Haley Allen, M.A.
5 meetings
Saturdays, 9 am–4 pm
Oct. 11–Nov. 8
San Francisco: San Francisco Campus • $800

Making Power Moves: Women and Leadership
BUS ADM X454.8 • 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
Acquire the skills needed to rise to leadership positions, and get practical information to advance your career, including networking, the use of power, organizational politics, nondefensive communication, negotiation, public speaking, managing up, and self-nurturing and limit setting. Through lecture, discussion and interactive exercises, gain skills that help you excel in today’s workplace and apply high standards of ethical practice and compassionate leadership. Several guest speakers augment the topics and provide diverse perspectives.
Sec. 002
Amy Levine, Ed.D.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 22–Nov. 24
Berkeley: Golden Bear Center • $650

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. 009
Gene Hendrix, Ph.D.,
Extension Honored Instructor
10 meetings
Mondays, 6–9 pm
Sept. 8–Nov. 10
San Francisco: San Francisco Campus • $800

Organization Development and Change
BUS ADM X491.2 • 2 semester units in Business Administration
An elective in the certificate programs in Human Resource Management and in Leadership and Management
Learn the right way to bring about change in an organization—conventional wisdom does not always lead to good business decisions. Examine a number of change models, develop skills in analyzing the need for introducing change into an organization and learn techniques for implementation.
Sec. 002
Gene Hendrix, Ph.D.,
Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Oct. 7–Dec. 16 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $800

FREE PUBLIC EVENT
Philanthropy, Volunteering and UniversalGiving™
UNEX 1235
Learn how you can create a better, healthier world through philanthropy and volunteering. This free public program shows how you can donate and volunteer your time with top-performing, global projects. Learn how to scale corporate social responsibility programs across the world.
Pamela Hawley, M.A., is the founder and CEO of UniversalGiving™, an award-winning nonprofit helping people to donate and volunteer with top-performing, vetted organizations all over the world. UniversalGiving Corporate helps manage global CSR for companies and has been featured on the homepage of BusinessWeek, Oprah.com, CBS, The Wall Street Journal and The New York Times. Hawley is a winner of the Jefferson Award (the Nobel Prize in Community Service) and attended three social innovation events at the White House.
Sec. 001
1 meeting
Thursday, 6–7 pm
Oct. 9
San Francisco: San Francisco Campus FREE

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
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 (offered this term)
- Moving on Up: Women and Leadership BUS ADM X474.1
- 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 extension-business@berkeley.edu

Strategies in Innovation and Technology
BUS ADM X413.5 • 1 semester unit in Business Administration
An elective in the Certificate Program in Leadership and Management

Are important industries like energy, medicine, education, food production and space exploration being ignored as innovation trends shift toward short-term gains solving microproblems and developing commercial apps? In this course, you examine past, current and future trends in innovation and understand its effects on fund performances, policy initiatives and society. If you are an aspiring entrepreneur, investor, policy maker or member of the public who would like to learn about the latest trends in innovation, you can benefit from this course.

Sec. 002
Nima Shomali, M.B.A.
2 meetings
Saturdays, 8:30 am–5 pm
San Francisco: San Francisco Campus • $595

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 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. 004
Curt Francis, M.B.A., M.S.
3 meetings
Saturdays, 8:30 am–5 pm
Nov. 15–Dec. 6 (no meeting on Nov. 29)
Belmont: Belmont Center • $595

Disruption and Innovation: An Introduction to Clayton Christensen
BUS ADM 1079 • 0.8 ceu
Learn from a top-management thinker on how to gain a true competitive edge through market disruption. Discover how to differentiate sustaining technology from disruptive technology and how to use innovation to disrupt rather than to compete. Experience and analyze the five skills of disruptive innovators: association, questioning, observing, networking and experimenting.

Sec. 002
Gene Hendrix, Ph.D., Extension Honored Instructor
1 meeting
Thursday, 8:30 am–5 pm
Nov. 13
Belmont: Belmont Center • $295

Global Supply Chain Management Strategies and Architectures
BUS ADM 1084 • 0.8 ceu

In this highly interactive seminar, you gain an understanding of the most current and relevant competing global supply chain strategies and how companies have designed competitively advantageous solutions. Analyze case studies in high-tech industrial products, consumer products, and retail and medical devices. Discuss current topics including trade compliance, currency exchange rates, conflict minerals and reshoring.

Sec. 002
Rosemary Coates, M.B.A.
1 meeting
Friday, 8:30 am–5 pm
Oct. 24
Belmont: Belmont Center • $350

Business Communication: Writing and Speaking
BUS ADM X404.7 • 2 semester units in Business Administration

Learn to be more confident and effective when making written and oral presentations.

For course schedule, see p. 66.

Business Intelligence With SQL Server
EL ENG X404.8 • 2 semester units in Electrical Engineering

Learn to analyze and develop a Business Intelligence (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.

For course schedule, see p. 184.

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. 68.

Handling Difficult Interactions With Skill and Confidence
BUS ADM 1026 • 0.8 ceu

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.

For course schedule, see p. 68.
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 4 units of electives (usually 2 courses) 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.

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

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

Certificate Program in Leadership and Management student Kathy Moe is especially pleased that techniques learned in class provide her with confidence in her new position. “The assignment in one course was to take an issue that we had discussed in class and apply it at work,” Moe relates. “So I decided to use a particular technique for a project at work. My co-workers didn’t know about it, and it proved to be very beneficial. A couple of people who report to me mentioned to my boss later, ‘Kathy handled that really well.’ It was important for me in this new position to maintain credibility and earn trust and respect in a new role.” Now, both Moe and her supervisor encourage their employees to take advantage of training courses, including Extension classes.
Marketing

COURSE INFORMATION

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

ONLINE COURSE INFORMATION

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

FREE INFORMATION SESSIONS
Certificate Program in Marketing and Professional Sequences in Marketing Metrics and ROI and in Managing Marketing Communications
UNEX 1046
Find out how UC Berkeley Extension’s Certificate Program in Marketing and the professional sequences in Marketing Metrics and ROI and in Managing Marketing Communications equip you with a solid understanding of marketing’s most up-to-date concepts and techniques. For more information about the Certificate Program in Marketing, see p. 93 or visit extension.berkeley.edu/cert/market.html. For more information about the Professional Sequence in Managing Marketing Communications, see p. 99 or visit extension.berkeley.edu/cert/mmc.html. For more information about the Professional Sequence in Marketing, see p. 93 or visit extension.berkeley.edu/cert/market.html.

Wednesday, 12–12:45 pm
July 16
Online • FREE

Sec. 004
1 meeting
Monday, 6:45–7:45 pm
Aug. 18
San Francisco: Downtown Center • FREE

Wednesday, 12–12:45 pm
Nov. 5
Online • FREE

Sec. 005
1 meeting
Monday, 6:45–7:45 pm
Dec. 15
San Francisco: San Francisco Campus • FREE

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. 023
James Prost, M.B.A., Department of Marketing
10 meetings
Tuesdays, 6–9 pm
Sept. 2–Nov. 4
San Francisco: San Francisco Campus • $800

Sec. 026
William Hess, M.A., Ph.D., Department of Marketing
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
Belmont: Belmont Center • $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. 013
Nicki Shovar, Ph.D.
Sept. 9–Dec. 2
Online • $800

Sec. 012
Scott Worthge, B.S.
5 meetings
 Saturdays, 9 am–4 pm
Nov. 15–Dec. 20 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $800

Marketing Strategy
BUS ADM X415 • 2 semester units in Business Administration
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. 013
Suzanne Powers, M.B.A.
Sept. 9–Dec. 2
Online • $800

Sec. 012
James Prost, M.B.A., Department of Marketing
10 meetings
Thursdays, 6–9 pm
Oct. 9–Dec. 18 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $800
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 (8 units) and 4 semester units of electives (usually 2 courses) 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.

Find the Education You Want
- Courses in all aspects of marketing
- Knowledge you can use immediately
- Berkeley-quality instruction

Get the Flexibility You Need
- Online or classroom format
- Classroom locations in Berkeley, San Francisco, and Belmont

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

Looking back on her certificate experience—which she completed in just one year—Mila 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.”
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. 004
Instructor to be announced
5 meetings
Tuesdays, 6–9 pm
Sept. 2–30
San Francisco: San Francisco Campus • $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 and lead-generation programs. Understand how to conduct competitive analyses and write marketing requirements documents.
Sec. 004
Laura Huddle, B.A., B.S.
10 meetings
Mondays, 6–9 pm
Sept. 8–Nov. 10
San Francisco: San Francisco Campus • $800

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 deployments. 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; present your work; and begin creating a professional portfolio.
Sec. 005
Melanie Wise, M.A.
4 meetings
Fridays, 9 am–12:45 pm
Oct. 3–24
San Francisco: San Francisco Campus • $525

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. 003
Stephan Sorger, M.B.A., M.S., CMC, PE, Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Nov. 15–Dec. 20 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $800

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. 008
Scott Worthge, B.S.
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
Berkeley: Golden Bear Center • $800

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. 008
Woody Alexander, M.B.A.
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Strategy, Tactics and Management of Pricing

BUS ADM X444.6 • 2 semester units in Business Administration
An elective in the Certificate Program in Marketing
Learn to create, manage and execute pricing strategies and tactics to win in global markets. Examine the fundamentals and role of pricing; study concepts and best practices to capture product and service values, and explore the various pricing strategies and tactics to win in markets and to influence purchase decisions. Investigate how to optimize revenue and profit consistent with market and business strategies, evaluate and select the best competitive strategies, and learn how to organize and manage an organization to achieve world-class pricing across a global corporation.

Prerequisite: Introduction to Marketing BUS ADM X460.1 or equivalent, or consent of instructor

Sec. 002
Linsley Johnson, M.B.A.
10 meetings
Wednesdays, 6–9 pm
Sept. 3–Nov. 5
San Francisco: San Francisco Campus • $800

NEW THIS TERM
A Practical Workshop in Marketing Services

BUS ADM 1091 • 1.2 ceu
Understand the significant differences between products and services, and learn how the marketing and sales of a service differ from promoting a tangible product. Gain an understanding of the four Ps (price, product, promotion and place) of marketing as they relate to service industry approaches. Discover how to effectively develop marketing programs that direct selling activities to accomplish company goals.

Prerequisite: Introduction to Marketing BUS ADM X460.1 or equivalent, or consent of instructor

Sec. 001
William Hess, M.A., Ph.D., Extension Honored Instructor
2 meetings
Saturdays, 9 am–4 pm
Sept. 6 and 13
San Francisco: San Francisco Campus • $450

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. 004
Charles G. Hollins, B.S.
2 meetings
Friday and Saturday, 8:30 am–5 pm
Oct. 24–25
San Francisco: San Francisco Campus • $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 size; forecasting and positioning; developing and interpreting surveys; understanding predictive analytics; grasping 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. 004
Stephan Sorger, M.B.A., M.S., CMC, PE, Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
San Francisco: Art and Design Center • $800

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. 004
Stephan Sorger, M.B.A., M.S., CMC, PE, Extension Honored Instructor
5 meetings
Saturdays, 9 am–4 pm
Oct. 11–Nov. 8
San Francisco: Art and Design Center • $800
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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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. 004
Sheila Fruge, B.A.
5 meetings
Mondays, 6–9 pm
Sept. 8–Oct. 6
Belmont: Belmont Center • $625

Marketing Intelligence
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. 004
Kerem Tomak, M.A., Ph.D.
5 meetings
Mondays, 6–9 pm
Nov. 17–Dec. 15
San Francisco: San Francisco Campus • $625

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. 003
Kathy M. Klotz-Guest, M.A., M.B.A.
10 meetings
Tuesdays, 6–9 pm
Oct. 7–Dec. 16 (no meeting on Nov. 11)
San Francisco: Art and Design Center • $800

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.

Prerequisite: Introduction to Marketing
BUS ADM X460.1 or equivalent, or consent of instructor

Sec. 009
Susan G. Gaide, M.B.A.
10 meetings
Oct. 7–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $800
Wordpress Mastery: How to Build Your Brand, Influence Others and Sell Online

BUS ADM X442.6 • 2 semester units in Business Administration

An elective in the Certificate Program in Marketing

Create an effective online presence using the four pillars of WordPress Mastery: Personal Branding, Content Strategy, Thought Leadership and Entrepreneurship. Plan and implement a congruent content strategy configured with powerful online tools enabling you to publish original content and distribute it across various social media platforms. Learn how to attract an audience with thought leadership and ways to start building an automated marketing list of highly qualified leads.

You must have Gmail and Facebook accounts set up prior to enrollment and two of the following social media profiles set up: LinkedIn, Twitter, YouTube, Google+, Instagram, Pinterest or Vine. An estimated online tools and accounts fee of $150—which includes budgeting for hiring a logo designer for basic branding—is required in addition to course tuition.

Sec. 002
Evan Kopelson, J.D.
10 meetings
Wednesdays, 6–9 pm
Oct. 8–Dec. 17 (no meeting on Nov. 26)
San Francisco: San Francisco Campus • $650

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. 005
Laurie Beasley, B.S.
1 meeting
Saturday, 8:30 am–5 pm
Dec. 6
San Francisco: San Francisco Campus • $475

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 panes. 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. 005
David B. Beasley, B.S.
1 meeting
Saturday, 8:30 am–5 pm
Dec. 13
San Francisco: San Francisco Campus • $475

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. 005
Lorrie Thomas Ross, M.A.O.M.
1 meeting
Saturday, 8:30 am–5 pm
Oct. 18
San Francisco: San Francisco Campus • $425

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 1 required course and 3 required workshops 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 1016 (offered this term)
- Advanced Email and Online Marketing
  BUS ADM 1001 (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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COURSES AVAILABLE THROUGHOUT THE YEAR

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NEW THIS TERM

**Search Engine Optimization for Real Business**

BUS ADM 1092 • 1.2 ceu

People conduct millions of search questions to Google and Bing every day. Learn about the art and science of making your website visible to prospective buyers through Search Engine Optimization. Unlike Search Engine Marketing, which relies upon paid advertising, Search Engine Optimization is an organic process that relies upon well-constructed and purposeful website content. Explore best practices and advanced SEO techniques you can directly implement, such as how to conduct and apply keyword research into a website’s content and how to measure effectiveness to attract and convert potential customers. Learn how to translate SEO geek-speak into plain English and discover how SEO fits into an overall marketing strategy to drive online leads.

You are strongly encouraged to bring a laptop to class.

To complete this course, you need access to Google Analytics, Webmaster Tools for a live website, a free Google AdWords account and a Google Analytics, Webmaster Tools for a live website, a free Moz trial account (link provided in class).

**Prerequisite:** Familiarity with search engines

**Sec. 001**

Alyson Harrold, B.A., and Massimo Paolini, B.A.

4 meetings

Mondays, 6–9 pm

Oct. 13–Nov. 3

Belmont: Belmont Center • $450

**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. 005**

Lorne Thomas Ross, M.A.O.M.

1 meeting

Friday, 8:30 am–5 pm

Oct. 17

San Francisco: San Francisco Campus • $325

**Understanding and Applying Google Analytics**

BUS ADM 1062 • 1 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. 003**

Philippa Gamse, B.A., Pg.Dip.

2 meetings

Saturdays, 10 am–3:45 pm

Nov. 15 and 22

San Francisco: San Francisco Campus • $450

**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.

**Prerequisite:** Managing Marketing Communications BUS ADM X466.1 or equivalent, or consent of instructor

**Sec. 004**

Deborah Doyle, B.A.

5 meetings

Thursdays, 6–9 pm

Sept. 4–Oct. 2

San Francisco: San Francisco Campus • $625

**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 course’s curriculum.

**Prerequisite:** Introduction to Marketing BUS ADM X460.1 or equivalent, or consent of instructor

**Sec. 005**

Patricia Smith, M.J.

10 meetings

Wednesdays, 6–9 pm

Sept. 3–Nov. 5

San Francisco: San Francisco Campus • $800

**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. 004**

Deborah Doyle, B.A.

5 meetings

Thursdays, 6–9 pm

Sept. 4–Oct. 2

San Francisco: San Francisco Campus • $625
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. 004
Gwendolyn Kaplan, B.A.
5 meetings
Wednesdays, 6–9 pm
Nov. 19–Dec. 17
San Francisco: San Francisco Campus • $625

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. 003
Joshua Kelly, M.S.
5 meetings
Tuesdays, 6–9 pm
Nov. 18–Dec. 16
San Francisco: San Francisco Campus • $625

NEW THIS TERM
Creating an Advertising Campaign
BUS ADM X401.4 • 1 semester unit in Business Administration

An elective in the Certificate Program in Marketing

Discover how a superior, creative advertising campaign can maximize your company’s media expenditure for increased ROI. Find out how the most successful advertising campaigns are developed by employing creativity, clarity and marketing focus, and learn to put that knowledge to work by creating an integrated advertising campaign. Tie it all together by establishing guidelines and using effective concept/idea generation techniques. Most importantly, gain awareness in how to present and sell your ideas effectively.

You should bring paper, pens, a marker pen and a laptop to class.

Prerequisite: Advertising and Social Marketing BUS ADM X464.7 or equivalent, or consent of instructor

Sec. 001
Tom Gehrig, M.F.A.
6 meetings
Wednesdays, 6–9 pm
Nov. 12–Dec. 17
San Francisco: San Francisco Campus • $625

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. 004
Michael Savod, M.B.A.
5 meetings
Mondays, 6–9 pm
Nov. 17–Dec. 15
San Francisco: San Francisco Campus • $625

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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Sales Management

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**Sales Management Best Practices**
BUS ADM X479.2 • 2 semester units in Business Administration
(Formerly Introduction to Sales Management I)
A requirement in the Professional Sequence in Sales Management; an elective in the certificate programs in Marketing and in Leadership and Management

Master 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. 004**
10 meetings
Mondays, 6–9 pm
Oct. 13–Dec. 15
San Francisco: San Francisco Campus • $800

Personal Financial Planning

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**CFP EXAM PREPARATION**
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**FREE INFORMATION SESSIONS**
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 certificate details, see p. 101 or visit extension.berkeley.edu/cert/pfp.html.

**Sec. 004**
1 meeting
Thursday, 6:30–7:15 pm
Aug. 28
Berkeley: Golden Bear Center • FREE

**Sec. 005**
1 meeting
Tuesday, 5:30–6:30 pm
Dec. 2
Berkeley: Golden Bear Center • FREE

**COURSES AVAILABLE THROUGHOUT THE YEAR**

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Certificate Program in Personal Financial Planning

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).

Note: Accelerated course schedules can help you complete the certificate in 7–9 months. Accelerated courses are three-week modules with one weeknight and one Saturday meeting each week. You can mix accelerated courses with regular, 10-week courses.

Required Courses
- Survey of Personal Financial Planning
  BUS ADM X433 (offered this term)
- Employment Benefits and Personal Financial Planning
  BUS ADM X433.6 (accelerated schedule offered this term)
- Estate Planning
  BUS ADM X433.2 (accelerated schedule offered this term)
- Income Taxes and Personal Financial Planning
  BUS ADM X433.1 (accelerated schedule offered this term)
- Insurance in Personal Financial Planning
  BUS ADM X433.8 (accelerated schedule 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)

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- Accelerated course option; complete the program in 7–9 months

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- Career night and awards dinner

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Eric Hon isn’t being a passive student while completing the Certificate Program in Personal Financial Planning. Rather, he’s engaging his instructors and taking that extra time to pick their brains for career guidance. Hon points to instructors Catherine Bradford, Kurt Carrasquilla, Peter Philipp, Frank Pare and Rich Arzaga as being especially supportive and helping him get on the right career path.

Hon is also an active member of the certificate’s Student Advisory Board, creating opportunities for fellow students to get involved through career nights and brown-bag events to study for the Certified Financial Planner (CFP®) Certification Examination. “Once I complete the certificate,” he says, “I’d like to stay on as an adviser and eventually transition to being a member of the industry advisory board.”
BUSINESS

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. 007
Catherine Bradford, M.S., CFP®, ChFC
5 meetings
Saturdays, 9 am–4 pm
Sept. 13–Oct. 11
San Francisco: San Francisco Campus • $800

Sec. 008
Mohsin Hafeez, M.B.A., CFP®
5 meetings
Sundays, 10 am–5 pm
Oct. 26–Nov. 23
San Francisco: San Francisco Campus • $800

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 and on financial planning techniques applicable to individuals, partnerships and corporations. Topics include income, deductions, rates and credits; sales and exchanges; real estate; tax shelters; corporations and planning vis-à-vis the individual shareholders and employees; partnerships and subchapter S corporations; retirement plans; and overall coordination of various planning techniques. Practical problems are analyzed in light of current and proposed tax laws.

Sec. 005
Michael Fontanello, B.S., CPA
6 meetings: accelerated schedule
Wednesdays, 6–9:30 pm
Sept. 3–17 (also Saturdays, Sept. 6–20, 9 am–4 pm)
San Francisco: San Francisco Campus • $800

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, 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. 004
Ashley Murphy, CFP®
6 meetings: accelerated schedule
Wednesdays, 6–9:30 pm
Nov. 5–19 (also Saturdays, Nov. 8–22, 9 am–4 pm)
San Francisco: San Francisco Campus • $800

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. 006
Kurt F. Carrasquilla, M.B.A., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $800

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. 006
Heather C. Liston, M.S.
6 meetings: accelerated schedule
Wednesdays, 6–9:30 pm
Oct. 15–29 (also Saturdays, Oct. 18–Nov. 1, 9 am–4 pm)
San Francisco: San Francisco Campus • $800

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. 005
Instructor to be announced
6 meetings: accelerated schedule
Wednesdays, 6–9:30 pm
Dec. 3–17 (also Saturdays, Dec. 6–20, 9 am–4 pm)
San Francisco: San Francisco Campus • $800
Real Estate Investments for Financial Planners
BUS ADM X433.5 • 1 semester unit in Business Administration
An elective 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. 004
Rich Arzaga, B.S., CCIM
5 meetings
Mondays, 6–9 pm
Sept. 8–Oct. 6
San Francisco: San Francisco Campus • $645

Retirement Income Planning
BUS ADM X416.8 • 1 semester unit in Business Administration
An elective in the Certificate Program in Personal Financial Planning
Understand how financial planning practitioners bridge the gap between their clients’ wealth preservation and their extended income needs during retirement. Assess retiree financial situations and longevity probabilities, and develop risk-mitigation strategies. Learn to develop income models that aim to replace the stability of a regular monthly paycheck. Other learning objectives include applying income-planning research and stochastic modeling techniques, understanding the tax implications and restrictions on distributions from qualified plans, applying Social Security planning techniques to individuals and married couples, discerning the advantages and disadvantages of insured solutions and reverse mortgages, and integrating these techniques using real-world cases.

Sec. 002
Heather C. Liston, M.S.
5 meetings
Tuesdays, 6:30–9:30 pm
Nov. 18–Dec. 16
San Francisco: San Francisco Campus • $645

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. 005
George Noceti, M.A., M.B.A., CRPSR
10 meetings
Mondays, 6–9 pm
Sept. 8–Nov. 10
San Francisco: San Francisco Campus • $900

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. 003
George Noceti, M.A., M.B.A., CRPSR
1 meeting
Saturday, 9 am–12 pm
Oct. 18
San Francisco: San Francisco Campus • $95

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.

Sec. 006
Martin Brook, M.B.A., Extension Honored Instructor
1 meeting
Saturday, 10 am–5 pm
Sept. 6
San Francisco: San Francisco Campus • $350

Sec. 007
Martin Brook, M.B.A., Extension Honored Instructor
1 meeting
Saturday, 10 am–5 pm
Oct. 25
San Francisco: San Francisco Campus • $350

Investment Portfolio Management
BUS ADM X431.2 • 2 semester units in Business Administration
Get an overview of investment management. Topics include modern portfolio theory, fundamental and technical analysis of equities, concentrated equity positions, fixed-income analysis, benchmarking, capital markets, the appropriate use of mutual funds, the importance of asset allocation, IRAs, 401(k)s and tax-efficient portfolio design.

For course schedule, see p. 75.
Project Management

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

ONLINE COURSE INFORMATION
(510) 643-6375
extension.berkeley.edu/online

FREE INFORMATION SESSIONS
Certificate Program in Project Management
UNEX 1047
Discover how you can excel in the expanding field of project management with a UC Berkeley Extension certificate that meets the high professional standards of the Project Management Institute. For information about the certificate, see p. 107 or visit extension.berkeley.edu/cert/project.html.

Sec. 006
1 meeting
Thursday, 6–7 pm
Aug. 28
Belmont: Belmont Center • FREE

Sec. 007
1 meeting
Tuesday, 6–7 pm
Sept. 9
San Francisco: San Francisco Campus • FREE

Sec. 008
1 meeting
Wednesday, 6–7 pm
Dec. 17
Berkeley: Golden Bear Center • FREE

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

Project Management

BUS ADM X470 • 2 semester units in Business Administration • 30 pdu: PMI® provider 1173


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 most other UC Berkeley Extension project management courses.

Sec. 071
Edmond Matevosian, B.S., PE, PMP
Aug. 27–Oct. 22
Online • $800

Sec. 072
Anthony Minstein, B.A., CPIM, PMP,
   Extension Honored Instructor
Aug. 27–Oct. 22
Online • $800

Sec. 070
Ronald Gerola, B.S., Ed.D., M.S., PMP
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
San Francisco: San Francisco Campus • $800

Sec. 084
Gail Ferreira, M.S., D.M., CSM, CSPO,
   PMP, SAFe-SPC
6 meetings
Saturdays, 12–5 pm
Sept. 6–Oct. 11
Belmont: Belmont Center • $800

Sec. 073
Rick Santos, B.S., M.B.A., PMP
5 meetings
Sundays, 9 am–4 pm
Sept. 7–Oct. 5
Berkeley: Golden Bear Center • $800

Sec. 075
Robert Judd, M.S., PE, PMP
10 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Nov. 10
San Francisco: San Francisco Campus • $800

Sec. 074
Mark Angel, B.S., M.B.A., PMP
Sept. 9–Dec. 2
Online • $800

Sec. 077
Ali Ayed, Ph.D., PMP
Sept. 16–Dec. 9
Online • $800

Sec. 086
Robert Hull, B.S., PE, PMP
5 meetings
Saturdays, 9 am–4 pm
Oct. 11–Nov. 8
Belmont: Belmont Center • $800

Sec. 081
Ronald Gerola, B.S., Ed.D., M.S., PMP
10 meetings
Wednesdays, 6:30–9:30 pm
Oct. 15–Dec. 17
Belmont: Belmont Center • $800

Sec. 076
Carl Rand, B.A., M.B.A., PMP
6 meetings
Tuesdays and Thursdays, 12–5 pm
Oct. 21–Nov. 6
Berkeley: Golden Bear Center • $800

Sec. 078
Alex Brown, IPMA-C, PMP
Oct. 23–Dec. 18
Online • $800

Sec. 079
Timothy Donahue-Bombosch, Ph.D.
Oct. 23–Dec. 18
Online • $800
### 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

<table>
<thead>
<tr>
<th>Section</th>
<th>Instructor</th>
<th>Dates</th>
<th>Location</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>025</td>
<td>Timothy Donahue-Bombosch, Ph.D.</td>
<td>Aug. 27–Oct. 22</td>
<td>Online</td>
<td>$800</td>
</tr>
<tr>
<td>026</td>
<td>Timothy Donahue-Bombosch, Ph.D.</td>
<td>Sept. 16–Dec. 9</td>
<td>Online</td>
<td>$800</td>
</tr>
<tr>
<td>028</td>
<td>William Teiser, M.Ch.E.</td>
<td>5 meetings</td>
<td>Saturdays, 9 am–4 pm</td>
<td>Oct. 11–Nov. 8</td>
</tr>
<tr>
<td>029</td>
<td>Catherine Pinkas, M.B.A., PMP</td>
<td>10 meetings</td>
<td>Sundays, 1–4 pm</td>
<td>Oct. 12–Dec. 21 (no meeting on Nov. 30)</td>
</tr>
<tr>
<td>030</td>
<td>Catherine Pinkas, M.B.A., PMP</td>
<td>10 meetings</td>
<td>Sundays, 1–4 pm</td>
<td>Oct. 23–Dec. 18</td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Section</th>
<th>Instructor</th>
<th>Dates</th>
<th>Location</th>
<th>Fee</th>
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</thead>
<tbody>
<tr>
<td>027</td>
<td>Murray Millet, M.B.A., M.S.</td>
<td>Aug. 27–Oct. 22</td>
<td>Online</td>
<td>$800</td>
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<tr>
<td>029</td>
<td>Catherine Pinkas, M.B.A., PMP</td>
<td>10 meetings</td>
<td>Sundays, 9 am–12 pm</td>
<td>Oct. 12–Dec. 21 (no meeting on Nov. 30)</td>
</tr>
</tbody>
</table>

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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 that you need.
Project Leadership and Building High-Performance Teams
BUS ADM X469.2 • 2 semester units in Business Administration • 30 pdu: PMI® provider 1173
A requirement in the Certificate Program in Project Management and in the Professional Sequence in Project Human Resource Management

Gain the leadership and communication skills to support successful projects in your organization. Through team-based activities and projects, master the most difficult aspects of team management. Discover how to build and maintain a high-performing, motivated project team using techniques such as teamwork and employee empowerment. Learn how to work together with your project team to avoid and resolve conflicts, make collaborative decisions, and build the foundation of trust and interpersonal relationships required for cohesive teamwork and successful project results.

Prerequisite: Project Management BUS ADM X470

Sec. 034
Alex Brown, IPMA-C, PMP
Aug. 27–Oct. 22
Online • $800

Sec. 033
Ali Aiyed, Ph.D., PMP
Oct. 17–Nov. 14
San Francisco: San Francisco Campus • $800

Sec. 032
Jim O’Donnell, M.B.A.
6 meetings
Mondays and Wednesdays, 12–5 pm
Nov. 17–Dec. 3
San Francisco: San Francisco Campus • $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. 027
Madeleine Bronstone, MLHR, PMP
Aug. 27–Oct. 22
Online • $800

Sec. 030
Lifong Liu, B.S., PMP
5 meetings
Fridays, 9 am–4 pm
Sept. 12–Oct. 10
San Francisco: San Francisco Campus • $800

Sec. 028
Anthony Minstein, B.A., CPIM, PMP,
Extension Honored Instructor
Sept. 16–Dec. 9
Online • $800

Sec. 033
Roger Warren, M.B.A., PMP
10 meetings
Tuesdays, 6:30–9:30 pm
Oct. 7–Dec. 16 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $800

Sec. 031
Deann Smith, B.A., CKM, PMP
5 meetings
Saturdays, 9 am–4 pm
Oct. 11–Nov. 8
Berkeley: Golden Bear Center • $800

Sec. 029
Madeleine Bronstone, MLHR, PMP
Oct. 23–Dec. 18
Online • $800

Sec. 032
Instructor to be announced
5 meetings
Saturdays, 9 am–4 pm
Nov. 8–Dec. 13 (no meeting on Nov. 29)
Berkeley: Golden Bear Center • $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. 027
Anthony Minstein, B.A., CPIM, PMP,
Extension Honored Instructor
Aug. 27–Oct. 22
Online • $800

Sec. 028
Anthony Minstein, B.A., CPIM, PMP,
Extension Honored Instructor
Sept. 16–Dec. 9
Online • $800

Sec. 033
Sonja Koppensteiner, M.S., Ph.D., PMP
6 meetings
Wednesdays, 6:30–9:30 pm
Oct. 1–Dec. 3
Berkeley: Golden Bear Center • $800

Sec. 031
Joseph Mudd, B.S., PMP
5 meetings
Saturdays, 9 am–4 pm
Oct. 4–Nov. 1
Berkeley: Golden Bear Center • $800

Sec. 030
Lifong Liu, B.S., PMP
5 meetings
Fridays, 9 am–4 pm
Oct. 17–Nov. 14
San Francisco: San Francisco Campus • $800

Sec. 029
Deann Smith, B.A., CKM, PMP
Oct. 23–Dec. 18
Online • $800

Sec. 032
Alan Tsuda, M.B.A.
6 meetings
Tuesdays and Thursdays, 12–5 pm
Nov. 18–Dec. 9 (no meeting on Nov. 27)
Berkeley: Golden Bear Center • $800
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-Performance Teams BUS ADM X469.2 (offered this term)
- Project Execution and Control BUS ADM X471.9 (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.

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

Intensive PMP/CAPM Exam Preparation

BUS ADM X474.9 • 2 semester units in Business Administration • 35 pdu: PMI® provider 1173

An elective in the Certificate Program in Project Management

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 the exam. Chat room interaction, teleconferences and threaded discussions allow you to experience the full multimedia of this course.

Some classroom courses have an online component. See schedule blocks below for details.

Sec. 014
Edmond Matevosian, B.S., PE, PMP
Aug. 27–Oct. 22
Online • $1,650

Sec. 015
Edmond Matevosian, B.S., PE, PMP
Oct. 23–Dec. 18
Online • $1,650

Sec. 016
Cheryl Allen, M.S., PMP, Extension Honored Instructor
4 classroom meetings for a total of 24 hours, plus 11 online hours
Fridays, 9 am–4 pm
Sept. 5–Oct. 17
Berkeley: Golden Bear Center • $1,650

Sec. 017
Elie W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor
8 classroom meetings for a total of 24 hours, plus 11 online hours
Thursdays, 6:30–9:30 pm
Oct. 2–Nov. 20
Berkeley: Golden Bear Center • $1,650

Sec. 018
Cheryl Allen, M.S., PMP, Extension Honored Instructor
4 classroom meetings for a total of 24 hours, plus 11 online hours
Saturdays, 9 am–4 pm
Oct. 25–Dec. 6 (no meetings on Nov. 15 and 22)
Berkeley: Golden Bear Center • $1,650

Advanced Project Management

NEW THIS TERM

Project Stakeholder Management

BUS ADM X497.1 • 1 semester unit in Business Administration

An elective in the Certificate Program in Project Management

Managing stakeholder expectations was broken out as a new knowledge area in the PMBOK Guide Fifth Edition (2012), but savvy project managers have always understood the need to focus on stakeholder interest. Understand how to manage stakeholder expectations, and learn tips and techniques that can help your projects run more smoothly.

Prerequisite: Project Management BUS ADM X470

Sec. 001
Nathaniel Crews, M.S., M.B.A., ACP, CBAP, CSM, CSPO, PMP
2 meetings
Friday and Saturday, 9 am–5 pm
Dec. 19–20
Berkeley: Golden Bear Center • $500

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 mindset for successfully completing global projects within time, budget, and technical and political constraints while managing the risks that global projects bring.

Sec. 006
Gustav Toppenberg, M.B.A., M.Sc., PMP
2 meetings
Saturdays, 9 am–5 pm
Sept. 13 and 20
Belmont: Belmont Center • $595

Sec. 007
Gustav Toppenberg, M.B.A., M.Sc., PMP
2 meetings
Saturdays, 9 am–5 pm
Nov. 15 and 22
San Francisco: San Francisco Campus • $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 skilled in managing interpersonal conflicts and relationships. This course is applicable to a wide range of fields, such as project management, marketing, engineering, computer technology, manufacturing, architecture, construction, service, government and biotechnology.

Prerequisites: Project Management BUS ADM X470 and Project Leadership and Building High-Performance Teams BUS ADM X469.2

Sec. 005
Zachary Wong, Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 9:30 am–4:30 pm
Nov. 15–Dec. 20 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $800

Project Portfolio Management/Leadership

BUS ADM X438.3 • 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 over-committing scarce resources. Understand ways to make informed decisions to approve the right projects or efficiently shut down troubled projects.

Sec. 006
Gopal Kapur, B.S.
2 meetings
Thursdays, 9 am–5 pm
Sept. 11 and 18
Berkeley: Golden Bear Center • $500

Sec. 007
Gopal Kapur, B.S.
2 meetings
Fridays, 9 am–5 pm
Sept. 12 and 19
Belmont: Belmont Center • $500
NEW THIS TERM

Managing Organizational Change Projects

BUS ADM X499.5 • 1 semester unit in Business Administration

An elective in the Certificate Program in Project Management

This highly practical course provides project managers with change management information, tools and advice. The goal of change management is to minimize the performance drop that can result as people transition away from an old way of working to a new or changed state and to reap the benefits of the change. Get a practical approach to training delivery by facilitators who are experienced change management practitioners, ensuring a balance between theoretical knowledge and real-world application.

**Prerequisite:** Project Management BUS ADM X70

**Sec. 001**
Gustav Toppenberg, M.B.A., M.Sc., PMP

2 meetings
Sundays, 9 am–5 pm
Sept. 14 and 21
Berkeley: Golden Bear Center • $500

**Sec. 002**
Gustav Toppenberg, M.B.A., M.Sc., PMP

2 meetings
Sundays, 9 am–5 pm
Nov. 16 and 23
Berkeley: Golden Bear Center • $500

**Sec. 003**
Gustav Toppenberg, M.B.A., M.Sc., PMP

2 meetings
Saturdays, 9 am–5 pm
Dec. 6 and 13
Belmont: Belmont Center • $500

Special Events Project Planning

BUS ADM X415.3 • 1 semester unit in Business Administration

An elective in the Certificate Program in Project Management

Learn how to produce special events of varying sizes for either public relations or fund-raising outcomes. Understand how strategically planned special events can gain favorable media attention; convey a specific message or secure recognition; and significantly contribute to the image and reputation of a company, organization, product or program. Master basic event-planning tools and concepts critical to successful event coordination. Topics include strategic event design; evaluation methods; fund-raising strategies; site selection and inspection; and promotional websites, printed materials and social media.

**Sec. 002**
Helena Weiss-Duman, M.A., PMP

2 meetings
Fridays, 9 am–5 pm
Dec. 5 and 12
San Francisco: San Francisco Campus • $500

If you’re especially interested in learning how to effectively manage a project team, the three-course Professional Sequence in Project Human Resource Management provides exactly what you need. It begins with an overview of project management and includes intermediate and advanced courses that strengthen your communication skills and your ability to lead, motivate, coach and influence others to complete projects successfully.

**Curriculum Requirements**

The curriculum comprises 3 required courses for a total of 6–7 semester units (90–105 hours of instruction).

**Required Courses**

- Project Management BUS ADM X470 (offered this term)
- Project Leadership and Building High-Performance Teams BUS ADM X479.8 (offered this term)
- Advanced Human Factors: Improving Personal Effectiveness and Influence BUS ADM X496.6 (offered this term)

**Learn More**

extension.berkeley.edu/spos/projecthrm.html

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Despite demanding 12-hour days as a construction project engineer, Ana Lazo is determined to complete the Certificate Program in Construction Management with distinction. Working toward a management position at HerreroBoldt, Lazo brings skills learned in class to solve problems on site.

“I took Construction Project Scheduling and Control and was working on a smaller project at work,” Lazo says. “The material was so related that it made the content clear. It helps when you’re in the work environment and you can put the coursework into practice.”

With new skills in hand, Lazo is ready to add her prior experience as a landscape designer to a construction management position. She is considering additional Extension courses to further solidify her skill set. “I want to learn about BIM, building image modeling, which lets you design in 3-D,” 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.
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 Construction Management
Wednesday, Aug. 20, 5:30–6:30 pm
Berkeley: Golden Bear Center

Certificate Program in HVAC
Wednesday, Aug. 20, 6:30–7:30 pm
Berkeley: Golden Bear Center

Construction Management

COURSE INFORMATION
(510) 642-4151
extension-techeng@berkeley.edu
extension.berkeley.edu/construction

FREE INFORMATION SESSION
Certificate Program in Construction Management
UNEX 1040

Learn how this professional certificate can help you achieve your career goals. Call (510) 642-4111 to reserve your space. There is no charge or obligation to enroll. Find details on the Certificate Program in Construction Management on p. 113 or visit extension.berkeley.edu/cert/const.html.

Sec. 001
1 meeting
Wednesday, 5:30–6:30 pm
Aug. 20
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 budget 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. 003
Henry Tooryani, M.S.,
Extension Honored Instructor
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Nov. 4
Berkeley: Golden Bear Center • $695

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. 003
David Drum, B.S., M.S.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Nov. 10
Belmont: Belmont Center • $525

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 that you need.
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 (offered this term)
- 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.

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

Get the Knowledge You Need
- Management in the construction industry
- Safety and health in construction projects
- Project scheduling and control
- Building commissioning for LEED
Construction Project Scheduling and Control
CIV ENG X463 • 2 semester units in Civil and Environmental Engineering
A requirement in the Certificate Program in Construction Management
Understanding and applying scheduling and control to construction projects is essential to successful construction management. Project scheduling emphasizes network-based schedules, such as critical path management (CPM), network calculations, critical paths, resource scheduling, probabilistic scheduling and computer applications. Project control focuses on goals, flow of information, time and cost control, and change management.

Sec. 002
John Sims, B.S., PE
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $725

Building Commissioning for LEED
CIV ENG X493.1 • 2 semester units in Civil and Environmental Engineering
An elective in the certificate programs in Construction Management and in HVAC
As demand for energy efficiency and LEED-certified building increases, knowledge of professional building commissioning is critical as all buildings must undergo commissioning before they can obtain LEED certification. Learn in detail the full building-commissioning process through a practical, hands-on approach. You systematically develop a complete set of documents and deliverables that meets the requirements of a professional-grade commissioning report. The emphasis is on learning by doing, including measurement and verification (M&V) performed on actual building systems.

Sec. 002
Kelly S. Gearhart, B.A., LEED AP
2 meetings
Saturdays, 8:30 am–5 pm
Sept. 6 and 13
Berkeley: Golden Bear Center • $525

Implementing LEED Strategies
CIV ENG X496 • 1 semester unit in Civil and Environmental Engineering
An elective in the certificate programs in Construction Management and in HVAC
If you are a commercial-sector green professional—such as a LEED Accredited Professional—seeking to advance your skills, this course shows you how to manage the LEED project administration process through hands-on education. Gain proficiency with LEED Online, project checklists and submittal templates, and learn from project challenges and best practices. Examine technical contents of LEED programs in Building Design + Construction (BD+C), Existing Buildings: Operations and Maintenance (EB: O&M) and Interior Design + Construction (ID+C). Learn from real-world case studies, and take a mock building to LEED Platinum.

Sec. 002
Kelly S. Gearhart, B.A., LEED AP
2 meetings
Saturdays, 8:30 am–5 pm
Sept. 6 and 13
Berkeley: Golden Bear Center • $525

Environmental Management

COURSE INFORMATION
(510) 642-4151
extension-techeng@berkeley.edu
extension.berkeley.edu/construction

Green Innovation and Engineering
ENGIN X428 • 2 semester units in Engineering
Learn how to apply current principles and proper methods to generate new ideas for innovating and engineering greener products and business processes. This highly interactive course helps you learn how to effectively analyze present business models and development processes from a green perspective to successfully create innovative approaches. Explore the newest methodologies to reduce harm to environment. Learn to present proper recommendations for managing waste before products are made. Examine how to construct and supply products that are greener. Through readings, lectures, research and group discussions, you gain the skills and knowledge to deliver environmentally friendlier products.

Sec. 003
Farid Dalili, Ph.D.
8 meetings
Mondays, 6:15–10 pm
Sept. 8–Oct. 27
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. 003
Revtal Katznelson, Ph.D.
2 meetings
Wednesday and Thursday, 9 am–5 pm
Oct. 15–16
Berkeley: Golden Bear Center • $545
Introduction to Climate Change, Environment and Sustainability
NAT RES X444 • 2 semester units in Natural Resources
A requirement in the Professional Program in Leadership in Sustainability and Environmental Management
Study a broad spectrum of interrelated global environmental issues through hands-on case studies to develop your planning skills and prepare for jobs in the sustainability industry. Review scientific evidence, and examine issues related to natural cycles of the biosphere, biodiversity, ecological restoration and environmental management. Contemporary global issues and real-world case studies include topics such as the biochemical cycle, ecosystem management and toxicology.
Sec. 002
William Coleman, B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Aug. 19–Oct. 21
Belmont: Belmont Center • $695

Climate Change and Law AB32: What It Means For You
NAT RES X435.1 • 1 semester unit in Natural Resources
Study the requirements set forth in the Global Warming Solutions Act (AB32) and other laws, and gain a solid understanding of related issues such as greenhouse gas (GHG) inventories, registration and carbon-reduction strategies. 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 in revision now. These revisions highlight regulatory and policy progress towards 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. 003
Barbara Toole O’Neil, M.S., CHMM, QEP
2 meetings
Saturdays, 8:30 am–5 pm
Sept. 20 and 27
Berkeley: Golden Bear Center • $445

Introduction to Greenhouse Gas Management
NAT RES X438.1 • 1 semester unit in Natural Resources
Study the relationship of greenhouse gases (GHGs) to environmental quality management, sustainability and GHG-offset project markets. Understand the significance of GHGs from the perspectives of climate change, sustainability, human health and social welfare. Examine technology options for controlling GHG emissions and mitigating atmospheric CO2. Learn business development and career opportunities in current GHG management markets. Learn about the California Law AB32 requirements and the status of implementation, new policies, concepts, methods and tools supporting management of greenhouse gases (GHGs) in California. Hands on exercises and in-class discussions help you gain insight into the opportunities and risks of the emerging GHG-management industry.
Sec. 002
Barbara Toole O’Neil, M.S., CHMM, QEP
2 meetings
Saturdays, 8:30 am–5 pm
Oct. 4 and 11
Berkeley: Golden Bear Center • $445

Sustainability Leadership: Strategies and Paradigms
NAT RES X419 • 1 semester unit in Natural Resources
A requirement in the professional programs in Leadership in Sustainability and Environmental Management and 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. This course also helps you understand what is required of you as a leader when the demands of declining resources affect your company’s bottom line. Learn how to effectively communicate sustainability in your work environments; link green initiatives to cost savings and brand recognition; and engage shareholders and stakeholders in making decisions that move individuals, teams and companies toward sustainability. Enrollment is limited.
Sec. 003
Miriam Karell, M.S.
5 meetings
Mondays, 6:30–9:30 pm
Oct. 6–Nov. 3
San Francisco: San Francisco Campus • $475

LEED v4: The Future of Green Building Is Here
UNEX 1236
Gain insight into the impact of the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED™) new upgrade to version 4. Kelly S. Gearhart—principal with Triple Green Building Group—outlines LEED’s evolution, its global impact and the future opportunities it presents for organizations and professionals. Since its launch in 1998, LEED has grown from a single standard for new construction to a comprehensive system of interrelated standards covering all aspects of the development, construction, operation and maintenance of green buildings, homes and neighborhoods. Nearly 10,000 projects have been delivered by more than 200,000 professionals from more than 30 countries using LEED. See how LEED 4 delivers more flexibility, global reach and performance-focus in this entertaining evening event.
Kelly S. Gearhart, B.A., LEED AP, is a principal with Triple Green Building Group LLC. Gearhart has consulted with hundreds of clients on commercial and residential green building strategies. She teaches LEED and green building courses, facilitates green building charrettes, administers LEED projects domestically and internationally, presents at conferences, and serves on U.S. Green Building Council boards and councils.
1 meeting
Thursday, 6:30–8:30 pm
Dec. 4
San Francisco: San Francisco Campus FREE

Photo by Andrew Guest
CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT

Professional Program in
Responsihible 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 curriculum 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
- 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
- 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
extension-techeng@berkeley.edu

Fundamentals of Environmental Protection and Regulatory Compliance

NAT RES X445 • 1 semester unit in Natural Resources

An elective in the Professional Program in Leadership in Sustainability and Environmental Management

Learn the fundamentals, strategies and techniques for implementing and managing environmental protection and related regulatory compliance. Understand the methods for effective implementation and compliance with California and federal environmental regulations regarding air quality, water quality, greenhouse gas accounting and overall sustainability. Learn proven techniques and critical skills to articulate, advocate and demonstrate the cost and benefit of proposed programs to stakeholders and gain their support. As emerging environmental professionals, prepare to start or advance your career in the expanding green economy.

Sec. 001
Rebecca Anderson, M.E.H.S., LEED AP
5 meetings
Tuesdays, 6:30–9:30 pm
Nov. 18–Dec. 16
Berkeley: Golden Bear Center • $550

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 (offered this term)
- 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
extension-techeng@berkeley.edu
Energy

COURSE INFORMATION
(510) 642-4151
extension-techeng@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.

Prerequisites: Computer and online research skills expected; basic knowledge of electricity, calculus and geometry recommended but not required.

Sec. 003
Ridha Hamidi, Ph.D.
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Nov. 4
Belmont: Belmont Center • $645

Smart Grid Technology

Smart Grids: Introduction
EL ENG X423 • 1 semester unit in Electrical Engineering
Learn about the 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 practicalities points of view.

For course schedule, see p. 190.

Smart Grids: Energy-Efficient Transmission
EL ENG X423.1 • 1 semester unit in Electrical Engineering
Learn about the challenges of high-power interconnections, and review quality considerations. 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.

For course schedule, see p. 190.

Smart Grids: Command and Control
EL ENG X423.2 • 1 semester unit in Electrical Engineering
In this survey course, review the communication technology for distribution automation of AC energy and then advance into technology trade-offs 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.

For course schedule, see p. 191.

Smart Grids: Metering and Home Area Networks
EL ENG X423.3 • 1 semester unit in Electrical Engineering
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.

For course schedule, see p. 191.

Solar

Solar Energy: Systems Engineering
EL ENG X440.1 • 2 semester units in Electrical Engineering
Understand commercial solar photovoltaic (PV) systems by studying code requirements and industry best practices, including technical information for construction site managers, electrical professionals, PV supply-chain professionals, energy auditors, facility managers and building owner agents. Examine the design, implementation and support of PV systems from small residential to commercial facilities. After reviewing residential system requirements, investigate commercial systems up to 2 megawatts. Topics include common designs, forecasting energy output and loads, standard wiring techniques, system grounding methods, and a review of corrosion and other safety issues. This course is ideal for those transitioning to enterprise- and commercial-scale projects.

Sec. 002
Martin Herzfeld, B.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
Belmont: Belmont Center • $565

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 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 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
- 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
extension-techeng@berkeley.edu

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. 002
Steven Greenwood, M.B.A., CFM
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
Belmont: Belmont Center • $625

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. 001
Howard Birnberg, M.B.A.
4 meetings
Saturdays, 8:30 am–4:30 pm
Oct. 25–Nov. 15
San Francisco: San Francisco Campus • $525

HVAC System Design Considerations
MEC ENG X472 • 1 semester unit in Mechanical Engineering
A requirement in the Certificate Program in HVAC
Consider the practical questions confronting senior project engineers and principals during the design of an HVAC system. Prepare to discuss the design process, system selection and equipment selection, as well as business decisions, including determining competitive fees, and their relation to design.

Sec. 002
Steve Taylor, M.S., PE, Extension Honored Instructor
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
San Francisco: San Francisco Campus • $645

HVAC Mechanical Design Codes
CIV ENG X415 • 1 semester unit in Civil and Environmental Engineering
An elective in the Certificate Program in HVAC
Learn the California mechanical design codes and related building, plumbing, electrical and fire codes that affect HVAC designs (excluding California Energy Code). Understand HVAC-related codes, and acquire the skills to obtain design approvals from relevant government agencies. Examine the concepts of protecting occupants and buildings from hazards associated with mechanical equipment such as boilers, chillers and ventilation exhausts, and understand the importance of protecting exit routes.

Sec. 003
Richard Paillon, B.S., LEED AP, PE
5 meetings
Tuesdays, 6:30–9:30 pm
Oct. 7–Nov. 4
San Francisco: San Francisco Campus • $495
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
- HVAC Ductwork and Piping Systems MEC ENG X470
- HVAC System Design Considerations MEC ENG X472 (offered this term)
- 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.

Learn More and View the Flyer
extension.berkeley.edu/cert/hvac.html
(510) 642-4151
extension-techeng@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.”
Deanna Hurn lives by motivational speaker Les Brown’s advice: “You don’t have to be great to get started, but you have to get started to become great.” Getting a jump start with UC Berkeley Extension’s Designated Subjects Adult Education Teaching Credential, Hurn is bringing new skills and increased credibility to her burgeoning Miracle Math Coaching company.

A few courses shy of completing the program requirements, Hurn brings new techniques learned in class to her business each day. “When I first started, I had about five teachers at my business, and we’ve grown to 20 employees now,” she says. “When I have credentialed teachers coming in, I’m not asking them to be or do something that I have not committed myself to. I also want to make sure that the parents of my students know I have the education to devote to my practice.”

As a member of the Learning & the Brain society, Hurn combines research on how the brain processes information with Extension course information to better tutor her clients. “The program is tailored to the working adult or the teacher who is seeking professional development,” she says. “The credential has been great for my practice. It’s added credibility to what I do, and it shows my dedication.”
Whether you’re already a teacher or want a career in education, UC Berkeley Extension can 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.
Teaching English as a Second or Foreign Language (TESL/TEFL)

**COURSE INFORMATION**
(415) 284-1083
extension-tesol@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/cert/tesl.html.

**Sec. 003**
1 meeting
**Tuesday, 5:30–7 pm**
**Aug. 19**
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. 007**
Steven West, Ph.D.
12 meetings
Mondays, 6–9 pm
**Sept. 22–Nov. 17** (also Saturdays, Sept. 20, Oct. 18 and Nov. 15, 10 am–4 pm)
Berkeley: Golden Bear Center • **$575**

**Sec. 008**
Carol Lethaby, M.A., Extension Honored Instructor
15 meetings
Mondays, 6–9 pm
**Oct. 6–Dec. 15** (also Thursdays, Oct. 9 and 23 and Nov. 6 and 13, 6–9 pm)
San Francisco: Art and Design Center • **$575**

**Cross-Cultural Communication**
EDUC X339.4 • 2 semester units in Education
A requirement in the certificate programs in Teaching English as a Second Language and in Teaching Chinese as a Heritage/Foreign Language
Examine the values, customs, mores and communication styles of cultural groups, with an 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. 005**
Instructor to be announced
10 meetings
**Wednesdays, 6–9 pm**
**Sept. 10–Nov. 12**
Berkeley: Golden Bear Center • **$550**

**Grammar Fundamentals for ESL Teachers**
EDUC X338 • 2 semester units in Education
A requirement in the Certificate Program in Teaching English as a Second Language
Get an in-depth review of basic grammar topics that have particular importance in the ESL classroom. You also gain an understanding of the special difficulties that arise in learning a second language and the reasons that these problems occur.

**Sec. 008**
Caroline Priestley, M.A., M.Litt.
10 meetings
**Wednesdays, 6–9 pm**
**Sept. 10–Nov. 12**
San Francisco: Art and Design Center • **$550**

**Sec. 007**
Patti Weissman, M.A.
7 meetings
**Sundays, 9:30 am–2 pm**
**Oct. 5–Nov. 16**
Berkeley: Golden Bear Center • **$550**

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

**Find the Quality You Want**
- UC Berkeley-approved courses
- Transferable coursework to Saint Mary’s College and University of San Francisco master’s degree programs in TESOL

**Get the Knowledge You Need**
- Practical classroom experience
- Guidance from experienced ESL/EFL practitioners
- Training to teach students of all ages
- Readiness for careers in U.S. and international business and education

**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.

**Learn More and View the Brochure**
extension.berkeley.edu/cert/tesl.html
(415) 284-1083
extension-tesol@berkeley.edu
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. 008
Shosheana Bianchi-McElwee, M.A.
5 meetings
Wednesdays, 6–9 pm
Oct. 1–29
Berkeley: Golden Bear Center • $395

Sec. 009
Caroline Priestley, M.A., M.Litt.
3 meetings
Saturdays, 9 am–2 pm
Oct. 25–Nov. 8
San Francisco: Art and Design Center • $395

Second-Language Acquisition

EDUC X334 • 3 semester units in Education

A requirement in the Certificate Programs in Teaching English as a Second Language and in Teaching Chinese as a Heritage/Foreign Language

Review 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. 005
Sedique Popal, Ed.D., Extension Honored Instructor
13 meetings
Mondays, 6–9:30 pm
Sept. 8–Dec. 1
Berkeley: Golden Bear Center • $575

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. 009
Sedique Popal, Ed.D., Extension Honored Instructor
13 meetings
Tuesdays, 6–9:30 pm
Sept. 9–Dec. 9 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $575

Sec. 010
Carol Lethaby, M.A., Extension Honored Instructor
13 meetings
Tuesdays, 6–9 pm
Oct. 7–Dec. 16 (also Saturdays, Oct. 11 and 25, 10 am–4:30 pm and Wednesday, Nov. 12, 6–9 pm; no meeting on Nov. 11)
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. Embedded in the course are 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 will observe in class over a minimum of five one-hour visits. You then teach four one-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 you can observe a dedicated ESL class. Contact the department on your enrollment to receive related practicum documents.

Sec. 006
Angela Blackwell, M.A.
7 meetings
Saturdays, 9 am–4 pm
Sept. 20–Dec. 6 (no meetings on Sept. 27, Oct. 11 and 25, and Nov. 8 and 29)
San Francisco: Art and Design Center • $990

Teaching Chinese as a Heritage/Foreign Language

EDUC X396.8 • 3 semester units in Education

A requirement in the Certificate Program in Teaching Chinese as a Heritage/Foreign Language

Gain a working knowledge of Chinese-language teaching approaches for all levels in grades K–12. Through demonstration and participation, you become familiar with activities and materials to use in developing oral fluency and literacy. Apply what you learn in class by planning a thematic unit or a 50-minute lesson. You also complete four to six hours of practice teaching in a Chinese-language classroom.

Sec. 002
Stella Kwoh, Ed.D.
13 meetings
Saturdays, 1:30–5:30 pm
Aug. 9–Nov. 1 (also Saturday, Nov. 8, 9 am–5:30 pm; no meetings on Aug. 30)
Berkeley: Golden Bear Center • $495

Second-Language Acquisition

EDUC X334 • 3 semester units in Education

Review theories of first- and second-language acquisition, comparing and contrasting issues involved in both.

For course schedule, see this page.

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.
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, and
- 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
- Methods and Materials for Teaching Chinese I EDUC X392.8
- Methods and Materials for Teaching Chinese II EDUC X396.8 (offered this term)
- 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
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 extension-education@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

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
extension-education@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)
- Foundations of Adult Education EDUC X366.22 (offered this term)
- Adult Education Instructor Practicum EDUC X366.21

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
extension-education@berkeley.edu

Teaching Credential Programs

COURSE INFORMATION
(510) 642-1171
extension-education@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 extension-education@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 SESSIONS
Designated Subjects Adult Education and Career Technical Education Teaching Credentials and Professional Programs

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 this page or visit extension.berkeley.edu/spos/adulted.html. For more information about career technical education, see p. 127 or visit extension.berkeley.edu/spos/dscte.html.

Thursday, 12–12:45 pm
Aug. 28
Online ● FREE

Sec. 004
1 meeting
Thursday, 5:50–7 pm
Sept. 25
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. 013**

Vicki Pontius, Ed.D.

2 meetings

Sundays, 9 am–5:30 pm

Oct. 5 and 12

Berkeley: Golden Bear Center • $305

**Sec. 012**

Susan Benz, M.A.

2 meetings

Sundays, 9 am–5:30 pm

Dec. 7 and 14

Berkeley: Golden Bear Center • $305

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**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
- 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

extension-education@berkeley.edu

**Contact the Education department for registration information.**

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**Professional Program in Career Technical Education**

A teaching credential is not required for many career technical education positions, but skilled, knowledgeable teachers are always in demand. UC Berkeley Extension’s Professional Program in Career Technical Education prepares you for a career teaching in a variety of learning environments and improves your skills if you are already a professional teacher or trainer. Learn from industry professionals, and get up-to-date training in education technology, curriculum development and student evaluation.

**Curriculum Requirements**

The curriculum comprises 3 required courses and 1 approved elective for a total of 7–10 semester units (105–135 hours of instruction).

**Required Courses**

- Instructional Strategies EDUC X366.14 (offered this term)
- Curriculum Design and Assessment EDUC X366.16 (offered this term)
- Career Technical Education Foundations EDUC X366.18

**Electives**

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

**Learn More and View the Brochure**

extension.berkeley.edu/spos/career_tech.html

(510) 642-1171

extension-education@berkeley.edu

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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.
### 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., Extension Honored Instructor
4 meetings
Sundays, 9 am–5:30 pm
Oct. 19 and 26
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 credentials 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. 005**
Instructor to be announced
4 meetings
Sundays, 9 am–5:30 pm
Oct. 19–Nov. 9
Berkeley: Golden Bear Center • $499

### 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 and 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. 006**
Daniène Marciano, Ed.D.
4 meetings
Sundays, 9 am–5:30 pm
Sept. 7–28
Berkeley: Golden Bear Center • $499

### 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. 004**
Vicki Pontius, Ed.D.
4 meetings
Sundays, 9 am–5:30 pm
Nov. 16–Dec. 14 (no meeting on Nov. 30)
Berkeley: Golden Bear Center • $499

### 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. 004**
Instructor to be announced
4 meetings
Sundays, 9 am–5:30 pm
Nov. 16–Dec. 14 (no meeting on Nov. 30)
Berkeley: Golden Bear Center • $499

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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.
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 and Career Technical Education Foundations EDUC X366.18

**Sec. 003**
Instructor to be announced
8 meetings
Saturdays, 9 am–5:30 pm
Oct. 4–Nov. 22
Berkeley: Golden Bear Center $998

**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 804.1 (offered this term)
- CTEL 1: Culture and Inclusion EDUC X374.A (offered this term)
- CTEL 2: Language and Language Development EDUC X374.B (offered this term)
- CTEL 4: Foundations and Methods of English Language Development and Content Instruction, SDAIE EDUC X374.D
- CTEL P: Portfolio EDUC X374.P (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). 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/pedagogy.html
extension-education@berkeley.edu

**Contact the Education department at (510) 642-1171 for registration information and individualized guidance through the certification process.**
CTE-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. 006
Instructor to be announced
2 meetings
Saturdays, 9 am–5:30 pm
Dec. 6 and 13
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. 003
David Casuto, M.A., M.Ed.
4 meetings
Sundays, 9 am–5:30 pm
Oct. 19–Nov. 9
Berkeley: Golden Bear Center • $525

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.
### 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. 005**

Rodney McLean, M.A.

4 meetings

Saturdays and Sundays, 9 am–5:30 pm

Sept. 20–28

Berkeley: Golden Bear Center • $525

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### 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. 004**

Eugenia Kaw, M.A., Ph.D.

6 meetings

Sundays, 9 am–5:30 pm

Sept. 7–Oct. 12

Berkeley: Golden Bear Center • $625

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### 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. 141.

#### 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. 140.

#### 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. 140.

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### Location Guide

*For detailed information, see p. 246.*

- **Belmont:** **Belmont Center** 1301 Shoreway Rd., Suite 400, Belmont
- **Berkeley Campus** See campus map, p. 247. If no building location is given, visit extension.berkeley.edu for updated information.
- **Berkeley: Golden Bear Center** 1995 University Ave., Berkeley
- **San Francisco:** **Art and Design Center** 95 Third St., San Francisco
- **San Francisco: San Francisco Campus** 160 Spear St., Floors 5, 6 and 7, 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.
Professional Development for Educators

COURSE INFORMATION
(510) 642-1171
extension-education@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. 128.

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. 128.

Teaching Math

Making Math Real

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, enroll 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. 005
David Berg, ET
2 meetings
Saturday and Sunday, 9 am–5 pm
Sept. 6–7
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175

Making Math Real: The 4 Operations and 400 Math Facts
EDUC X362.6 • 5 semester units in Education
This course continues the fundamental development from the Overview course, providing the essential foundation upon which all mathematics develops: the 4 operations and the 400 math facts. These are the bases for cognitive development K-5 and all mathematical applications through algebra and beyond. Topics include comprehensive methods for teaching the acquisition of all math facts, including full units in addition, subtraction, basic place value, number concepts, multiplication and long-division (single-digit and double-digit multipliers and divisors).
Tuition fee paid directly to Making Math Real Institute: $1,194. 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. 003
David Berg, ET
10 meetings
Saturdays and Sundays, 9 am–5 pm
Oct. 11, 12, 25 and 26; Nov. 8, 9, 22 and 23; and Dec. 6 and 7
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. 004
David Berg, ET
2 meetings
Saturday and Sunday, 9 am–5 pm
Sept. 20–21
Berkeley: Black Pine Circle School, 2016 Seventh St. • $175
College Admissions and Career Planning

COURSE INFORMATION
(510) 642-1171
extension-education@berkeley.edu
extension.berkeley.edu/education

FREE INFORMATION SESSIONS
Certificate Program in College Admissions and Career Planning and Professional Program in College Admission Counseling
UNEX 1039
For details on the Certificate Program in College Admissions and Career Planning, see p. 135 or visit extension.berkeley.edu/cert/college.html.
For details on the Professional Program in College Admission Counseling, see this page or visit extension.berkeley.edu/spos/admission.html.

Wednesday, 5:30–6:15 pm
Sept. 3
Online ● FREE

Sec. 006
1 meeting
Wednesday, 5:30–7 pm
Sept. 10
Belmont: Belmont Center ● FREE

Sec. 005
1 meeting
Wednesday, 5:30–7 pm
Oct. 1
Berkeley: Golden Bear Center ● FREE

Wednesday, 5:30–6:15 pm
Dec. 10
Online ● FREE

Counseling Techniques for Educators
EDUC X365.6 ● 2 semester units in Education
A requirement in the Certificate Program in College Admissions and Career Planning
Gain familiarity with counseling approaches that counselors, teachers, administrators and others can use in K–12 and university settings. 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. 011
Suzy Thomas, M.A., Ph.D., PPS, and Aubrey Uresti, M.A., PPS
4 meetings
Sundays, 9 am–5:30 pm
Sept. 14–Oct. 5
Berkeley: Golden Bear Center ● $485

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. 007
Steven Pantell, Ph.D.
8 meetings
Saturdays, 9 am–5:30 pm
Oct. 11–Dec. 6 (no meeting on Nov. 29)
Berkeley: Golden Bear Center ● $985

Convenient Locations in Berkeley, Belmont and San Francisco
extension.berkeley.edu/locations

Get Berkeley Quality Online
extension.berkeley.edu/online

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
extension-education@berkeley.edu

Get Berkeley Quality Online
extension.berkeley.edu/online

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-1171
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. 003
Peggy Hock-McCalley, Ph.D., and Catherine Murphy, M.A.
11 meetings
Saturdays, 9 am–5:30 pm
Nov. 1–Dec. 13 (also Tuesdays, Nov. 4–Dec. 9, 6–9 pm, no meetings on Nov. 11 and 29)
Belmont: Belmont Center • $970
(Tuesday class meetings held at Golden Bear Center in Berkeley)

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, re-entry, foreign and underrepresented students.
Prerequisite: College Admissions Advising A EDUC X369.3
Sec. 003
Catherine Murphy, M.A., and Peggy Hock-McCalley, Ph.D.
12 meetings
Saturdays, 9 am–5:30 pm
Aug. 16–Sept. 27 (also Tuesdays, Aug. 19–Sept. 23, 6–9 pm; no meeting on Aug. 30)
Berkeley: Golden Bear Center • $970

Practicum in College Admission Advising
EDUC X361.9 • 1 semester unit in Education
A requirement in the Certificate Program in College Admissions and Career Planning
Deepen your knowledge and skills by completing 40 hours of involvement at a high school or nonprofit organization, working with high school students who are 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. 004
Mark van Warmerdam, M.S., PPS
3 meetings
Thursdays, 6–9 pm
Sept. 4, Oct. 23 and Dec. 11
Berkeley: Golden Bear Center • $395

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. Teachers, counselors or others who help students with essay writing will 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. Participants also assess their own strengths as an essay reviewer and editor.
This class is not intended for students writing their own essay.
Sec. 007
Instructor to be announced
2 meetings
Saturdays, 9 am–1 pm
Aug. 23 and Sept. 6
Berkeley: Golden Bear Center • $215

Location Guide
For detailed information, see p. 246.
Belmont: Belmont Center 1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus See campus map, p. 247. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center 1995 University Ave., Berkeley
San Francisco: Art and Design Center 95 Third St., San Francisco
San Francisco: San Francisco Campus 160 Spear St., Floors 5, 6 and 7, 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.
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.”
A recently retired anesthesiologist, Lyn Aye now has time to pursue his passion: bringing the culture of his native Burma to a new audience through the written word. Seeking formalized training for his craft, Aye is nearing completion of the Post-Baccalaureate Certificate Program in Writing. Writing about Burma in a variety of styles—from fiction to poetry—Aye also takes courses outside of the certificate’s curriculum to enhance his education.

He recalls Mary Ann Koory’s Mystery Fiction course as starting him on a search for the identity of the author of a long-lost mystery novel set in Burma. “I even went to Burma and interviewed literary historians, and nobody had heard about her,” Aye says. “Finally, with the help of a real-life literary detective, I was able to uncover her identity.” The Myanmar Times, the leading weekly news periodical in Burma, published Aye’s account of his literary quest. His poems and translations have also been published in the U.K. and in the U.S., including anthologies edited by the U.S. Poet Laureate.

In each course, whether in humanities or writing, Aye looks forward to receiving constructive feedback that helps him better convey Burmese culture to a wider audience. “The great thing about the program is that it cuts across demographic lines,” he says. “When you’re getting feedback, you don’t get it from a single demographic but from different types of people, different cultures. I’ve enjoyed all of my classes.”
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.

NEW COURSES

The History of Thought, see p. 138
Hyperpower: The U.S. and International Relations at a Crossroads, see p. 138
Modern and Contemporary Women Poets, see p. 140
Pharaohs, Priests and Peasants: Ancient Egyptian Culture and History, see p. 140
Presidential Elections of the Past 50 Years, see p. 138
NEW THIS TERM

The History of Thought

PHILOS X403 • 1 semester unit in Philosophy

In an age of exploding knowledge, it is important to be culturally fluent in multiple disciplines and able to synthesize information coming from a variety of sources. Expand your horizons through an interdisciplinary survey of the ideas that shaped human civilization, from the culture of ancient Egypt to quantum mechanics, using a conversational language that can be grasped by an audience of intellectually curious professionals and students with no specialized training. Immerse yourself in an introduction to the most important thinkers of the past, whose ideas affect and reach into the present.

Sec. 001
Piero Scaruffi
6 meetings
Tuesdays, 6:30–9:30 pm
Sept. 16–Oct. 21
Berkeley: Golden Bear Center • $395

NEW THIS TERM

Hyperpower: The U.S. and International Relations at a Crossroads

PHILOS X479 • 2 semester units in Philosophy

Examine international relations reality and theory from the perspective of the United States of America. Study U.S. foreign relations from the American Revolution onward, paying special attention to the perspectives of civilizations at play. Review the major international-relations theory schools—realism, liberalism, radicalism and constructivism—as you consider the factors that make up an international state system, state sovereignty and the role of individuals in power. Discuss how these important elements manifest themselves in multinational corporations, organizations, law and ethical standards in relation to the U.S. as a global power through a protracted look at present international issues.

Sec. 001
Josef Chytry, D.Phil. (Oxford), Extension Honored Instructor
10 meetings
Wednesdays, 7–10 pm
Sept. 24–Dec. 3 (no meeting on Nov. 26)
Berkeley Campus: 206 Wheeler Hall • $575
FREE PUBLIC EVENTS

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 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, and has 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 (Universe, 2009) and A History of Jazz Music (Omnibook, 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 (Omnibook, 2009). A Brief History of Knowledge (Amazon Digital Services, 2011) has been published as an Amazon e-book.

Panelists for Oct. 8

John Edmark, M.S., teaches design, color theory and animation at Stanford University. His creative investigations range from geometric kinetic works and transformable objects, to products for storage, kitchen and creative play. He is named inventor on nine U.S. utility patents. His other interests include hyperstereo landscape photography, ultralight backpacking and throat singing.

Edward Frenkel, Ph.D., is a professor of mathematics at UC Berkeley, author and filmmaker. He is a member of the American Academy of Arts and Sciences, a Fellow of the American Mathematical Society and the 2002 winner of the Hermann Weyl Prize in mathematical physics. Frenkel is the author of numerous books, including Love and Math (Basic Books, 2013), which is currently being translated into nine languages. Frenkel has also co-produced, co-directed and played the lead in the film Rites of Love and Math.

Alison Gopnik, Ph.D., is a professor of psychology and the arts at UC Berkeley. She is an internationally recognized leader in the study of children’s learning and is the author of more than 100 articles and several books including the bestseller The Scientist in the Crib (William Morrow, 1999).

Stephen Palmer, Ph.D., teaches psychology at UC Berkeley, where he also served as director of the Institute of Cognitive Studies. Palmer is best known for his research on perceptual organization and his interdisciplinary book, Vision Science: Photons to Phenomenology (MIT Press, 1999). He now studies visual aesthetics of color and spatial composition.

Panelists for Dec. 10

Lily Alexander, M.A., is a graduate student in the Department of History of Art and Visual Culture at UC Santa Cruz. Her research focuses on new media art, the history of art and technology and the politics of production. Previously, she was contributor and online editor for Whitewall Magazine.

Paula Birnbaum, Ph.D., is an associate professor and academic director of the Museum Studies Master Program at USF. She also serves as program director of Art History/Arts Management in the Department of Art + Architecture. She is a specialist in modern and contemporary art, a former Fulbright Scholar, and fellow at the Institute for Research on Women and Gender at Stanford University.

Carlo Séquin, Ph.D., is a professor of computer science at UC Berkeley. He was head of the Computer Science Division from 1980–1983. Since then, he has concentrated on computer graphics, geometric modeling; and on the development of computer-aided design (CAD) tools for circuit designers, architects and mechanical engineers. Since the mid-1990s, Séquin’s work in computer graphics and in geometric design have provided a bridge to the world of art. He is a Fellow of the ACM, a Fellow of the IEEE, and has been elected to the Swiss Academy of Engineering Sciences.

Andrea Steves is a multiplatform artist, designer and ecologist, and a founding member of FICTILIS. You can review some of its multimedia projects at www.fictilis.com/projects.

Sec. 009
1 meeting
Wednesday, 7–9 pm
Oct. 8
Berkeley: Golden Bear Center • FREE

Sec. 010
1 meeting
Wednesday, 7–9 pm
Dec. 10
Berkeley: Golden Bear Center • FREE
HUMANITIES AND LANGUAGES

NEW THIS TERM

Pharaohs, Priests and Peasants: Ancient Egyptian Culture and History

ANTHRO X404 • 2 semester units in Anthropology

Explore four millennia of ancient Egyptian history and culture. Draw on archaeological finds and Egyptian literary, religious and historical texts as you listen to chronologically arranged lectures that span the Predynastic period through Roman times. Explore the significance of western oases and the recently discovered ports on the Red Sea coast, as well as famous sites including Karnak, Giza, Abydos (the site of two newly discovered royal tombs), Elephantine and Saqqara. Discuss historical problems such as the foundation of the Egyptian state, the collapse of the Old Kingdom, the Thutmosid succession and the Amarna heresy. Analyze the context of these problems in the midst of Egyptian theology, ethical concepts, personal piety and funerary beliefs. Learn the secrets of the embalmers’ workshop, the battles of Megiddo and Qadesh, and the community of elite craftsmen who excavated and decorated the royal tombs in the Valley of the Kings. Discover how Egyptians dressed according to social hierarchy, examine Egyptian food and drink, and learn about leisurely pursuits in ancient Egypt.

Time is allotted for questions and discussion.

Sec. 001
Teresa Moore, Ph.D.
10 meetings
Saturdays, 10 am–1 pm
Sept. 6–Nov. 8
Berkeley Campus: 203 Wheeler Hall • $575

Great Novels You Always Meant to Read

ENGLISH X467 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Read some of the most influential novels in the Western canon while examining their rich social, historical and literary contexts. Appropriate for both first-time and repeat readers, this course lets you take part in lively group discussions of classic books. The instructor provides specific historical, biographical and critical backgrounds on each text and author.

Sec. 003
Donna Levin, J.D.
10 meetings
Saturdays, 10:30 am–1:30 pm
Sept. 20–Nov. 22
San Francisco: San Francisco Campus • $575

NEW THIS TERM

Modern and Contemporary Women Poets

ENGLISH X474.1 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

Writers must know the work of their predecessors and contemporaries to write in or against existing styles and to understand the deeper context of the conversation they’re joining. Develop your skills as a poetry reader and writer by examining the work of influential women poets from the past 50 years, from Elizabeth Bishop and Sylvia Plath to those writing today. Focus on craft, and social and historical context. Develop your capabilities with fellow students as readers, writers and members of the literary community.

Sec. 002
Lisa Gluskin Stonestreet, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 15–Nov. 17
Berkeley: Golden Bear Center • $575

Latin and Greek Roots in English

ENGLISH X476 • 2 semester units in English

More than 60 percent of English words have Greek or Latin roots. In science and technology vocabularies, the figure rises to more than 90 percent. Learn to map the semantic development of Greek and Latin derivatives in English, and examine the contexts in which the original meanings have changed. By the end of the class, you should have a better understanding of the history of English and begin to see language as a dynamic system in which changes are intricately linked to historical, social and cultural realities.

Sec. 001
Rali Christo, Ph.D.
10 meetings
Saturdays, 2–5 pm
Sept. 6–Nov. 8
Berkeley Campus: 121 Wheeler Hall • $575

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. 240 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.

See website for available section number
Arthur Kane Scott, M.A.
Enroll anytime
Online • Proctored final exam • $795

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. 240 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.

See website for available section number
Arthur Kane Scott, M.A.
Enroll anytime
Online • Proctored final exam • $795
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. 002
Gwynne Pacheco, Ed.D.
Enroll anytime
Online • Proctored final exam • $695

Introduction to American Politics

POL SCI XBW1 • 4 semester units in Political Science

Important: Special academic policies apply to XBW courses. See p. 240 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. 002
Nina Clark, Ph.D.
Enroll anytime
Online • Proctored final exam • $795

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 as a way to discover what visions they present of childhood, of the social world and of the self. You pay particular attention to how these books address the two audiences of children’s literature: the child and the adult.

Sec. 004
Celeste Mannis, B.A., M.B.A.
Sept. 16–Dec. 9
Online • $695

The English Novel

ENGLISH X125 • 4 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing

Survey the English novel by reading authors such as E.M. Forster, Anthony Trollope, Charles Dickens, Charlotte Brontë, George Eliot, Oscar Wilde, Thomas Hardy and Robert Louis Stevenson. Gain perspective on this literary form with emphasis on how moral, social, psychological, political and philosophical problems were perceived during the Victorian and Edwardian periods.

Sec. 002
Kathryn Klypas, Ph.D.
Enroll anytime
Online • Proctored final exam • $795

American Fiction

ENGLISH X135A • 3 semester units in English

An elective in the Post-Baccalaureate Certificate Program in Writing

Survey the major American novelists and short-story writers of the 19th and early-20th centuries, including Mark Twain, Edgar Allen Poe, Stephen Crane, Herman Melville, Edith Wharton, Nathaniel Hawthorne and Jack London. Learn about various literary movements—such as romanticism, realism and naturalism—and consider questions of aesthetics, morality, poverty, racism, gender and power.

Sec. 002
Zachary Gordon, Ph.D.
Enroll anytime
Online • Proctored final exam • $695

American Environmental and Cultural History

ESPM X8W160AC • 4 semester units in Environmental Science, Policy and Management

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. 002
Douglas Greenberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $795

Reading Events at Litquake

UNEX 1106

UC Berkeley Extension’s Writing program is pleased to be a sponsor of Litquake, the largest literary festival on the West Coast. Join us for special reading events during the week of the festival featuring instructors and students from the program. Litquake events run from Oct 10–18, 2014, in various San Francisco locations.

For event schedules, visit our website.
Wine and Food Studies

COURSE INFORMATION
(510) 643-1110
extension-humanities@berkeley.edu
extension.berkeley.edu/humanities

Introduction to Wines of the World
UNEX 1072 • 2.4 ceu
(Formerly Fundamentals of Wine Studies I: Wines of California and Europe)
Explore the characteristics of various wines, including their methods of production, aging techniques and respective regions of origin. Develop tasting techniques by comparing domestic and international wines of similar varietals, and learn the proper care and serving of wine. Tastings of representative wines from around the world follow each lecture.

Bring six wineglasses to each session. You must be at least 21 years old to enroll in this course.

Sec. 007
Christopher Greene, B.A.
8 meetings
Tuesdays, 6:30–9:30 pm
Sept. 16–Nov. 4
San Francisco: Art and Design Center • $545

Languages

French

COURSE INFORMATION
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. 005
Marie-Claude Le Gall, M.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 10–Nov. 12
San Francisco: San Francisco Campus • $425

French I

Mandarin

COURSE INFORMATION
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. 004
Natasha Wild, M.A., Extension Honored Instructor
18 meetings
Mondays and Thursdays, 6:30–9 pm
Sept. 8–Dec. 15
Berkeley Campus: 206 Wheeler Hall • $565

Mandarin I

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. 003
Instructor to be announced
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Berkeley Campus: 107 Genetics and Plant Biology Building • $565

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. 004
Natasha Wild, M.A., Extension Honored Instructor
18 meetings
Mondays and Thursdays, 6:30–9 pm
Sept. 15–Nov. 13
Berkeley Campus: 206 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. 003
Instructor to be announced
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Berkeley Campus: 107 Genetics and Plant Biology Building • $565

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.
Italian

**Introduction to Italian**
ITALIAN X402 • 1 semester unit in Italian

Buongiorno! Even if you have no prior knowledge of Italian, you can acquire the skills to speak and understand the language in everyday situations. Through directed classroom conversation, develop oral proficiency and listening skills while studying basic grammar. You also gain an understanding of Italian culture and society.

**Sec. 002**
Tiziana Balestra, M.A.
8 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Oct. 22
Belmont: Belmont Center • $295

**Italian II**
ITALIAN X403 • 1 semester unit in Italian

Consolidate the phonetic and grammatical competence gained in Italian I, and further develop your conversational skills. Enrollment is limited.

**Prerequisite:** Italian I ITALIAN X15 or equivalent

**Sec. 002**
Tiziana Balestra, M.A.
8 meetings
Wednesdays, 6:30–9:30 pm
Oct. 29–Dec. 17
Belmont: Belmont Center • $295

Latin

**Latin I**
CLASSIC X20 • 3 semester units in Classics

Get an introduction to the grammar, syntax and vocabulary of classical Latin. Instruction includes passages from Roman poets such as Catullus, Horace, Virgil, Ovid and Martial, as well as from great prose writers and thinkers, such as Cicero. Enrollment is limited.

**Sec. 002**
Rali Christo, Ph.D.
15 meetings
Saturdays, 10 am–1 pm
Sept. 6–Dec. 20 (no meeting on Nov. 29)
Berkeley Campus: 121 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. 003**
Pamela Lim-McAlister, M.A.,
Extension Honored Instructor
15 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Dec. 15
Berkeley: Golden Bear Center • $545

**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. 002**
Pamela Lim-McAlister, M.A.,
Extension Honored Instructor
15 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Dec. 16 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $545

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.

**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.
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, and
- 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, and
- 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; and
- 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 extension-tesol@berkeley.edu.

English as a Second Language (ESL)

**Academic Writing for ESL**

**COLWRIT X400.1**  
2 semester units in College Writing Program  
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 see noticeable improvements in your writing.  
This course is intended for intermediate to advanced English learners.  
**Sec. 006**  
Jeffrey Croft  
10 meetings  
Tuesdays, 6–9 pm  
Sept. 16–Nov. 25 (no meeting on Nov. 11)  
Berkeley Campus: 104 Barrows 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.  
This course is intended for advanced English learners.  
**Sec. 005**  
Steven West, Ph.D.  
10 meetings  
Thursdays, 6–9 pm  
Sept. 18–Nov. 20  
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.  
This course is intended for high-intermediate to advanced English learners.  
**Sec. 006**  
Jeffrey Croft  
10 meetings  
Mondays, 6–9 pm  
Sept. 15–Nov. 17  
Berkeley Campus: 104 Barrows Hall  
$550

**Sec. 007**  
Benjamin Feinbaum, M.Ed.  
10 meetings  
Tuesdays, 6:30–9:30 pm  
Sept. 23–Dec. 2 (no meeting on Nov. 11)  
Berkeley Campus: 109 Wheeler Hall  
$550

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 that you need.
Idiomatic English and Oral Communication Skills for ESL

COLWRIT X407 • 2 semester units in College Writing Program

Learn to communicate more fluently and naturally in many everyday situations. Using a variety of fun and engaging classroom speaking activities, build your vocabulary and your ability to use idioms to communicate more accurately and express yourself more effectively. Examine common American English idioms, expressions, slang and word combinations in popular movies, songs and texts. Learn in a lively, fun classroom environment, and build confidence in your English conversation skills.

This course is intended for intermediate to advanced English learners.

Sec. 003
Benjamin Feinbaum, M.Ed.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 25–Dec. 4 (no meeting on Nov. 27)
Berkeley Campus: 109 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.

This course is intended for intermediate to advanced English learners.

Sec. 008
Amy Loewen, M.A.
10 meetings
Tuesdays, 6–9 pm
Sept. 23–Dec. 2 (no meeting on Nov. 11)
Berkeley Campus: 210 Wheeler Hall • $500

Location Guide

For detailed information, see p. 246.

Belmont: Belmont Center 1301 Shoreway Rd., Suite 400, Belmont
Berkeley Campus See campus map, p. 247. If no building location is given, visit extension.berkeley.edu for updated information.
Berkeley: Golden Bear Center 1995 University Ave., Berkeley
San Francisco: Art and Design Center 95 Third St., San Francisco
San Francisco: San Francisco Campus 160 Spear St., Floors 5, 6 and 7, 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.
Jobert Ballestros Poblete’s desire to help people is the driver behind his career change from being a research analyst to practicing medicine. Poblete is now completing his first year at UCSF’s School of Medicine, thanks to the Post-Baccalaureate Health Professions Program.

“The reason I chose UC Berkeley Extension was the flexibility,” Poblete says. “My commitment to making this change grew over time, and Extension was able to meet my needs during each stage. At the beginning, I just wanted to take a class or two. I was then able to load up the coursework and accelerate to what I needed. When I was applying, I got a lot of support from my advisers, other students and instructors. I was able to meet frequently with the counselors.”

In making this career change, Poblete enjoys the camaraderie with like-minded classmates who provide not only emotional support but also information about opportunities. “It was a concentrated group, and we were all in similar situations,” Poblete says. “It’s really important to create relationships with the students.”
Enhance your career in the sciences with UC Berkeley Extension. Stay competitive with training that reflects the latest thinking in various fields. Courses developed and taught by industry innovators and subject experts enable you to connect with medical professionals, business leaders and biotechnology pioneers.

Prepare for advanced programs in medicine, dentistry, veterinary medicine, nursing, pharmacy and other health professions. Meet the math and statistics requirements to enter the UC Berkeley Haas School of Business or other M.B.A. programs. Courses ranging from biology and physics to analytic geometry and calculus ensure that you find the appropriate education. For the specialized math and science knowledge that you need to take your career to the next level, come to UC Berkeley Extension.

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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.

Clinical Laboratory Scientist Preparatory Program
Monday, Aug. 11, 5–6:30 pm
Berkeley: Golden Bear Center

Life Science Industries Professional Certificate and Specialized Programs of Study
Thursday, Sept. 4, 4–6 pm
Berkeley: Golden Bear Center
Monday, Dec. 15, 4–6 pm
San Francisco: San Francisco Campus

Post-Baccalaureate Health Professions Program
Friday, Aug. 15, 12–1 pm
Online
Monday, Sept. 8, 6:30–8 pm
San Francisco: San Francisco Campus
Wednesday, Oct. 22, 6:30–8 pm
Berkeley: Golden Bear Center
Friday, Nov. 14, 12–1 pm
Online
Friday, Dec. 5, 12–1 pm
Online

Professional Program in Life Sciences Business
Friday, Sept. 12, 12–12:45 pm
Online

Health Professions Preparation

COURSE INFORMATION
(510) 643-6901
extension-science@berkeley.edu
extension.berkeley.edu/sciences

FREE INFORMATION SESSIONS
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 care training programs with UC Berkeley Extension’s top-flight science courses. For details, see this page or visit extension.berkeley.edu/spos/premed.html.

Friday, 12–1 pm
Aug. 15
Online • FREE

Sec. 014
1 meeting
Monday, 6:30–8 pm
Sept. 8
San Francisco: San Francisco Campus • FREE

Sec. 015
1 meeting
Wednesday, 6:30–8 pm
Oct. 22
Berkeley: Golden Bear Center • FREE

Friday, 12–1 pm
Nov. 14
Online • FREE
Friday, 12–1 pm
Dec. 5
Online • FREE

FREE PUBLIC EVENT
Genomic and Precision Medicine

UNEX 1238
Jeanette McCarthy provides an overview of how advances in genomic science are affecting health care by dramatically changing the prevention, diagnosis and treatment of disease. This is an important issue for everyone in the community to understand, as it will enable all to make better and more educated decisions about personal health. This event is appropriate for a lay audience, practicing health care professionals; researchers; and prehealth students in medical, nursing and clinical laboratory science.

Jeanette McCarthy, M.P.H., Ph.D., is an adjunct associate professor of medicine at Duke University and a visiting faculty member in the Division of Medical Genetics at UCSF. She trained in genetic epidemiology at UC Berkeley and has taught courses in epidemiology, genetic epidemiology, computational genomics and genomic medicine. She currently runs a consulting business, working with academic centers, health care institutes and industry partners to help fill the education gap in genomic and precision medicine.

Sec. 001
1 meeting
Thursday, 6:30–8:30 pm
Oct. 23
Berkeley: Golden Bear Center • FREE
The courses gave me a solid foundation for beginning my medical career. As a humanities undergrad major, I was afraid of being behind the rest of my class when I started medical school. But I now have the scientific and professional knowledge to succeed.” —Gaylan Dascanio, Post-Baccalaureate Health Professions Program Graduate
Biology

COURSE INFORMATION
(510) 643-6918
extension-science@berkeley.edu
extension.berkeley.edu/sciences

ONLINE COURSE INFORMATION
(510) 642-7345
extension-science-online@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. This course is associated with General Biology Laboratory I MCELLBI X15.1A. The lecture may be taken without the laboratory.

Sec. 007
Nidhi Ahuja, Ph.D.
15 meetings
Tuesdays, 1–5 pm
Aug. 19–Dec. 2 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $980

Sec. 009
Katerina Athena Drouvalakis, Ph.D.
15 meetings
Tuesdays, 6–10 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
Belmont: Belmont Center • $980

Sec. 008
Aung Chein, M.D.
15 meetings
Thursdays, 6–10 pm
Aug. 28–Dec. 11 (no meeting on Nov. 27)
Berkeley: Golden Bear Center • $980

General BiologyII
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 X15.1B. The lecture may be taken without the laboratory.

High school chemistry is recommended.

Sec. 009
Piper Nicolosi, Ph.D.
15 meetings
Thursday, 6–10 pm
Aug. 21–Dec. 4 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $980

Sec. 010
Justine Walsh, Ph.D.
15 meetings
Thursday, 6–10 pm
Aug. 21–Dec. 4 (no meeting on Nov. 27)
Belmont: Belmont Center • $980

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.
General Biology Laboratory II
INTEGBI X15.B  •  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 X15.B must be completed with a C or better or taken concurrently.
Sec. 009
Judith Owiti, Ph.D.
15 meetings
Saturdays, 9 am–1 pm
Aug. 23–Dec. 13 (no meetings on Aug. 30 and Nov. 29)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 252  •  $980

Introductory Biology With Lab, Part A
MCELLBI X19.A  •  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. 003
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online • Proctored final exam  •  $875

Introductory Biology With Lab, Part B
MCELLBI X19.B  •  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. 002
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. 017
James Smiley, B.A., D.C.
15 meetings
Tuesdays, 2–5 pm
Aug. 19–Dec. 2 (no meeting on Nov. 11)
Berkeley: Golden Bear Center  •  $880

Sec. 018
Kathleen Azevedo, MSN, R.N.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 19–Dec. 2 (no meeting on Nov. 11)
Berkeley: Golden Bear Center  •  $880

Sec. 015
Kashif Ahmad, M.B.B.S., M.Sc., Ph.D.
Enroll anytime
Online • Proctored final exam  •  $850

Sec. 016
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. 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. 010
Emmanuel Segmen, M.A.
15 meetings
Wednesdays, 6:30–9:30 pm
Aug. 20–Dec. 3 (no meeting on Nov. 26)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 210  •  $855

Sec. 009
Kathleen Azevedo, MSN, R.N.
15 meetings
Mondays, 6:30–9:30 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 210  •  $855

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. 003
Peter Niloufari, M.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Aug. 20–Nov. 26
Berkeley: Golden Bear Center  •  $880
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

Important: Special academic policies apply to XB and XBW courses. See p. 240 for details.

Understand the complexities of the cells, tissues, and major organs and systems of the human body. Study a different system each week, concentrating on basic mechanisms underlying human life processes and important diseases affecting normal human function.

Prerequisite: One year of high school or college chemistry

Sec. 007
Peter Niloufari, M.D.
15 meetings
Mondays, 6:30–9:30 pm
Aug. 18–Dec. 1 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $880

Sec. 008
Lawrence Basso, M.D., M.S.
15 meetings
Thursdays, 6–9 pm
Aug. 21–Dec. 4 (no meeting on Nov. 27)
Belmont: Belmont Center • $880

Sec. 008
Lawrence Basso, M.D., M.S.
15 meetings
Thursdays, 6–9 pm
Aug. 21–Dec. 4 (no meeting on Nov. 27)
Belmont: Belmont Center • $880

See website for available section number
This course has rotating sections with varying instructors: Kashif Ahmad, Christina Morales, Keith Earnshaw and Jennifer Wade
Enroll anytime
Online • Proctored final exam • $850

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 EKGs, blood pressure, respiratory volume and reflexes.

Prerequisite: Either introduction to Human Physiology MCELLBI XB32 or Mammalian Systemic Physiology INTEGBI X109 must be completed with a C or better or taken concurrently.

Sec. 008
Nancy Rauch, Ph.D.
13 meetings
Saturdays, 1–4:30 pm
Aug. 23–Dec. 6 (no meetings on Aug. 30, Oct. 4 and Nov. 29)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 210 • $855

Sec. 009
Peter Niloufari, M.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
Hayward: Life Chiropractic College, 25001 Industrial Blvd., Room 164 • $855

Physiology of the Cardiac and Respiratory Systems

MCELLBI X499.5 • 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 disease, control and prevention of disease through case studies and journal articles.

Prerequisites: One college-level course in general biology and one in physiology

Sec. 003
Michael Coronado, Ph.D.
15 meetings
Wednesdays, 3:30–6:30 pm
Aug. 27–Dec. 3
San Francisco: San Francisco Campus • $880

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: A basic mathematics course and computer literacy

Sec. 003
Candace Low, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $880

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
James Smiley, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 28–Dec. 11 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $880
Medical Microbiology

MCELLB1 X134 • 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

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.

Prerequisite: One year of college-level general biology for majors and chemistry

Sec. 013
Christina Morales, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Aug. 18–Dec. 1 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $880

Sec. 011
Aung Chein, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Aug. 27–Dec. 3
Belmont: Belmont Center • $880

Sec. 014
Srinivas Garlapati, Ph.D.
15 meetings
Mondays, 2–5 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
San Francisco: San Francisco Campus • $880

Sec. 012
Nidhi Ahuja, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Aug. 27–Dec. 3
San Francisco: San Francisco Campus • $880

Microbiology Laboratory

MCELLB1 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 MCELLB1 X134 lecture must be taken concurrently or taken previously.

Sec. 004
Srinivas Garlapati, Ph.D.
15 meetings
Saturdays, 9:30 am–12:30 pm
Aug. 23–Dec. 13 (no meetings on Aug. 30 and Nov. 29)
Oakland: Merritt College, 12500 Campus Dr., Building D, Room 205 • $855

Sec. 005
Edwin Ochong, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 16, Room 204 • $855

Neuroscience

MCELLB1 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. 004
Rachel Henderson, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 19–Dec. 2 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $880

Biochemistry

MCELLB1 X115A • 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 the common molecular processes and chemical reactions that underlie diverse life forms. Begin by examining the relationship between the 3-D structure of proteins and their biological activity. Next, look at the mechanism of enzyme action, how enzymes recognize their substrates and enhance reaction rates, and the control of enzymatic activity. Finally, develop an integrated picture of metabolism in the body by examining metabolic pathways and their regulation and control.

Prerequisites: One year of college-level general biology for majors and organic chemistry

Sec. 016
Louisa Weng Chi Man, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Aug. 18–Dec. 1 (no meeting on Sept. 1)
Belmont: Belmont Center • $880

Sec. 015
Mary Alice Yund, Ph.D., Extension Honored Instructor
14 meetings
Thursdays, 6:30–9:45 pm
Aug. 21–Nov. 20
Berkeley Campus: 107 Genetics and Plant Biology • $880

Sec. 014
R. Geoffrey Sargent, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 26–Dec. 16 (no meetings on Sept. 30 and Nov. 11)
San Francisco: Downtown Center • $880

Sec. 013
R. Geoffrey Sargent, Ph.D.
15 meetings
Tuesdays, 2–5 pm
Aug. 26–Dec. 16 (no meetings on Sept. 30 and Nov. 11)
San Francisco: Downtown Center • $880
**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 recommended.

**See website for available section number**

This course has rotating sections with varying instructors: Nidhi Ahuja, Weiwei Gu, Rebekah Marsh and Paul Tarr

**Enroll anytime**

**Online • Proctored final exam • $850**

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**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 multifactoral 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. 014**
Mary Alice Yund, Ph.D., Extension Honored Instructor

14 meetings

Tuesdays, 6:30–9:45 pm

Aug. 19–Nov. 25 (no meeting on Nov. 11)

Berkeley Campus: 107 Genetics and Plant Biology • $880

**Sec. 015**
Instructor to be announced

15 meetings

Thursdays, 6:30–9:45 pm

Aug. 28–Dec. 11 (no meeting on Nov. 27)

San Francisco: Downtown Center • $880

**See website for available online section number**

This course has rotating sections with varying instructors: Marina Crowder, Christina Morales, John Placyk and Paul Tarr

**Enroll anytime**

**Online • Proctored final exam • $850**

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**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. 002**
Bayly Wheeler, Ph.D.

15 meetings

Wednesdays, 6:30–9:30 pm

Aug. 20–Nov. 26

Berkeley: Golden Bear Center • $880

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**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 to study cells, 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. 006**
Sophia Maund, Ph.D.

15 meetings

Mondays, 6:30–9:30 pm

Aug. 25–Dec. 8 (no meeting on Sept. 1)

San Francisco: Downtown Center • $880

**Sec. 005**
Nidhi Ahuja, Ph.D.

Enroll anytime

**Online • Proctored final exam • $850**

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- Increase efficiency
- Increase retention

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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 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. 003
Elena Rodriguez, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Aug. 20–Nov. 26
Berkeley: Golden Bear Center • $880

Principles and Techniques of Molecular Cell Biology
MCELLBI X121 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program and in the Clinical Laboratory Scientist Preparatory Program
In this nonlab course, learn how cells function by exploring gene regulation and expression, cell regulation, genetic engineering, the Human Genome Project, the genetics of cancer, immune system diseases, and DNA technology in forensics.
Prerequisite: One year of college-level general biology
Sec. 003
Susan Parkinson, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Stem Cell Biology, Research and Discovery
MCELLBI X424 • 3 semester units in Molecular and Cell Biology
An elective in the Advanced Biosciences Program and in the Post-Baccalaureate Health Professions Program
Review the science and current research topics in the field of human stem cells, and learn how they are being applied to regenerative medicine. Examine the derivation, cultivation and development of technologies surrounding human embryonic stem cells, adult stem cells and induced pluripotent stem cells. Understand the ethical, political and business-development issues surrounding research, development and commercialization of therapies and products from human embryonic stem cells.
Prerequisite: College-level biology or biochemistry
Sec. 002
R. Geoffrey Sargent, Ph.D.
15 meetings
Wednesdays, 6:30–9:30 pm
Aug. 27–Dec. 10 (no meeting on Oct. 1)
San Francisco: San Francisco Campus • $880

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
Examine the derivation, cultivation and development of technologies surrounding human embryonic stem cells, adult stem cells and induced pluripotent stem cells. Understand the ethical, political and business-development issues surrounding research, development and commercialization of therapies and products from human embryonic stem cells.
Prerequisite: College-level biology or biochemistry
Sec. 002
Rainbow Vogt, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
San Francisco: San Francisco Campus • $880

Introduction to Parasitology
INTEGBI X401 • 2 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
In this interactive course, investigate the life cycles, modes of transmission and impact that parasites have on human populations around the world. Focus on parasites that are relevant to human health, including worms, amoebae and other macroparasites.
Prerequisite: One year of college-level biology
Sec. 003
Edwin Ochong, Ph.D.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 18–Nov. 20
Berkeley: Golden Bear Center • $605

Principles of Infectious Diseases and Emerging Infectious Diseases
MCELLBI X474 • 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
Improve your understanding of the basic concepts of infectious diseases, dynamics of disease transmission, and the emerging and reemerging infectious diseases from many perspectives. You also focus on host-pathogen relationships and the mechanisms behind the emergence of new microbial threats. From an initial review of some common terms, you progress into detailed discussions on how pathogens establish themselves within a host to sustain an infection.
Sec. 002
Rajeev Banerjee, M.S., Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Aug. 21–Dec. 27 (no meeting on Nov. 27)
Berkeley: Golden Bear Center • $605

Open Admissions Policy
UC Berkeley Extension serves the continuing education needs of adults in our community. You do not have to be matriculated to enroll, and there is no admission process to take individual courses.
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.

Prerequisite: One year of college-level general biology for majors

Sec. 014
Amy Morgan, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Aug. 28–Dec. 11 (no meeting on Nov. 27)
San Francisco: Downtown Center • $880

Sec. 015
Rajeev Banerjee, M.S., Ph.D.
15 meetings
Saturdays, 10 am–1:15 pm
Sept. 6–Dec. 13 (no meeting on Nov. 29)
Berkeley: Golden Bear Center • $880

Sec. 011
Amy Morgan, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Sec. 012
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

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. 002
David Liu, M.D., Ph.D.
Enroll anytime
Online • Proctored final exam • $850

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 required; some molecular biology background recommended

Sec. 004
Michael Bachmann, M.D., Sc.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 19–Dec. 11 (no meeting on Nov. 27)
San Francisco: Downtown Center • $880

Sec. 014
Amy Morgan, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Sec. 012
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

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. 158.

Virtual Hematology Laboratory

MCELLBI X499.3 • 1 semester unit in Molecular and Cell Biology

Study fundamental concepts of hematology, and learn to analyze laboratory results and their clinical implications.

For course schedule, see p. 158.

Sec. 011
Amy Morgan, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Sec. 012
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

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
Advanced Bioscience

COURSE INFORMATION
(510) 642-8108
extension-science@berkeley.edu
extension.berkeley.edu/sciences

ONLINE COURSE INFORMATION
(510) 642-7345
extension-science-online@berkeley.edu
extension.berkeley.edu/online

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, genetics, 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. 007
Monica Ranes-Goldberg, Ph.D.
Sept. 9–Dec. 2
Online • $585

Sec. 006
Robin Ball, Ph D.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 15–Nov. 17
San Francisco: San Francisco Campus • $605

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. 153.

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. 154.

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. 154.

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. 158.

Virtual Hematology Laboratory
MCELLBI X499.3 • 1 semester unit in Molecular and Cell Biology
Study fundamental concepts of hematology, and learn to analyze laboratory results and their clinical implications.

For course schedule, see p. 158.

Immunology
MCELLBI X110 • 3 semester units in Molecular and Cell Biology
Examine the basic principles of immunology, and study the tissues and cells that make up the immune system.

For course schedule, see p. 156.

Introduction to Biostatistics
MCELLBI X471 • 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. 152.

Introduction to Parasitology
INTEGRIBI X401 • 2 semester units in Integrative Biology
In this interactive course, investigate the life cycles, modes of transmission and impact that parasites have on human populations around the world.

For course schedule, see p. 155.

Mammalian Systemic Physiology
INTEGRIBI 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. 152.

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 semester units of electives for a total of 10 semester units (150 hours of instruction).

Required Course
• Current Topics in the Biosciences
MCELLBI X427 (offered this term)

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
extension-science@berkeley.edu
Medical Microbiology
MCSEBLI 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.
For course schedule, see p. 153.

Microbiology Laboratory
MCSEBLI X136 • 1 semester unit in Molecular and Cell Biology
Get an introduction to medical microbiology and general laboratory techniques in this course designed for students who have some background in biology and chemistry.
For course schedule, see p. 153.

Neuroscience
MCSEBLI X108 • 3 semester units in Molecular and Cell Biology
Get an overview of the fundamental principles of the organization, function and development of the human nervous system, including neural development and diseases.
For course schedule, see p. 153.

Principles of Toxicology
MCSEBLI 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. 155.

Principles of Infectious Diseases and Emerging Infectious Diseases
MCSEBLI X474 • 2 semester units in Molecular and Cell Biology
Improve your understanding of the basic concepts of infectious diseases, dynamics of disease transmission, and the emerging and reemerging infectious diseases from many perspectives.
For course schedule, see p. 155.

Stem Cell Biology, Research and Discovery
MCSEBLI X424 • 3 semester units in Molecular and Cell Biology
Review the science and current research topics in the field of human stem cells, and learn how they are being applied to regenerative medicine.
For course schedule, see p. 155.

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 this page.

Clinical Laboratory Science

**Course Information**

(510) 642-8108
extension-science@berkeley.edu
extension.berkeley.edu/sciences

**Online Course Information**

(510) 642-7345
extension-science-online@berkeley.edu
extension.berkeley.edu/online

**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. See p. 159 or visit extension.berkeley.edu/spos/cl_prep.html for more program details.

**Sec. 004**

1 meeting
Monday, 5–6:30 pm
Aug. 11
Berkeley: Golden Bear Center • FREE

**Hematology**

MCSEBLI 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. 008**

Helen Kwan, Ph.D.
15 meetings
Mondays, 6:30–9:30 pm
Aug. 18–Dec. 1 (no meetings on Aug. 30 and Nov. 29)
Belmont: Belmont Center • $880

**Sec. 009**

Miguel Angeles, M.P.H., M.D.
15 meetings
Saturdays, 6:30–9:30 pm
Aug. 23–Dec. 13 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $880

**Sec. 011**

Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Virtual Hematology Laboratory
MCSEBLI X499.3 • 1 semester unit in Molecular and Cell Biology
Study fundamental concepts of hematology and the analysis of laboratory results and their clinical implications. Gain hands-on experience using Web-based software that acts as a virtual microscope, and learn how to interpret peripheral blood smears. You also learn how to apply your knowledge of hematology concepts to the modern-day laboratory, as well as demonstrate the critical-thinking and problem-solving skills necessary for a successful career in the clinical laboratory.

**Prerequisites:** One year of college-level general biology for majors and one college-level hematology course (may be taken concurrently)

**Sec. 001**

Joseph Musallam, B.S., and Timothy Hamill, M.D.
5 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–30
Berkeley: Golden Bear Center • $450

**Sec. 002**

Joseph Musallam, B.S., and Timothy Hamill, M.D.
5 meetings
Tuesdays, 6:30–9:30 pm
Oct. 14–Nov. 18 (no meeting on Nov. 11)
Berkeley: Golden Bear Center • $450

Quantitative Analysis: Applications in Clinical Chemistry

**Chemistry**

MCSEBLI X416 • 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. 001**

Thomas Kampfrath, Ph.D., DABCC
15 meetings
Saturdays, 9:30 am–12:30 pm
Aug. 16–Dec. 6 (no meetings on Aug. 30 and Nov. 29)
San Francisco: Art and Design Center • $880
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. 153.*

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. 154.*

Immunology  
MCELLBI X110 • 3 semester units in Molecular and Cell Biology  
Examine the basic principles of immunology, and study the tissues and cells that make up the immune system.  
*For course schedule, see p. 156.*

Introduction to Biostatistics  
MCELLBI X471 • 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. 152.*

Introduction to Parasitology  
INTEGBI X041 • 2 semester units in Integrative Biology  
In this interactive course, investigate the life cycles, modes of transmission and impact that parasites have on human populations around the world.  
*For course schedule, see p. 155.*

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. 152.*

Medical Microbiology  
MCELLBI X134 • 3 semester units in Molecular and Cell Biology  
Gain familiarity with important microbial pathogens, including bacteria, viruses, fungi and parasites.  
*For course schedule, see p. 153.*

Principles of Infectious Diseases and Emerging Infectious Diseases  
MCELLBI X474 • 2 semester units in Molecular and Cell Biology  
Improve your understanding of the basic concepts of infectious diseases, dynamics of disease transmission, and the emerging and reemerging infectious diseases from many perspectives.  
*For course schedule, see p. 155.*

Principles of Molecular Biology  
MCELLBI X107A • 3 semester units in Molecular and Cell Biology  
Gain an understanding of the fundamental concepts and complexities of molecular biology, including both structures and processes common to most organisms.  
*For course schedule, see p. 155.*

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. 155.*

**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 that you need.
Chemistry

COURSE INFORMATION
(510) 643-6901
extension-science@berkeley.edu
extension.berkeley.edu/sciences

ONLINE COURSE INFORMATION
(510) 642-7345
extension-science-online@berkeley.edu
extension.berkeley.edu/sciences

General Chemistry I
CHEM X19A • 3 semester units in Chemistry
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to the fundamental concepts of inorganic chemistry, including matter, atoms, molecules, solutions, thermochemistry, chemical bonding and intermolecular forces. This course is designed for 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. This course is associated with General Chemistry Laboratory I CHEM X19.1A.
Prerequisite: General Chemistry I CHEM X19A must be completed with a C or better or taken concurrently.

Sec. 008
Jay Parish, M.B.A., Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Aug. 21–Dec. 4 (no meeting on Nov. 27)
Belmont: Belmont Center • $880

Sec. 006
Mahin Hemmati, Ph.D.
15 meetings
Mondays, 2–5 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $880

Sec. 007
Zoran Kurtovic, Ph.D.
15 meetings
Mondays, 7–10 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $880

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. This course is associated with General Chemistry Laboratory I CHEM X19.1A.
Prerequisite: General Chemistry I CHEM X19A.

Sec. 011
Nicholas Cairns, Ph.D.
15 meetings
Mondays, 7–10 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Redwood City: Cañada College,
4200 Farm Hill Blvd., Building 18, Room 311 • $915

Sec. 008
Mahin Hemmati, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 220 Latimer Hall • $915

Sec. 009
Gurnam Singh, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 209 Latimer Hall • $915

Sec. 010
Zoran Kurtovic, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 205 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. 007
Jean Dupon, Ph.D.
15 meetings
Wednesday, 6:30–9:30 pm
Aug. 20–Dec. 3 (no meeting on Nov. 26)
Belmont: Belmont Center • $880

Sec. 006
Gregory Watkins, Ph.D.
15 meetings
Mondays, 7–10 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $880

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.
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.A 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. 008**
Valeria Martinovic, Ph.D.
15 meetings
Tuesdays, 6:30–10 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
Redwood City: Cañada College,
4200 Farm Hill Blvd., Building 18, Room 311 • $915

**Sec. 007**
Christian Canlas, Ph.D.
15 meetings
Wednesdays, 6:30–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 204 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, a basic knowledge of math, including algebra is required.

**Sec. 003**
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. 004**
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, alkyne, 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 a college-level general chemistry completed with a C or better

**Sec. 008**
Maurizio Franzini, Ph.D.
15 meetings
Mondays, 6–10 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $980

**Sec. 010**
Jean Dupon, Ph.D.
15 meetings
Tuesdays, 6–10 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
Belmont: Belmont Center • $980

**Sec. 009**
Heiko Held, Ph.D.
15 meetings
Wednesdays, 1–5 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley: Golden Bear Center • $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 with laboratory. Organic Chemistry I CHEM X36A must be completed with a C or better or taken concurrently.

**Sec. 012**
Richard Samuelson, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 320 Latimer Hall • $980

**Sec. 013**
Kristen Aramthanapon, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 321 Latimer Hall • $980

**Sec. 014**
Marcus Strawn, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Aug. 28–Dec. 11 (no meeting on Nov. 27)
Redwood City: Cañada College,
4200 Farm Hill Blvd., Building 18, Room 311 • $980

**Sec. 015**
Jean Dupon, Ph.D.
15 meetings
Thursdays, 6–10 pm
Aug. 28–Dec. 11 (no meeting on Nov. 27)
Redwood City: Cañada College,
4200 Farm Hill Blvd., Building 18, Room 311 • $980

SCIENCES, MATHEMATICS AND BIOTECHNOLOGY
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 completed with a C or better
Sec. 006
Marcus Strawn, Ph.D.
15 meetings
Mondays, 6–10 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Berkeley: Golden Bear Center • $980
Sec. 007
Jean Dupon, Ph.D.
15 meetings
Mondays, 6–10 pm
Aug. 25–Dec. 8 (no meeting on Sept. 1)
Belmont: Belmont Center • $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 completed with a C or better. Organic Chemistry II CHEM X36B must be completed with a C or better or taken concurrently.
Sec. 009
Maria Somma, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Berkeley Campus: 224 Latimer Hall • $980
Sec. 010
Nicholas Cairns, Ph.D.
15 meetings
Wednesdays, 6–10 pm
Aug. 27–Dec. 10 (no meeting on Nov. 26)
Redwood City: Cañada College, 4200 Farm Hill Blvd., Building 18, Room 225 • $980

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. 153.

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. 158.

Open Admissions Policy
UC Berkeley Extension serves the continuing education needs of adults in our community. You do not have to be matriculated to enroll, and there is no admission process to take individual courses.
Physics Laboratory I
PHYSICS X1:1A • 1 semester unit in Physics
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to the fundamental concepts of physics, including introduction to forces, properties of matter, kinetics, thermodynamics, heat, wave motion, fluids, sound and other topics of interest. This course is associated with Physics I PHYSICS X3A.
Prerequisite: Physics I PHYSICS X3A must be completed with a C or better or taken concurrently.
Sec. 011
Minhua Zhu, Ph.D.
15 meetings
Saturdays, 2–5 pm
Aug. 23–Dec. 13 (no meetings on Aug. 30 and Nov. 29)
Redwood City: Cañada College,
4200 Farm Hill Blvd.,
Building 16, Room 106 • $855
Sec. 008
Shafinaz Ali, Ph.D.
15 meetings
Tuesdays, 6:30–9:30 pm
Aug. 26–Dec. 9 (no meeting on Nov. 11)
Berkeley Campus: 211 LeConte Hall • $855

Physics II
PHYSICS X1:1B • 1 semester unit in Physics
An elective in the Post-Baccalaureate Health Professions Program
Get an introduction to the fundamental concepts in physics, including electricity, magnetism, electromagnetic waves and optics. Aimed at biology, premedical, prehealth and architecture students, this course is also appropriate for returning students interested in physics and professionals in other disciplines considering a career change to the sciences. This course is associated with Physics II PHYSICS X3B.
Prerequisite: Physics I PHYSICS X3A and Physics Laboratory I PHYSICS X3:1A must be completed with a C or better. Physics II PHYSICS X3B must be completed with a C or better or taken concurrently.
Sec. 010
Minhua Zhu, Ph.D.
15 meetings
Saturdays, 10 am–1 pm
Aug. 23–Dec. 13 (no meetings on Aug. 30 and Nov. 29)
Redwood City: Cañada College,
4200 Farm Hill Blvd.,
Building 16, Room 106 • $855
Sec. 009
Shafinaz Ali, Ph.D.
15 meetings
Thursdays, 6:30–9:30 pm
Aug. 28–Dec. 11 (no meeting on Nov. 27)
Berkeley Campus: 211 LeConte Hall • $855

Concepts of Physics
PHYSICS X1:1 • 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. 003
Raja Almukahhal, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Clinical Research

COURSE INFORMATION
(510) 642-1062
eXtension-science@berkeley.edu
extension.berkeley.edu/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. 013
Peter Dubinsky, B.S.
Aug. 27–Oct. 22
Online • $1,895
Sec. 012
Lincoln Bynum, M.D.,
Peter Dubinsky, B.S.,
Siu Po Sit, Ph.D.,
Marianna Lenoci, M.A., and
Thomas Renau, Ph.D.
4 meetings
Saturdays, 9 am–5 pm
Sept. 6 and 20 and Oct. 4 and 18
San Francisco: San Francisco Campus • $1,825
Sec. 014
Peter Dubinsky, B.S.
Oct. 23–Dec. 18
Online • $1,895

VISIT OUR WEBSITE
Up-to-date course and schedule information with easy enrollment
extension.berkeley.edu
### 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, pre-study visits and more.

**Prerequisite:** Introduction to Clinical Research: Clinical Trial Phases and Design PB HLTH X400.2

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<td>010</td>
<td>Daniel Redline, B.A., CCRP</td>
<td>Aug. 27–Oct. 22</td>
<td>Online</td>
<td>$1,895</td>
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<td>011</td>
<td>Daniel Redline, B.A., CCRP</td>
<td>Oct. 23–Dec. 18</td>
<td>Online</td>
<td>$1,895</td>
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<tr>
<td>009</td>
<td>Marianna Lenoci, M.A., Lincoln Bynum, M.D., Peter Dubinsky, B.S., Siu Po Sit, Ph.D., and Kathleen Monroe, B.A., B.S., M.B.A.</td>
<td>Nov. 1 and 15 and Dec. 6 and 13</td>
<td>San Francisco: San Francisco Campus</td>
<td>$1,825</td>
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### 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 time lines.

**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

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<tr>
<td>009</td>
<td>Marianna Lenoci, M.A., Siu Po Sit, Ph.D., Karen A. Henry, M.P.H., Bonnie Miller, M.S., R.N., and Peter Dubinsky, B.S.</td>
<td>4 meetings</td>
<td>Saturdays, 9 am–5 pm</td>
<td>$1,825</td>
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<td>4 meetings</td>
<td>Saturdays, 9 am–5 pm</td>
<td>$1,825</td>
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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

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<td>Marianna Lenoci, M.A., Lincoln Bynum, M.D., Peter Dubinsky, B.S., Siu Po Sit, Ph.D., and Kathleen Monroe, B.A., B.S., M.B.A.</td>
<td>4 meetings</td>
<td>Saturdays, 9 am–5 pm</td>
<td>$1,825</td>
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### FULLY CUSTOMIZABLE COURSES

We can consult with you to better understand your workforce development needs and develop customized courses for your employees to improve productivity and retention. Your employees learn solutions and best practices that they can apply on the job right away.

For more information, visit extension.berkeley.edu/corporate.
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)

Learn More and View the Brochure
extension.berkeley.edu/cert/clinical.html
extension-science@berkeley.edu
(510) 642-1062

“I had been looking for work for a few months, and a classmate told me about the internship at her work,” Certificate Program in Clinical Research and Conduct graduate Jessica Kundapur recalls. “Her company was impressed with her and knew about the Extension certificate, so they trusted her opinion of me—and I started interning for them in November. In January, they offered me full-time employment.”
Life Sciences Business

COURSE INFORMATION

(510) 642-1062
extension-science@berkeley.edu
extension.berkeley.edu/sciences

FREE INFORMATION SESSIONS

Life Science Industries
Professional Certificate and Specialized Programs of Study

UNEX 1031
Attend a free, no-obligation event to learn about the wide variety of biomedical sciences programs available at UC Berkeley Extension. Meet instructors who can answer your questions about how these programs can help you in your biotech career. For details, see p. 163-171 or visit extension.berkeley.edu/cert/sciences.

Sec. 007
1 meeting
Thursday, 4–6 pm
Sept. 4
Berkeley: Golden Bear Center • FREE

Sec. 006
1 meeting
Monday, 4–6 pm
Dec. 15
San Francisco: San Francisco Campus • FREE

ONLINE INFORMATION SESSION

Professional Program in Life Sciences Business

Gain the knowledge in this professional program to start, develop, expand and operate a successful business in the life science industries. For details, see p. 167 or visit extension.berkeley.edu/spos/lifesciences_business.html.

Friday, 12–12:45 pm
Sept. 12
Online • FREE

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. Although 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 careers, 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, Federal Drug Administration (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 Kuficne, 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

Paul Cannon, Ph.D., combines knowledge of molecular diagnostics with more than 20 years of senior management experience in pharmaceutical R&D.

Linval DePass, Ph.D., DABT, is a toxicology expert with many years of experience in designing and conducting nonclinical trials necessary to determine safety levels of drugs in development.

P. Michael Dubinsky, has 24 years of experience working with the FDA and 13 years of experience in private industry, focusing on GXP compliance.

David Ellis, M.D., Ph.D., has extensive experience in designing and conducting clinical trials for many companies and has participated in filing of numerous IND and NDA applications.

Diane Gordon, Ph.D., is a registered pharmacist with 28 years of hands-on experience as an expert project manager leading numerous projects at Syntex and Roche.

Natalie McClure, Ph.D., has 30 years of experience in drug development and more than 20 years of experience in regulatory affairs.

Tom Moran, has been active in patent law since 1973. He consults and teaches after recently retiring from Foley and Larner, LLP.

M. Sue Preston has more than 25 years of experience in implementing novel regulatory and quality strategies for timely product approvals.

Emil Samara, Ph.D., has more than 20 years experience in pharmaceutical R&D, including work at the FDA.

Darwin Williams, M.S., has more than 20 years of experience as a quality management consultant specializing in GMP/GLP compliance and training.

Susan Wollowitz, Ph.D., has more than 20 years of experience in the discovery and development of pharmaceuticals and agricultural products.

Peter Working, Ph.D., has 30 years of experience in the biopharmaceutical industry, working in the areas of mechanisms of toxicity, nonclinical drug safety; pharmacokinetics and pharmacology.

Mary Alice Yund, Ph.D., Extension Honored Instructor, originated and leads the Bioscience Essentials for Industry Professionals course at UC Berkeley Extension.

Sec. 004
5 meetings
Monday–Friday, 9 am–5 pm
Oct. 13–17 (Monday meeting from 12–5 pm)
San Francisco: San Francisco Campus • $1,975

Breakfast, lunch and course materials are included in the course fee.
### 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 than those found in other industries and requires specialized knowledge and skills to navigate the unique regulatory path requirements, lengthy development times, expensive clinical trial process, Federal Drug Administration 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 a 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 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 subscription databases to assist in researching your term project. 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 and 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 16 years at Genentech Inc., Chiarenza became a regulatory affairs consultant. Prior to Genentech, she worked in quality with Abbott Laboratories and for three years, worked in the 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, director of Commercial Compliance & Government Programs at Compliance Implementation Services (CIS), 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 at 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. 003**

2 meetings
Thursday and Friday, 8:30 am–5 pm
Oct. 2–3
San Francisco: San Francisco Campus • $795
Life Sciences Business Development
BUS ADM X440.8 • 1 semester unit in Business Administration

A requirement in the Professional Program in Life Sciences Business

Develop an understanding of the critical role that business development and licensing functions play in the commercialization of new products and technology and to the development of a successful life science company. A term assignment gives you the opportunity to put the knowledge and materials from class to immediate and practical use.

Upon successful completion of the course, you should be able to:

- Understand the various aspects of the business development function in the life science industry and appreciate the skills required to be effective in business development and licensing roles.
- Distinguish types of deals and their role in commercialization strategies and company funding.
- Understand the importance of IP status and patent life-cycle planning.
- Appreciate the role of pricing and reimbursement in the commercial assessment of life science innovations that underlie deal valuations.

Who Will Benefit From This Course

This course is suitable for marketing and business development professionals as well as scientific professionals working in bioscience companies, especially those considering a career move into business development. Licensing, entrepreneurial, scientific, clinical, regulatory financial, legal and auxiliary personnel can also benefit from insights gained in the course. Although there are no formal prerequisites, those who have been exposed to the life science industry and The Drug Development Process: An Intensive Seminar PB HLTH 1023 can most benefit from the course.

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

Chris Dokomajilar, deal operations manager at Recap LLC, provides advisory services to clients in the life sciences, including biotech and pharmaceutical companies and legal and venture capital firms. His focus areas include alliances, mergers and acquisitions, financing, and pharmaceutical manufacturing. Topic: BioPharma Alliances: Trends in the Marketplace

Ginger Dreger, J.D., M.S., partner in Arnold & Porter LLP’s intellectual property practice group, concentrates her practice on counseling and providing strategic advice to emerging and established public companies in the biotechnology, medical device and pharmaceutical industries. Topic: What You Need to Know About Patents Working in Business Development

Harold (Hal) Etterman, M.B.A., CEO, Knight Financial Plans & Services, LLC, has more than 25 years of experience in finance, operations and information technology, including more than 10 years serving as a CFO, COO and interim CEO. Topic: Financial Planning and Funding for a Bioscience Venture: New, Emerging and Growing Entities

Carolyn Feamster, M.B.A., a business strategy and analysis consultant, has more than 25 years of experience in the pharmaceutical and biotech therapeutics, diagnostics and drug delivery systems. Topic: Preparing for and Planning Deals for Maximum Strategic Impact

Jessica L. Holmes, director of reimbursement for Argenta Advisors, has 20 years of experience in payer relations, government affairs, reimbursement strategy and tactical planning. She has worked for manufacturers in home infusion therapy, medical devices, biotechnology, capital equipment and diagnostics. Topic: Developing and Positioning Technology in the Evolving Health Care Reimbursement Landscape

Gilbert R. Mintz, Ph.D., is president of GRM Associates, a biotechnology business development, licensing, strategic planning consulting firm. He has expertise in building early-stage companies by focusing their strategic planning and licensing activities and raising money through venture capitalists. Topic: Working Your Way through the Bioscience Licensing Process: Negotiating and Writing the Deal Contract

Sec. 003
2 meetings
Wednesday and Thursday, 8:30 am–5 pm
Dec. 3–4
San Francisco: San Francisco Campus • $895
Project Management in the Life Science Industries

COURSE INFORMATION
(510) 642-1062
extension-science@berkeley.edu
extension.berkeley.edu/sciences

Project Management in the Life Science Industries

BUS ADM X478.5 • 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

Learn to apply project management processes to the design, planning, and phases of clinical development. Working individually and in teams, you develop a project management plan, including project operating guidelines compliant with Good Clinical Practices (GCP) and standard operating procedures (SOP). Examine clinical data management practices, and learn how to identify and analyze risks such as protocol deviation and adverse event reporting.

Sec. 003
Kathleen Monroe, B.A., M.B.A.
2 meetings
Friday and Saturday, 9 am–5 pm
Sept. 19–20
San Francisco: San Francisco Campus • $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. 003
Elie W. Asmar, M.S.E., CKM, PMP,
Extension Honored Instructor
2 meetings
Saturdays, 9 am–5 pm
Oct. 25 and Nov. 1
San Francisco: San Francisco Campus • $895

Certificate Program in Project Management

Acquire the skills to complete a high-quality project on task, on time and within budget. Most Extension project management courses apply toward professional development units (PDUs) recognized by the Project Management Institute (PMI).

See p. 107 for complete certificate details.

Convenient Locations in Berkeley, Belmont and San Francisco
extension.berkeley.edu/locations

Get Berkeley Quality Online
extension.berkeley.edu/online

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
- Project Management in Clinical Development BUS ADM X484.2 (offered this term)
- 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 Sciences Industry BUS ADM X484.5
- Best Practices in Project Management for the Life Sciences BUS ADM X484.6
- Project Management for Effective CMC Planning BUS ADM X484.7

Learn More and View the Flyer
extension.berkeley.edu/spos/project_lifesciences.html
(510) 642-1062
extension-science@berkeley.edu
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. The Professional Program in Quality and Compliance for Biotechnology reviews Good Pharmaceutical Practice (GXP) principles, procedural guidelines, FDA, and other regulations and ethical considerations. The comprehensive program prepares you for a career in quality assurance, quality control or compliance. The curriculum includes electives drawn from the related functional areas of clinical research, product and process development, manufacturing and supply chain, and regulatory affairs. Many of the required and elective 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 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
- Inspections and Audits for Quality and Compliance PB HLTH X401.5 (offered this term)
- Validation and Interfacing With Quality Assurance (QA) PB HLTH X401.8 (offered this term)

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

Learn More and View the Flyer
extension.berkeley.edu/spos/compliance.html
(510) 642-1062 extension-science@berkeley.edu

Regulatory Sciences

COURSE INFORMATION
(510) 642-1062
extension-science@berkeley.edu
extension.berkeley.edu/sciences

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. 002
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Sept. 13 and 20
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 Program 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. 003
Hossein Khoshkhoo, Ph.D.
4 meetings
Saturdays, 9 am–5 pm
Oct. 23–Nov. 15
Berkeley: Golden Bear Center • $875

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 quality assurance (QA) in the functional plants that make materials for clinical trials and commercial operations. Understand the role of QA in a functional Good Manufacturing Practices (GMP) plant.

Sec. 005
Peter Calcott, B.Sc., D.Phil.
4 meetings
Thursdays and Fridays, 9 am–5 pm
Sept. 25–Oct. 3
Berkeley: Golden Bear Center • $875

Inspections and Audits for Quality and Compliance
PB HLTH X401.5 • 1 semester unit in Public Health
A requirement in the Professional Program in Quality and Compliance for Biotechnology
Gain an understanding of the role quality assurance plays when interfacing with governmental regulatory bodies in day-to-day operations. You study the various regulatory elements and expectations—including audits, inspections, recalls and alerts—and learn how to implement them.

Sec. 004
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Aug. 23 and Sept. 6
Berkeley: Golden Bear Center • $575

For course and schedule information visit extension.berkeley.edu/catalog
Validation and Interfacing With Quality Assurance (QA)

PB HLTH X401.8 • 1 semester unit in Public Health

*An elective in the Professional Program in Quality and Compliance for Biotechnology*

Get an introduction to the principles of validation and the associated requirements defined by regulatory authorities. Study the validation regulatory elements and expectations and how they must be implemented for quality. Examine the role of quality assurance (QA) and how quality and compliance requires interfacing with QA.

Sec. 003
Peter Calcott, B.Sc., D.Phil.
2 meetings
Thursday and Friday, 9 am–5 pm
Nov. 6–7
Berkeley: Golden Bear Center • $575

Principles of Supply Chain and Manufacturing

PB HLTH X475.7 • 1 semester unit in Public Health

*An elective in the professional programs in Life Sciences Business, in Quality and Compliance for Biotechnology, and in Regulatory Affairs*

Study the principles of supply chain and the supply of materials for clinical trials and commercial sales. Master the regulations that must be followed, and understand how to implement them in operations to ensure compliance with the laws governing the biopharmaceutical industry.

Sec. 003
Peter Calcott, B.Sc., D.Phil.
2 meetings
Friday and Saturday, 9 am–5 pm
Dec. 5–6
Berkeley: Golden Bear Center • $575

Regulatory Affairs

Principles of Regulatory Affairs

PB HLTH X401.3 • 1 semester unit in Public Health

*An elective 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. 005
Ronald Carlson, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Sept. 13 and 20
Berkeley: Golden Bear Center • $575

Harmonization Across Worldwide Applications

PB HLTH X402.1 • 1 semester unit in Public Health

*An elective in the Professional Program in Regulatory Affairs*

Master the role of regulatory affairs in the successful licensure of products globally, including responsibilities and reporting relationships. Using case studies, learn to understand the similarities and differences in worldwide requirements for product licensure in the major markets and create a strategy for integrating the preparation for a timely, efficient submission.

Sec. 002
Linda Yang, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Sept. 27 and Oct. 4
Berkeley: Golden Bear Center • $575

Principles of Supply Chain and Manufacturing

PB HLTH X475.7 • 1 semester unit in Public Health

Study the principles of supply chain and the supply of materials for clinical trials and commercial sales.

For course schedule, see this page.
Mathematics and Statistics

COURSE INFORMATION
(510) 642-1061
extension-mathstat@berkeley.edu
extension.berkeley.edu/sciences

Mathematics

Mathematics Refresher
MATH 1003 • 2.8 ceu
Brush up on essential math skills, including selected topics in algebra, geometry, trigonometry, probability and statistics.

Sec. 005
Dieter Jurkat, M.S., Extension Honored Instructor
4 meetings
Saturdays, 9 am–5 pm
Sept. 13–Oct. 4
San Francisco: San Francisco Campus • $350

Math for Management
MATH X402 • 2 semester units in Mathematics
Fulfills the quantitative proficiency requirement for 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. 002
Steven Pon, Ph.D.
Enroll anytime
Online • Proctored final exam • $720

Analytic Geometry and Calculus-A
MATH XB16A • 3 semester units in Mathematics
An elective in the Post-Baccalaureate Health Professions Program

Fulfills the quantitative proficiency requirement for the Haas School of Business Evening and Weekend M.B.A. Program

Important: Special academic policies apply to XB and XBW courses. See p. 240 for details.

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. 004
Steven Pon, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Sec. 005
Merlin Miller, M.A.
Enroll anytime
Online • Proctored final exam • $860

Sec. 006
Dieter Jurkat, M.S., Extension Honored Instructor
11 meetings
Mondays, 6–10 pm
Sept. 18–Nov. 10 (also Saturday, Nov. 8, 9 am–3 pm)
San Francisco: San Francisco Campus • $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.

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. 002
Hillel Raz, Ph.D.
Enroll anytime
Online • Proctored final exam • $720

Calculus XiA
MATH XiA • 4 semester units in Mathematics
Fulfills the quantitative proficiency requirement for 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.

Prerequisites: Three-and-a-half years of high school mathematics, including trigonometry and analytic geometry

Sec. 004
Merlin Miller, M.A.
Enroll anytime
Online • Proctored final exam • $860

Sec. 005
Steven Pon, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Sec. 006
Hillel Raz, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Calculus XiB
MATH XiB • 4 semester units in Mathematics
This continuation of Calculus MATH XiA 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 XiA or equivalent

Sec. 004
Merlin Miller, M.A.
Enroll anytime
Online • Proctored final exam • $860

Sec. 005
Hillel Raz, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Sec. 006
Makan Rokni, Ph.D.
Enroll anytime
Online • Proctored final exam • $860
Self-Paced Classroom 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.

**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  
Three or more semester units in this course satisfy the quantitative proficiency requirement for the Haas School of Business Evening and Weekend M.B.A. Program.  
**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  
Three semester units in this course satisfy the quantitative proficiency requirement for the Haas School of Business Evening and Weekend M.B.A. Program.  
**Prerequisite:** Three-and-a-half years of high school math, including trigonometry and analytic geometry, or precalculus

**Calculus**

MATH X1A-S • 1–4 semester units in Mathematics  
Three or more semester units in this course satisfy the quantitative proficiency requirement for the Haas School of Business Evening and Weekend M.B.A. Program.  
**Prerequisite:** Calculus MATH X1A-S or MATH XB16A or equivalent

**Statistics**

**Introduction to Statistics**

STAT XB2 • XBW2 for online sections  
4 semester units in Statistics  
An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program

**Important:** Special academic policies apply to XB and XBW courses. See p. 240 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.

**Prerequisites:** Two years of high school algebra. A recent course in college algebra is recommended.

**Sec. 009**

Michael Quigley, Ph.D.  
15 meetings  
Mondays, 6–9:30 pm  
Aug. 18–Nov. 17 (also Thursdays, Aug. 21 and Sept. 11, 6–9:30 pm; no meeting on Sept. 1)  
San Francisco: Downtown Center • $720

**Sec. 010**

Dieter Jurkat, M.S., Extension Honored Instructor  
15 meetings  
Tuesdays, 6–10 pm  
Aug. 19–Nov. 25 (also Saturday, Nov. 22, 9 am–1 pm; no meeting on Nov. 11)  
San Francisco: Downtown Center • $720

**Sec. 008**

Guohua Pan, Ph.D.  
Enroll anytime  
Online, proctored final exam • $860

**Sec. 009**

Makan Rokni, Ph.D.  
Enroll anytime  
Online, proctored final exam • $860

**Sec. 010**

Dieter Jurkat, M.S., Extension Honored Instructor  
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?”
Technology and Information Management

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 analysis and decision making, business intelligence and information administration, databases and applications development, computer languages, operating systems, electrical engineering, and technology fundamentals.

NEW COURSES
Crunching Big Data in the Cloud: A Hands-On Introduction III—Power Tools, see p. 189
Web Startup Coding Workshop, see p. 186

Leadership, Systems and Technology Management 176
SAS, SPSS, Quantitative Analysis and Analytics 179
Business Intelligence and SAS Analytics 180
Quantitative Analysis 181
Data Administration 182
Microsoft Access Series 184
Open Source and Operating Systems 185
UNIX/Linux System Administration 185
Programming Languages and Object-Oriented Programming 186
Java 188
Virtual and Cloud Computing 188
Electrical Engineering 190
Smart Grid Technology 190
Integrated Circuit (IC) Design and Engineering 192
Leadership, Systems and Technology Management

**COURSE INFORMATION**

EL ENG X475.9 • 2 semester units in Electrical Engineering

Learn essential tools of innovation and marketplace success used by some of today's leading companies. Begin by understanding the product life cycle from a customer standpoint; then, learn how leaders pursue innovation and why while mitigating risk, anticipating customer needs, framing profitability with business models and changing internal work processes to enable faster market entry. Through interactive assignments, you learn how to evaluate innovation opportunities based on a set of critical success factors. In-class examples are taken from the technology industry and reflect product-launch considerations you encounter in the real world.

**Sec. 002**

Ronald Brown, M.B.A.

8 meetings

Tuesdays, 6–9:45 pm

Sept. 2–Oct. 21

Belmont: Belmont Center • $645

Moving Up to an IT Leadership Role

EL ENG X458.8 • 2 semester units in Electrical Engineering

This interactive framework-building course provides a suite of nine miniframeworks that you use to professionally overcome representative IT management issues that occur throughout the year. From RFPs to budgeting, improve your management efficiency and avoid costly errors with appropriate frameworks. The course is ideal for those climbing up the IT manager ranks at nontechnology companies where goods and services come first and technology is the enabler.

**Sec. 004**

Randall Chin, B.S.

8 meetings

Thursdays, 6:15–10 pm

Sept. 4–Oct. 23

San Francisco: San Francisco Campus • $575

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**FREE INFORMATION SESSIONS**

Post-Baccalaureate Certificate in Information Systems and Management

**UNEX 1055**

Meet UC Berkeley Extension instructors and staff members, and find out more about the direction of this certificate. An opening presentation is followed by a Q&A session. For details, see p. 177 or visit extension.berkeley.edu/cert/ism.html.

**Thursdays, Aug. 21, 12–1 pm**

**Online • FREE**

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.
Post-Baccalaureate Certificate in Information Systems and Management

Prepare yourself for a new career in the IT field. This rigorous curriculum combines theory and practice to give you a balanced mix of essentials 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 Requirements Analysis BUS ADM X438.1
- 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)
- Software Project Management BUS ADM X434
- Using the UNIX Operating System COMPSCI X415

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

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 curriculum to meet your needs.
- Study online or in the classroom.

Learn More and View the Brochure
extension.berkeley.edu/cert/ism.html
(510) 642-4151
extension-techeng@berkeley.edu
Maximizing a Restaurant’s Point of Sale System
EL ENG X456.3 • 2 semester units in Electrical Engineering
Modern point of sale (POS) systems have gained sophisticated capabilities and features as they have morphed into specialty enterprise management systems (EMS). Yet most restaurants utilize less than 50 percent of the profit-enhancing and cost-reducing capabilities of their modern POS systems. Learn how to gain the most value from a full POS system to improve productivity and increase profit margins. Determine the right POS system for your operation, and decide which features should be implemented. You emerge able to effectively manage the POS system, leverage reporting tools and enhance business profitability.

Sec. 001
Randall Chin, B.S.
8 meetings
Mondays, 6:15–10 pm
Oct. 27–Dec. 15
San Francisco: San Francisco Campus • $595

Understanding General IT Controls and Fraud
COMPSCI X411.3 • 1 semester unit in Computer Science
Gain an understanding of how to implement internal controls to keep business-information systems safe from hackers, identity thieves, corporate spies, malicious employees and competitors. Learn the basic requirements of Sarbanes-Oxley. Understand how to prevent unauthorized system access, ensure financial data protection, manage privacy and sensitive customer data, and develop adequate IT control policies and procedures. Course topics include designing an IT risk-assessment questionnaire, antifraud controls, effective logging and monitoring protocol, proper segregation of duties, physical security, and best practice controls required in implementing a new system. Throughout the course, you work in project teams to design solutions to real-life business cases.

Sec. 002
Harshavardhan K. Jadhav, M.B.A., CGMA, CIDA, CISA, CITP, CPA, CRISC, CRMA
5 meetings
Tuesdays, 6:30–9:30 pm
Nov. 18–Dec. 16
San Francisco: San Francisco Campus • $445

Advanced Applications for General IT Controls
COMPSCI X411.4 • 1 semester unit in Computer Science
Develop an understanding of IT audit risks, including the key system controls necessary to implement logical and privileged access, backup and recovery, problem and incident management, system development life cycle, third-party reliability, and change management. Work in teams to propose and design solutions to practical business scenarios. Pay particular attention to risks around data retention, managing changes in the system configuration, maintaining database integrity, data centers, end-user and super-user access controls, and continuous monitoring. You also examine the core concepts introduced in the control objectives for information and related technology toolset, enterprise risk management, IT security and control frameworks, penetration testing, and developing an IT control risk matrix.

Sec. 002
Harshavardhan K. Jadhav, M.B.A., CGMA, CIDA, CISA, CITP, CPA, CRISC, CRMA
5 meetings
Tuesdays, 6:30–9:30 pm
Nov. 18–Dec. 16
San Francisco: San Francisco Campus • $445

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. 008
Mark Angel, B.S., M.B.A., PMP
Sept. 9–Dec. 2
Online • $820

Sec. 009
Patrick McDermott, M.S.
6 meetings
Saturdays, 8:30 am–5 pm
Oct. 25–Dec. 6 (no meeting on Nov. 29)
Berkeley: Golden Bear Center • $845

Sec. 010
Hari Hirani, B.Tech., M.S.
6 meetings
Saturdays, 9 am–5 pm
Nov. 8–Dec. 20 (no meeting on Nov. 29)
Belmont: Belmont Center • $845

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
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 (ROI) analysis.

Sec. 008
Todd Landreneau, Ph.D., CHC, CPHQ
Sept. 9–Dec. 2
Online • $820
Certificate Program in Business Analysis
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.
See p. 65 for complete certificate details.

Professional Program in Business Process Management
Learn how to optimize business processes by blending traditional business and IT theories and practices.
See p. 70 for complete program details.

Strategies in Innovation and Technology
BUS ADM X413.5 • 1 semester unit in Business Administration
Examine past, current and future trends in innovation, and understand its effects on fund performances, policy initiatives and society.
For course schedule, see p. 90.

BPM A: Process Modeling and Analysis
BUS ADM X441.1 • 1 semester unit in Business Administration
Process modeling can be an extremely powerful diagnostic tool for your organization. Study the process-improvement key concepts and techniques and apply them to your own real-world situation.
For course schedule, see p. 70.

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.
For course schedule, see p. 64.

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. 64.

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.
For course schedule, see p. 64.

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 fits the business need. You also learn to identify gaps and shortcomings in solutions and determine necessary work-arounds or changes to the solution.
For course schedule, see p. 64.

SAS, SPSS, Quantitative Analysis and Analytics
COURSE INFORMATION
(510) 642-4151
extension-techeng@berkeley.edu
extension.berkeley.edu/technology

Programming With R
EL ENG X480.1 • 2 semester units in Electrical Engineering
Get an introduction to the R programming language for data manipulation, statistical analysis and graphics applications.
For course schedule, see p. 187.

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 that you need.
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. 005
Jianmin Liu, Ph.D.
9 meetings
Thursdays, 6–9:30 pm
Sept. 4–Oct. 30
San Francisco: San Francisco Campus • $945

Advanced Programming Using the SAS System

STAT X405.5 • 2 semester units in Statistics
A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software

Learn concepts of macro programming and SQL and various programming techniques in database construction and data manipulation. Macro programming in SAS significantly improves efficiency and is widely used in real-life scenarios and production environments.

Sec. 001
Jianmin Liu, Ph.D.
9 meetings
Tuesdays, 6–9 pm
Sept. 9–Nov. 4
San Francisco: San Francisco Campus • $945

Database Marketing and Data-Driven Customer Relationship Management (CRM)

BUS ADM X481.9 • 2 semester units in Business Administration

A requirement in the Professional Sequence in Business Intelligence and SAS Analytics Software; an elective in the Post-Baccalaureate Certificate in Information Systems and Management

Learn the most up-to-date technology and business intelligence role in database marketing and customer relationship management (CRM). Understand the central role that data mining plays in maximizing the profit of customers through acquisition, cross-selling, up-selling, customization, retention and win back. You also learn how data mining fits into direct marketing and CRM in practice.

Sec. 002
Jianmin Liu, Ph.D.
4 meetings
Saturdays, 9 am–5:30 pm
Nov. 1–22
San Francisco: San Francisco Campus • $725

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.
8 meetings
Tuesdays and Thursdays, 6–9:30 pm
Dec. 2–18 (also Wednesday, Dec. 10, 6–9 pm and Saturday, Dec. 20, 9 am–4 pm)
San Francisco: San Francisco Campus • $945

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, a skill that 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 (offered this term)
- 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 ADM X481.9 (offered this term)
- SAS Graphing and Output Delivery System (ODS) STAT X405.7
- SAS Techniques for Risk Management STAT X402
- Visual Data Discovery Using SAS Enterprise Code STAT X403

Learn More
extension.berkeley.edu/spos/sas.html
(510) 642-4151
extension-techeng@berkeley.edu
Quantitative Analysis

Quantitative Analysis: Using SQL

COMPSCI X407.1 • 1 semester unit in Computer Science

A requirement in the Professional Program 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.

You should bring a laptop that runs Windows XP, Windows 7 or Windows 8 to class.

Sec. 013
Can Gencer, B.S., M.S.
3 meetings
Thursday, 6:30–9:45 pm
Sept. 4 (also Saturday, Sept. 26, 8:15 am–5 pm and Friday, Oct. 17, 2–5:30 pm)
Belmont: Belmont Center • $445

Sec. 014
Can Gencer, B.S., M.S.
3 meetings
Thursday, 6:30–9:45 pm
Oct. 16 (also Fridays, Nov. 7, 2–5:30 pm and Saturday, Oct. 25, 8:15 am–5 pm)
Belmont: Belmont Center • $445

Sec. 015
Can Gencer, B.S., M.S.
3 meetings
Thursday, 6:30–9:45 pm
Oct. 2 (also Friday, Sept. 12, 2–5:30 pm and Saturday, Oct. 25, 8:15 am–5 pm)
Belmont: Belmont Center • $445

Sec. 016
Can Gencer, B.S., M.S.
3 meetings
Friday, 2–5:30 pm
Dec. 5 (also Thursday, Dec. 11, 6:30–9:45 pm and Friday, Dec. 12, 8:15 am–5 pm)
Belmont: Golden Bear Center • $445

Quantitative Analysis: Data Mining Using SQL

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.

You should bring a laptop that uses Windows 7 (64-bit) or Windows 8 to class.

Sec. 007
Can Gencer, B.S., M.S.
5 meetings
Fridays, 2–5:30 pm
Sept. 5 and Oct. 3 (also Saturdays, Sept. 20, Oct. 18 and Nov. 15, 8:15 am–5 pm)
Berkeley: Golden Bear Center • $625
Note: Nov. 15 class meeting held at Belmont Center

Sec. 008
Can Gencer, B.S., M.S.
6 meetings
Thursdays, 6:30–9:45 pm
Oct. 23–Nov. 20 (also Saturdays, Nov. 1 and 8, 8:15 am–5 pm; no meeting on Oct. 30)
Belmont: Belmont Center • $625

Sec. 009
Can Gencer, B.S., M.S.
5 meetings
Fridays, 2–5:30 pm
Oct. 29 and Nov. 22 (also Fridays, Nov. 8, 8:15 am–5 pm)
Belmont: Belmont Center • $625

Sec. 011
Can Gencer, B.S., M.S.
5 meetings
Fridays, 2–5:30 pm
Oct. 18 and Nov. 15, 8:15 am–5 pm
Belmont: Golden Bear Center • $625

Sec. 012
Can Gencer, B.S., M.S.
5 meetings
Fridays, 2–5:30 pm
Oct. 25 and Nov. 22 (also Fridays, Nov. 8, 8:15 am–5 pm)
Belmont: Belmont Center • $625

Sec. 013
Can Gencer, B.S., M.S.
5 meetings
Fridays, 2–5:30 pm
Oct. 30 and Nov. 22 (also Fridays, Nov. 8, 8:15 am–5 pm)
Belmont: Golden Bear Center • $625

Sec. 016
Can Gencer, B.S., M.S.
3 meetings
Friday, 2–5:30 pm
Dec. 5 (also Thursday, Dec. 11, 6:30–9:45 pm and Friday, Dec. 12, 8:15 am–5 pm)
Belmont: Golden Bear Center • $445
Data Administration

COURSE INFORMATION
(510) 642-4151
extension-techeng@berkeley.edu
extension.berkeley.edu/technology

Introduction to Big Data

COMPSCI X409.2 • 1 semester unit in Computer Science
Prepare to 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 contribute to in-class group discussions.

Sec. 004
Alakh Verma, M.S.
4 meetings
Mondays and Thursdays, 6–9:45 pm
Sept. 8–18
Belmont: Belmont Center • $445

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 unprecedented 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. 004
Alakh Verma, M.S.
4 meetings
Mondays and Thursdays, 6–9:45 pm
Oct. 6–16
Belmont: Belmont Center • $445

Introduction to Relational Database Management Systems

COMPSCI X409.1 • 2 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 and in the Specialized Program in Professional Writing

Learn effective relational database design, and receive a general overview of relational database management systems. 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. 005
Andrew Oppel, B.A.
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 2–Nov. 4
San Francisco: San Francisco Campus • $795

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
extension-techeng@berkeley.edu
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. 004
Andrew Oppel, B.A.
Enroll anytime
Online • Proctored final exam • $799

Managing Data(bases) Using SQL

EL ENG X401.9 • 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
Get in-depth training of the core Structured Query Language (SQL), with particular focus on Data Query Language (DQL) and Data Manipulation Language (DML), Data Definition Language (DDL) and Data Control Language (DCL) are also covered briefly. You learn the concepts of SQL through lectures and hands-on exercises. Additional class exercises, tests and projects further enhance your learning experience. Upon successful completion of the course, you are able to write and understand complex SQL statements and gain a basic understanding of database operations.

Sec. 004
Michael C. Kremer, M.S., Ph.D.,
Extension Honored Instructor
10 meetings
Thursdays, 6–9 pm
Sept. 4–Nov. 6
San Francisco: San Francisco Campus • $695

Introduction to MySQL and PHP

EL ENG X495.1 • 2 semester units in Electrical Engineering
A requirement in the Professional Program in Data Administration and Management
In this practical introductory course, discover why the combination of MySQL’s fast database speed and the ease 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. 004
Hans Yip, M.S.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 11–Nov. 13
Belmont: Belmont Center • $595

PostgreSQL Fundamentals

EL ENG X496.1 • 1 semester unit in Electrical Engineering
A requirement in the Professional Program in Data Administration and Management
PostgreSQL is the economical choice for firms requiring an industrial-strength database. PostgreSQL is a sophisticated ACID-compliant, object-relational database with most of the same enterprise-level capabilities as the major leading commercial vendors. Upon completion of the course, you gain a solid foundation in using and administering PostgreSQL to create high-speed, multimillion-record databases from data models as well as to construct SQL queries that underpin corporate reporting and decision support.

Sec. 002
Cameron Kimbrough, M.S.
5 meetings
Wednesdays, 6:30–9:30 pm
Nov. 12–Dec. 10
Berkeley: Golden Bear Center • $445

FREE PUBLIC EVENT
Current Topics in Cybersecurity

UNE 1240
The 21st century is characterized by the use of the Internet for our personal and professional daily lives. National security depends on a stable, safe and resilient cyberspace. We rely on this vast array of networks to communicate, socialize, network, travel, automate our homes, run the world economy, and provide many government programs and services. Unfortunately, cyber intrusions and attacks have increased dramatically over the last decade, exposing sensitive personal and business information, disrupting critical business operations, and disrupting economies. Get an overview of cyber security from multiple perspectives in this timely lecture.

Pratap Chillakanti, M.S., is founder of the consulting company GENI. He 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. Previously, Chillakanti was a training program manager at Hewlett-Packard and has held leadership roles on enterprise software development teams.

Sec. 001
1 meeting
Thursday, 6:30–9:30 pm
Oct. 9
San Francisco: San Francisco Campus
FREE
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
(510) 642-4151
extension-techeng@berkeley.edu

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. 003
Andrew Oppel, B.A.
10 meetings
Mondays, 6:30–9:30 pm
Oct. 13–Dec. 15
San Francisco: San Francisco Campus • $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. 005
Erick Ahrens, B.S., M.B.A.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 18–Nov. 20
San Francisco: San Francisco Campus • $645

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; advanced select queries and SQL sub queries; 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. 003
Michael C. Kremer, M.S., Ph.D.,
Extension Honored Instructor
5 meetings
Saturdays, 8:30 am–3:30 pm
Sept. 6–27 (also Monday, Oct. 13, 12–6 pm)
San Francisco: San Francisco Campus • $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 that 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. 003
Michael C. Kremer, M.S., Ph.D., Extension Honored Instructor
5 meetings
Saturdays, 8:30 am–5:30 pm
Nov. 8–Dec. 13 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $695

Open Source and Operating Systems

UNIX/Linux System Administration

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. 005
Marcelo J. Carvalho, M.A.
4 meetings
Saturdays, 8:30 am–5 pm
Sept. 6–27
Berkeley: Golden Bear Center • $895

UNIX/Linux System Administration Programming: Shell, C and Perl
EL ENG X426.1B • 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 are issued to you by the second class meeting.

Sec. 004
Marcelo J. Carvalho, M.A.
4 meetings
Saturdays, 8:30 am–5 pm
Oct. 4–25
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 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 operating system externals and command interfaces, access to a UNIX or Linux system

Sec. 004
Instructor to be announced
5 meetings
Saturdays, 9 am–4 pm
Sept. 6–Oct. 4
San Francisco: San Francisco Campus • $795

UNIX/Linux System Administration II: Networking
EL ENG X420.8 • 2 semester units in Electrical Engineering

Get an introduction to the TCP/IP Protocol suite, and examine its different layers and protocols. Examine theory and application in depth. 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. 005
Ronald Petty, M.B.A., M.S.
10 meetings
Mondays, 6:30–9:30 pm
Oct. 6–Dec. 15 (no meeting on Oct. 13)
San Francisco: San Francisco Campus • $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. 004
Kari Ujanen
10 meetings
Mondays, 6:30–9:30 pm
Sept. 15–Nov. 17
San Francisco: San Francisco Campus • $695

UNIX/Linux System Administration Capstone: Case Studies
EL ENG X462.3 • 2 semester units in EECS
This course exposes you to real-world scenarios that occur in the practice of system administration. Gain hands-on experience building a computer from components, installing and configuring an operating system, setting up a network connection and related services, properly securing a system, documenting system configuration, installing and configuring third-party applications (Apache, Perl, MySQL and PHP), troubleshooting problems, and recovering from a disaster.

Prerequisites: All other courses in the discontinued Certificate Program in UNIX/Linux System Administration curriculum

Sec. 002
Marcelo J. Carvalho, M.A.
8 meetings
Thursdays, 6:15–10 pm
Sept. 4–Oct. 23
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. 004
Marcelo J. Carvalho, M.A.
8 meetings
Tuesdays, 6:15–10 pm
Sept. 2–Oct. 21
Berkeley: Golden Bear Center • $695

Programming Languages and Object-Oriented Programming

NEW THIS TERM
Web Startup Coding Workshop
BUS ADM 1094 • 0.8 ceu
Practice introductory programming techniques with HTML, CSS, JavaScript, PHP and .NET to build your Web startup application. Learn about programming using basic languages and frameworks, choosing a technology stack, understanding new technologies in Silicon Valley, and tackling common issues when hiring developers. Gain an understanding of the mobile space, including marketplace considerations and design and development of a mobile app. Determine which content management system is most suitable for your project, and learn to implement and use it effectively.

Sec. 001
Allan Chao, B.A.
1 meeting
Saturday, 8:30 am–5 pm
Sept. 13
San Francisco: San Francisco Campus • $425

Building Web Applications Using ASP.Net, AJAX and JavaScript
EL ENG X428.7 • 2 semester units in EECS
An elective in the Professional Program in Data Administration and Management
Learn to develop ASP.net Web applications using Visual Web Developer Express (part of Microsoft Visual Studio). Get a solid introduction to Web applications and the ASP.net structure. Explore C# as a programming language for server-side processing, JavaScript for client-side processing and AJAX technologies in great detail. Continue into ADO.net and programming custom data access methods. Then, combine these new skills into a sample Web application that accesses a database. Advanced topics include cloud computing, security and forms authentication.

Sec. 003
Michael C. Kremer, M.S., Ph.D., Extension Honored Instructor
10 meetings
Tuesdays, 6–9 pm
Sept. 30–Dec. 16 (no meetings on Nov. 11 and 25)
San Francisco: San Francisco Campus • $695

Convenient Locations in Berkeley, Belmont and San Francisco
extension.berkeley.edu/locations

Get Berkeley Quality Online
extension.berkeley.edu/online
First Course in Android Application Programming
EL ENG X422.9 • 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 programmers, and developers who would like to program Android mobile devices gain a comprehensive understanding of the Android platform architecture and Software Development Kit (SDK).

Sec. 002
Lalitha Krishnamurthy, M.S.
5 meetings
Saturdays, 9 am–4 pm
Nov. 15–Dec. 20 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $645

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, Internet resources. Java programmers, and developers who would like to program Android mobile devices gain a comprehensive understanding of the Android platform architecture and Software Development Kit (SDK).

Sec. 002
Lalitha Krishnamurthy, M.S.
5 meetings
Saturdays, 9 am–4 pm
Nov. 15–Dec. 20 (no meeting on Nov. 29)
San Francisco: San Francisco Campus • $645

Introduction to C Language Programming
EL ENG 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 its fundamental programming concepts. Gain the knowledge to write simple C language applications and undertake future 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 concepts is helpful.

Sec. 002
Robert Adams, M.S.
Enroll anytime
Online • Proctored final exam • $595

C++ Programming I
EL ENG X421.1 • 2 semester units in Computer Science
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 EL ENG X24 or reasonable knowledge of the C programming language, including familiarity with C data types, structures and arrays; decision and looping constructs; use of pointers; and defining and invoking functions. Access to a C++ compiler is required.

Sec. 003
Robert Adams, M.S.
Enroll anytime
Online • Proctored final exam • $715

C# Programming I
EL ENG X444.3 • 1 semester unit in Computer Science
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. 003
David Gewirtz, B.S.
Enroll anytime
Online • Proctored final exam • $595

Programming With R
EL ENG X480.1 • 2 semester units in Electrical Engineering
Get an introduction to the R programming language for data manipulation, statistical analysis and graphics applications. Thousands of libraries or packages are available for everything from time-series analysis and machine learning to data visualization. As a result, R is rapidly becoming the language of choice for engineers, scientists, researchers and business analysts who engage in data preparation and analysis and generate high-quality typographical and graphical results.

Sec. 005
Allan Miller, Ph.D.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 3–Nov. 5
Berkeley: Golden Bear Center • $645

Introduction to Perl Programming
EL ENG X416.7 • 1 semester unit in Computer Science
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. 005
Carl Limuscio, B.A., Certified Java Programmer
Enroll anytime
Online • $595
Python Programming
EL ENG X442.3 • 1 semester unit in Computer Science
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Python, an open-source scripting language that allows rapid application development of both large and small software systems, is object oriented by design and provides an excellent platform for learning the basics of language programming. Learn this language, ideal for team projects, that provides access to databases, CGI programming, system administration and other useful services.
Although no previous programming experience is required, you must have access to a computer running Python or access to the Internet to download Python.

Sec. 003
Carl Limsico, B.A., Certified Java Programmer
Enroll anytime
Online • Proctored final exam • $595

PHP Programming for the Web
EL ENG 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 of disk space, MySQL and PHP. In general, most Web hosts offer workable sites. Free PHP Web-hosting options are also available.

Sec. 002
Robert Adams, M.S.
Enroll anytime
Online • $595

Introduction to MySQL and PHP
EL ENG X495.1 • 2 semester units in Electrical Engineering
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.
For course schedule, see p. 183.
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 (offered this term)
- Cloud Computing: Systems Engineering and Analysis EL ENG X422.5 (offered this term)
- Cloud Deployment EL ENG X422.3
- Cloud Deployment EL ENG X422.1
- Optimizing Cloud Computing for Profitability EL ENG X421.3
- 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
techeng@berkeley.edu

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. 006
Alakh Verma, M.S.
12 meetings
Mondays and Thursdays, 9–9:45 pm
Oct. 20–Dec. 7 (no meeting on Nov. 7)
Berkeley: Golden Bear Center • $475

Crunching Big Data in the Cloud: A Hands-On Introduction I

COMPSCI X459.8A • 1 semester unit in Computer Science

Got massive data sets or long-running jobs? Need to gain insight from large-scale data? Learn the tools and techniques that easily tame today’s big data/big computer problems. Learn how to select the best toolkit for the problem at hand. This introductory course, first of a three-part series, focuses on Apache Hadoop as the engine that can help solve large scale problems. You get hands-on experience with cloud computing and map/reduce in the process of working on the Hadoop-based class project.

Sec. 002
Dima Rekesh, Ph.D.
2 meetings
Sundays, 9 am–5 pm
Sept. 7 and Sept. 21
Berkeley: Golden Bear Center • $475

Crunching Big Data in the Cloud: A Hands-On Introduction II—Performance

COMPSCI X459.8B • 1 semester unit in Computer Science

Get hands-on experience with Apache Hadoop, its configuration options and performance aspects in the process of working on a bioinformatics class project. Learn how to quickly write jobs for Hadoop. Finally, get an introduction to Pig, a higher-level language that can further increase your productivity while analyzing big data using Hadoop. Part two of a three-part series, this course focuses on Hadoop as the engine that is most commonly used to solve big data problems.

Sec. 002
Dima Rekesh, Ph.D.
2 meetings
Sundays, 9 am–5 pm
Oct. 5 and 19
Berkeley: Golden Bear Center • $475

Crunching Big Data in the Cloud: A Hands-On Introduction III—Power Tools

COMPSCI X459.8C • 1 semester unit in Computer Science

Study Apache Map Reduce–powered Zookeeper and HBase as well as Platform Computing Map Reduce and High Performance Computing management systems. You get hands-on experience with power tools of Map Reduce and HPC technologies in the process of working on a class project in the area of predictive analytics in the cloud. This introductory course is the last part of a three-part series.

Prerequisites: Ability to program in at least one programming language such as Java. Familiarity with Linux and shell(s), as well as general familiarity with the Internet programming models. Hands-on familiarity with cloud computing and Apache Hadoop. You must bring a laptop running a popular Linux distribution, a Mac or an English version of Windows. Tablets or Chromebooks are not sufficient. We recommend that you have experience with high school-level statistics.

Sec. 001
Dima Rekesh, Ph.D.
2 meetings
Saturdays, 9 am–5 pm
Oct. 25 and Nov. 8
Berkeley: Golden Bear Center • $475

Building Your Private Cloud With Linux

EL ENG X422.7 • 2 semester units in Electrical Engineering

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.

For course schedule, see p. 186.
Electrical Engineering

COURSE INFORMATION
(510) 642-4151
extension-techeng@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. 002
Kwang-Pill Sung, M.S.
8 meetings
Wednesdays, 6:15–10 pm
Aug. 27–Oct. 15
Belmont: Belmont Center • $595

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, IOS, 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. 004
Kwang-Pill Sung, M.S.
8 meetings
Wednesdays, 6:15–10 pm
Oct. 22–Dec. 10
Belmont: Belmont Center • $595

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.

Fundamentals of Data Communications and Networking
COMPSCI X433 • 2 semester units in Computer Science

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. 002
Ching-Cheng Lee, Ph.D.
Enroll anytime
Online • $715

Smart Grids 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 practicalities points of view. Discover the evolution of today's power distribution grid and the potential benefits from dynamically applying intelligence for improved efficiencies. This course lays a solid technical foundation for business professionals and a contemporary overview for technical staff; it is ideal for proposal staff, product developers, system managers and urban planners.

Sec. 004
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
Oct. 4 and 11
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. 003
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
Nov. 1 and 8
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, 8:30 am–5 pm
Nov. 15 and 22
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. 004
Michael Hsieh, Ph.D.
2 meetings
Saturdays, 8:30 am–5 pm
Dec. 6 and 13
Belmont: Belmont Center • $475

FIVE WAYS TO ENROLL

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3. Mail:
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4. Purchase Order: (510) 642-3910
5. In Person: At Golden Bear Center,
   1995 University Ave., Berkeley
Integrated Circuit (IC) Design and Engineering

COURSE INFORMATION

(510) 642-4151
techeng@berkeley.edu
extension.berkeley.edu/technology

Semiconductor Devices for IC Design
EL ENG X138 • 2 semester units in Electrical Engineering
(Formerly Semiconductor Devices for Integrated Circuit Design)
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Fundamental Analog ICs
EL ENG X139 • 2 semester units in Electrical Engineering
(Formerly Advanced Analog Microelectronics)
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

IC Filters and Oscillators
EL ENG X140 • 2 semester units in Electrical Engineering
(Formerly Fundamentals of Analog Integrated Circuit Design Techniques)
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 circuits. 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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Analog IC Design
EL ENG X141 • 2 semester units in Electrical Engineering
(Formerly Advanced Design Techniques for Analog Integrated Circuits)
A requirement in the Certificate Program in Integrated Circuit Design and Techniques
Advances in signal processing, analog-to-digital conversion and the continued scaling down of complementary metal-oxide semiconductor (CMOS) nanotechnology have ushered in the era of analog IC design with multistandard challenges. Topics include stability of feedback, frequency compensation, multistage operational amplifiers (op-amps) and optimized CMOS op-amp designs. Prepare to work on a design project to meet a required product specification. The scope of the project covers design of an advanced CMOS op-amp and of high-performance CMOS comparators for flash analog-to-digital converter (ADC) applications.

Sec. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Introduction to Microelectronic Circuits
EL ENG X30 • 1 semester unit in Electrical Engineering
(Formerly Introduction to Microelectronic Theory and Applications)
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265
Certificate Program in Integrated Circuit Design and Techniques

The online Certificate Program in Integrated Circuit Design and Techniques provides in-depth knowledge in a convenient online format designed for working professionals. Develop an understanding of key concepts in state-of-the-art design, including semiconductor characteristics; semiconductor device modeling; and analog, digital and mixed-signal integrated circuit (IC) design. 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 IC Design EL ENG X138 (offered this term)
- Fundamental Analog ICs EL ENG X139 (offered this term)
- IC Filters and Oscillators EL ENG X140 (offered this term)
- Analog IC Design EL ENG X141 (offered this term)

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

Find the Quality You Want
- Preparation to begin or advance a career in the semiconductor industry
- Instructors approved by UC Berkeley
- Academic curriculum with professionally relevant courses

Get the Flexibility You Need
- Online convenience
- Optional Mandarin sound tracks

Learn More and View the Brochure
extension.berkeley.edu/cert/icdesign.html
(510) 642-4151
extension-techeng@berkeley.edu
Introduction to Semiconductor Devices
EL ENG X32 • 1 semester unit in Electrical Engineering
(Formerly Introduction to Physics of Semiconductor Devices)
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Semiconductor IC Amplifiers
EL ENG X33 • 1 semester unit in Electrical Engineering
(Formerly Fundamentals of Analog Microelectronic Techniques)
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Digital ICs
EL ENG X34 • 2 semester units in Electrical Engineering
(Formerly Digital Integrated Circuit Design)
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Computer Simulation of Electronic Circuits
EL ENG X405 • 1 semester unit in Electrical Engineering
(Formerly Effective SPICE Circuit Simulation Techniques)
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-transconducance bias; advanced comparators; and sequential digital circuits, such as master-slave DFFs and C2MOS latches.

Sec. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Fundamentals of Modern Data Converter Design
EL ENG X326 • 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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

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 0.8GSPS 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. 002
Vincent Chang, Ph.D.
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Accelerated, In-Depth Intensive Workshops for Managers

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- Leadership Excellence
- Program Management

Contact us to learn more or discuss custom programs for your location.

extension.berkeley.edu/corporate
(510) 664-4005
Although Nina Tunac Basey works with language—as a freelance Spanish editor and translator—she’s most interested in developing stories. “I’ve always wanted to write; it’s a dream of mine,” Tunac Basey says. “Writing is really tough and competitive, and the Post-Baccalaureate Certificate Program in Writing is a great way to see if I have what it takes.”

Tunac Basey credits the Extension instructors with encouraging her to find that inner writer and strive for success. “I’ve been really impressed with them, especially Lindsey Crittenden,” she says. “If something’s not working in a piece, she’ll give great constructive feedback and support.”

By molding each class assignment to become another chapter in her work-in-progress memoir, Tunac Basey is honing her craft while gaining self-assurance in her talent. A few courses from completing the certificate, Tunac Basey plans to continue taking Extension courses to keep her memoir on track. “That’s what I love about this program,” she says. “The classes provide structure and deadlines, so I’m able to get my memoir done.”
Your path to grow 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 COURSES

Be Heard Above the Noise: How to Stand Out in Social Media, see p. 202
Developing the Memoir II, see p. 206
Embedded Indexing and Indexing of E-Books, see p. 200
How to Run a Freelance Editing Business, see p. 198
Poetry Generation Workshop, see p. 202
The Reviewer’s Craft: Reading and Writing Book Reviews, see p. 207
So You Want to Write, see p. 201
Story Structure Workshop: Scene, Character, Dialogue, see p. 204
Writing Dynamic Speeches and Presentations, see p. 207
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. 022
Amanda Kaufmann, M.A.
Sept. 9–Dec. 2
Online • $645

Sec. 026
David Kudler, M.F.A.
10 meetings
Tuesdays, 7–10 pm
Sept. 16–Nov. 25 (no meeting on Nov. 11)
Berkeley Campus: 100 Wheeler Hall • $595

Sec. 023
Diane Martin, M.A.
Sept. 16–Dec. 9
Online • $645

Sec. 024
Barbara Magalnick, M.S.
Sept. 23–Dec. 16
Online • $645

New This Term

How to Run a Freelance Editing Business

UNEX 1232 • 0.4 ceu

Learn to translate your editing skills into a thriving business. Study the basics of building a successful freelance practice, including office setup, client retention, fees and tax documentation. Explore vital business topics you may not have considered before, such as defining your scope of work, dealing with difficult clients and choosing a cost-effective employment model. This comprehensive workshop is designed specifically for professional-minded editors.

Sec. 001
David Couzens, M.S., and
Jill O’Nan, M.A., J.D.
1 meeting
Saturday, 1–5 pm
Dec. 6
Berkeley: Golden Bear Center • $195
**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

<table>
<thead>
<tr>
<th>Sec. 018</th>
<th>Cathleen Small, B.A., M.A.</th>
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<tr>
<td>Sept. 9–Dec. 2</td>
<td>Online • $645</td>
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<tr>
<th>Sec. 019</th>
<th>Lisa Carlson, B.A.</th>
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<tr>
<td>Tuesdays, 6:30–9:30 pm</td>
<td>9 meetings</td>
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<tr>
<td>Sept. 16–Nov. 25 (no meeting on Nov. 11)</td>
<td>Berkeley Campus: 206 Wheeler Hall • $595</td>
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<tr>
<th>Sec. 017</th>
<th>Beth Burke, B.S., M.A.</th>
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<tr>
<td>Sept. 16–Dec. 9</td>
<td>Online • $645</td>
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<tr>
<th>Sec. 016</th>
<th>Leda Ciraolo, Ph.D.</th>
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<tr>
<td>Sept. 23–Dec. 16</td>
<td>Online • $645</td>
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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.

**Prerequisite:** Editorial Workshop I: Introduction to Copyediting JOURN X405

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<tr>
<th>Sec. 010</th>
<th>Lisa Carlson, B.A.</th>
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<td>Sept. 9–Dec. 2</td>
<td>Online • $645</td>
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<tr>
<th>Sec. 009</th>
<th>Leda Ciraolo, Ph.D.</th>
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<tr>
<td>Sept. 23–Dec. 16</td>
<td>Online • $645</td>
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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 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 II: Intermediate Copyediting JOURN X415

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<tr>
<th>Sec. 009</th>
<th>Gail Hynes Shea, B.A.</th>
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<td>Sept. 9–Dec. 2</td>
<td>Online • $645</td>
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<tr>
<th>Sec. 010</th>
<th>Gail Hynes Shea, B.A.</th>
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<tr>
<td>Saturdays, 10 am–1 pm</td>
<td>10 meetings</td>
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<tr>
<td>Sept. 13–Nov. 15</td>
<td>Berkeley Campus: 109 Wheeler Hall • $595</td>
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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.

**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, this 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  
extension-letters@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 (offered this term)

Electives

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

Learn More
extension.berkeley.edu/pos/techcom.html
(510) 642-4151
extension-techeng@berkeley.edu

NEW THIS TERM
Embedded Indexing and Indexing of E-Books

JOURN X477.1 • 3 semester units in Journalism
Publishers often require indexers to embed index entries into the text files of their books because of the prevalence of digital publishing and the need to quickly get books to press. Discuss current industry demands and speculate about future developments. Learn to embed index entries into documents using various software programs and file formats, including Microsoft Word, Adobe FrameMaker and InDesign, XML, ePub, and Mobi. Learn to install and use add-on tools in indexing programs to be more efficient and to broaden your skill set. Practice embedding index entries into Web and intranet pages.

Prerequisite: Indexing: Theory and Application JOURN X477 or experience as a professional indexer

Sec. 001
Kevin A. Broccoli
Enroll anytime
Online • $695

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 website for details.

See website for available section number
This course has five rotating sections with varying instructors: Sylvia D. Coates, Heather Ebbs, Fred Leise, Max McMaster and Ruth Pincoce.
Enroll anytime
Online • $695

Technical Communication

COURSE INFORMATION
(510) 642-4151
techeng@berkeley.edu
extension.berkeley.edu/writing

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

Technical Writing
ENGLISH 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. 002
John Tabor, B.A.
Enroll anytime
Online • $770

Technical Communication I
JOURN X465 • 2 semester units in Journalism
A requirement in the Professional Sequence in Technical Communication

Learn the requirements for designing and developing technical documentation from start to finish. As you develop your class project, practice how to define your audience and purpose, determine appropriate document format and style, improve the clarity and organization of your writing, and review and edit your work more effectively. Learn about teamwork, oral communication and presentation skills that can increase your success in the technical communication field.

Prerequisites: Basic computer literacy, word processing skills and good writing skills, including knowledge of correct grammar, usage and punctuation. Students who need a grammar review should take Grammar, Mechanics and Usage for Editors ENGLISH X445 before enrolling in this course.

Sec. 003
Linda Urban, M.S., Extension Honored Instructor
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 25–Dec. 4 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $695
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 technology, as well as current Web content and formatting languages.

Prerequisites: Technical Communication I JOURN X465 (or the online course Technical Writing ENGLISH X412), or equivalent

Sec. 003
John Tabor, B.A.
Enroll anytime
Online • $550

Writing

COURSE INFORMATION
(510) 642-6362
text.letters@berkeley.edu
text.berkeley.edu/writing

ONLINE COURSE INFORMATION
(510) 643-4957
text.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. 203 or visit extension.berkeley.edu/cert/writing.html.

Thursday, Sept. 4, 12–12:45 pm
Online • FREE

Sec. 003
1 meeting
Wednesday, 6–8 pm
Sept. 10
Berkeley: Golden Bear Center • 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. 004
David Rompf, J.D.
Sept. 16–Dec. 9
Online • $575

NEW THIS TERM
So You Want to Write
UNEX 1231
Whether you are engaged in an ongoing writing project or have always wanted to write, this one-day workshop provides stimulation and concentration. Explore writing activities that connect you to your passion and voice as you experiment with exercises designed to push your writing to the next level. Use techniques as diverse as meditation and guided visualization, writing prompts, Gestalt exercises and self-dialogue to explore all facets of the writing process. Learn what it takes to find, implement and sustain a regular writing routine, opening the door to the infinite possibilities of your own writing. Enrollment is limited.

Sec. 001
Jane Staw, M.F.A., Ph.D.
1 meeting
Saturday, 10 am–5 pm
Sept. 13
Berkeley: Golden Bear Center • $195

Open Admissions Policy
Take a course just for fun! You may enroll in individual courses without registering for a certificate or specialized program of study.

Courses available without prerequisites in creative and nonfiction writing.
**NEW THIS TERM**

**Be Heard Above the Noise: How to Stand Out in Social Media**

UNEX 1233 • 0.6 ceu

Create a strong, recognizable online presence by fine-tuning your message and receiving feedback from your instructor, fellow students and guest media strategists. In the first half of the workshop, discuss how to create compelling, concise and conversationally content for social media platforms: blogs, websites, Facebook and Twitter. Study high-traffic blogs and group-member posts to analyze what makes a post memorable and marketable. In the afternoon, you work with visiting industry experts, who offer feedback on your posts while discussing vital media marketing strategies for reaching your intended audience, increasing views and traffic, creating enticing content and turning blogs into books.

You are invited to submit a blog post by Oct. 15 to discuss in class. Submissions should be 300–500 words. Work brought on the day of the workshop is reviewed if time permits.

For more details about how to submit your writing, contact the Writing Program: extension-letters@berkeley.edu or (510) 642-6962.

Sec. 001
Elizabeth Fishel, Extension Honored Instructor
1 meeting
Saturday, 10 am–5 pm
Oct. 25
Berkeley: Golden Bear Center • $195

**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. *Enrollment is limited.*

Sec. 011
David Rompf, J.D.
Sept. 16–Dec. 9
Online • $575

Sec. 013
Daniel Cashnear, M.F.A.
10 meetings
Wednesdays, 6:30–9:30 pm
Sept. 17–Nov. 19
Berkeley Campus: 100 Wheeler Hall • $575

Sec. 012
Enrich Miller, M.F.A.
Sept. 23–Dec. 16
Online • $575

**The Craft of Reading**

ENGLISH X429 • 2 semester units in English

*A requirement 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, 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. 004
Audrey Ferber, M.F.A.
10 meetings
Mondays, 6:30–9:30 pm
Sept. 15–Nov. 17
San Francisco: Art and Design Center • $575

Sec. 003
Marc Schiffman, M.F.A.
Sept. 16–Dec. 9
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. 006
Marc Schiffman, M.F.A.
Sept. 16–Dec. 9
Online • $575

Sec. 007
Susan Ito
10 meetings
Mondays, 6:30–9:30 pm
Sept. 8–Nov. 10
Berkeley: Golden Bear Center • $575

**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. 003
Tom Parker, M.A.
10 meetings
Thursdays, 7–10 pm
Oct. 9–Dec. 18 (no meeting on Nov. 27)
San Francisco: San Francisco Campus • $575

**NEW THIS TERM**

**Poetry Generation Workshop**

ENGLISH X486 • 1 semester unit in English

When generating new poems, both beginning and experienced writers can fall into the habit of returning to the same well rather than seeking out new watersheds. Explore multiple techniques for generating poems and drawing new material from existing work. Try new methods for initiating, guiding and expanding drafts, and workshop poems-in-progress with an eye to further invention. You emerge with 12 to 15 new drafts, a collection of tools for generating new material, and a host of critical skills for use in workshop and one-on-one critique.

Sec. 001
Lisa Gluskin Stonestreet, M.F.A.
6 meetings
Thursdays, 6:30–9:30 pm
Oct. 2–Nov. 6
Berkeley: Golden Bear Center • $395
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 8 courses for a minimum of 16 semester units (240 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 Reading
  ENGLISH X429 (offered this term)
- 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.

Learn More and View the Brochure
extension.berkeley.edu/cert/writing.html
(510) 642-6362
extension-letters@berkeley.edu

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!”
Professional Writing

Writing well and communicating effectively are critical skills that are in demand. Whether you are writing a business proposal, fund-raising letter, ad copy, feature story or blog, strong, persuasive writing is 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 X106.3 (offered this term)
- Introduction to Public Relations Writing JOURN X481 (offered this term)
- Fundamentals of Freelancing ENGLISH 1004
- 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
extension-letters@berkeley.edu

Flash Fiction: the Power of the Short Form
ENGLISH X106.3 • 2 semester units in English
(Formerly Writing the Short Form: Flash Fiction, Prose Poetry and Prose Fiction)

An elective in the Post-Baccalaureate Certificate Program in Writing
Flash fiction, long hidden away in small journals, has come into its own through a myriad of online publications connecting writers with readers. Its brevity has allowed writers to understand their unique visions—always greater than the sum of individual sentences. Study this form, ranging from one sentence to 1,000 words, as you create an urgent and immediate experience for your reader. Discuss and analyze a variety of flash fiction, including the 100-word story, the compressed narrative and the fable. Explore the writing techniques of flash fiction authors as you discover the writing styles best suited to your interests, voice and passion. This course is suitable for all writers, including cross-genre poets, novelists and short-story writers. The last session is an all-day workshop with guest authors who publish flash fiction, as well as novels.

Sec. 001
Thaisa W. Frank
9 meetings
Thursdays, 7–10 pm
Oct. 2–Nov. 20 (also Saturday, Nov. 22, 10 am–4 pm)
Berkeley Campus: 109 Wheeler Hall • $575

NEW THIS TERM

Story Structure Workshop: Scene, Character, Dialogue
ENGLISH X465.7 • 2 semester units in English

NEW THIS TERM

Great Novels You Always Meant to Read
ENGLISH X467 • 2 semester units in English

Develop the skills as a poetry reader and writer by examining the work of influential women poets from the past 50 years, from Elizabeth Bishop and Sylvia Plath to those writing today.

For course schedule, see p. 140.
From Twain to Litquake:
A Literary Guide to San Francisco

ENGLISH X484 • 2 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing

The San Francisco Bay Area has been home to some of the most original and innovative authors in fiction, nonfiction and poetry. The tradition started with Mark Twain and Bret Harte, continued with William Saroyan and John Steinbeck, and took firm hold with Beat poets such as Jack Kerouac and Allen Ginsberg. This collective outpouring of creativity continued well into the 1990s, inspiring Jack Boulware and Jane Ganahl to create Litquake in 1999, hailed as one of the most significant literary festivals on the West Coast.

In this course, you examine the Bay Area’s literary traditions from past to present, through close readings and discussions of famous local writers. Renowned authors Ianthe Brautigan and Ishmael Reed read from their works. At the final class meeting, Jack Boulware provides his perspective on this year’s Litquake festival, including insider information for participants.

Sec. 002
10 meetings
Tuesdays, 6:30–9:30 pm
Sept. 16–Nov. 25 (no meeting on Nov. 11)
San Francisco: Art and Design Center • $575

Laurie Ann Doyle 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. She teaches writing at UC Berkeley, co-hosts San Francisco’s eclectic reading series Babylon Salon, and is hard at work on a book of stories touching on love, death and a few points in between.

Jack Boulware, executive director and co-founder of Litquake; author/co-author of three books including the Bay Area punk history Gimme Something Better.

Ianthe Brautigan lives and teaches in the wine country with her husband, Paul. Her memoir You Can’t Catch Death has been optioned by a major motion picture company.

Ishmael Reed, MacArthur Fellowship recipient, is the author of more than twenty titles, including Going Too Far: Essays About America’s Nervous Breakdown.

UNEX 1106
UC Berkeley Extension’s Writing program is pleased to be a sponsor of Litquake, the largest literary festival on the West Coast. Join us for special reading events during the week of the festival featuring instructors and students from the program. Litquake events run from Oct 10–18, 2014, in various San Francisco locations.

For more information on Extension events, visit extension.berkeley.edu/writing.

Asa Murphy at a 2013 Litquake reading event.

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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
### Nonfiction

#### Writing Skills Workshop

**ENGLISH X3** • 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. 013**  
  Katherine Sharpe, M.A.  
  Sept. 9–Dec. 2  
  Online • $575

- **Sec. 014**  
  Timothy Peters, B.S., M.A.  
  10 meetings  
  Thursdays, 6:30–9:30 pm  
  10 meetings  
  San Francisco: Art and Design Center • $575

#### Introduction to Creative Nonfiction

**ENGLISH X480** • 2 semester units in English  
An elective in the Post-Baccalaureate Certificate Program in Writing

Creative nonfiction can take many different forms and includes the subgenres of personal essay, memoir, nature and science writing, travel and food writing, and historical and biographical narrative. Learn to master the form and elements of creative nonfiction through reading assignments, writing exercises and respectful criticism. This course is designed for those wishing to hone their skills for any writing need.

- **Sec. 002**  
  Katherine G. Sharpe  
  10 meetings  
  Thursdays, 6:30–9:30 pm  
  Sept. 18–Nov. 20  
  Berkeley: Golden Bear Center • $575

#### 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, point of view, conflict, sensory description, dialogue and the dramatic reconstruction of events. Examine ethical and truth-telling issues that arise when writing about yourself and the people you know. By the end of the course, you are expected to have produced and workshoped a first draft and a complete, polished piece of memoir (up to 25 pages). Enrollment is limited.

- **Sec. 007**  
  Katherine Sharpe, M.A.  
  Sept. 16–Dec. 9  
  Online • $575

#### Developing the Memoir I

**ENGLISH X463** • 2 semester units in English  
An elective in the Post-Baccalaureate Certificate Program in Writing

Truly engaging memoirs have a story-like quality. They are dramatic, compelling and believable. Whether you are interested in writing a personal essay or book-length memoir, learn how to shape your story with essential elements of craft such as voice, structure, characterization, point of view, conflict, sensory description, dialogue and the dramatic reconstruction of events. Examine ethical and truth-telling issues that arise when writing about yourself and the people you know. By the end of the course, you are expected to have produced a memoir, memoir selection or collection of personal essays. Enrollment is limited.

- **Sec. 004**  
  Lindsey Crittenden, M.A.  
  10 meetings  
  Mondays, 6–9 pm  
  Sept. 15–Dec. 1 (no meetings on Sept. 29 and Oct. 6)  
  San Francisco: San Francisco Campus • $575

#### Developing the Memoir II

**NEW THIS TERM**  
Developing The Memoir I ENGLISH X463 or equivalent

**ENGLISH X462.9** • 2 semester units in English  
An elective in the Post-Baccalaureate Certificate Program in Writing

Memoirs come in many forms, but what the best share in common is a quest for the truth. In this continuation of Developing the Memoir I ENGLISH X463, you continue that quest by studying a wide variety of forms and learning new ways to shape your stories. Practice essential craft elements such as the balance between scene, summary and musing and explore how memory and language collude to create new meaning. By the end of the course, you should have produced and workshoped a first draft and revision of a self-contained memoir piece (up to 25 pages). Enrollment is limited.

- **Sec. 001**  
  Monica Wesolowska, B.A.  
  10 meetings  
  Wednesdays, 6:30–9:30 pm  
  Oct. 1–Dec. 17 (no meetings on Oct. 29 and Nov. 26)  
  Berkeley: Golden Bear Center • $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. 005**  
  Margaret Steen, M.J., Extension Honored Instructor  
  Sept. 16–Dec. 9  
  Online • $575

#### Journalism Workshop

**JOURN X473** • 2 semester units in Journalism  
An elective in the Post-Baccalaureate Certificate Program in 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. 003**  
  Thomas Abate, M.A.  
  10 meetings  
  Saturdays, 10 am–1 pm  
  Oct. 11–Dec. 20 (no meeting on Nov. 29)  
  Berkeley Campus: Evans Hall • $575
Health Care Journalism
JOURN X479 • 2 semester units in Journalism
An elective in the Post-Baccalaureate Certificate Program in Writing, the Post-Baccalaureate Health Professions Program and in the Specialized Program in Professional Writing
Learn to identify health news, translate medical, question experts, interview patients and get published. In addition to many in-class exercises, you write a magazine-style article. Guest speakers introduce aspects of academic writing. Although open to the general public, the class is ideal for health professionals looking to broaden their career options. Enrollment is limited.
Sec. 001
Katherine Griffin, M.A.
10 meetings
Thursdays, 6:30–9:30 pm
Sept. 18–Nov. 20
Berkeley Campus: Wheeler Hall • $575

NEW THIS TERM
The Reviewer’s Craft: Reading and Writing Book Reviews
ENGLISH X473.1 • 1 semester unit in English
Want to join the conversation on book review sites and blogs? Aiming for publication in The New York Times? Learn to write persuasive reviews that stand out. Study examples of published reviews, analyzing their style and effectiveness. Write your own book reviews and workshop them in class with fellow students. Practice the essential techniques of critical writing while developing a lasting personal voice.
Sec. 001
Audrey Ferber, M.F.A.
5 meetings
Saturdays, 10 am–1 pm
Oct. 11–Nov. 8
San Francisco: San Francisco Campus • $395

Writing for Social Media: Prose That Works for Web 2.0
ENGLISH X468 • 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: This course focuses primarily on content writing and editing, not Web technology.
Sec. 005
Timothy Peters, B.S., M.A.
Sept. 16–Oct. 28
Online • $395

Introduction to Public Relations Writing
JOURN X481 • 1 semester unit in Journalism
(Formerly From Pitch to Print: A Five-Week Introduction to Public Relations Workshop)
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. 003
Nancy Davis Kho, M.A.
5 meetings
Wednesdays, 6:30–9:30 pm
Oct. 1–29
Berkeley Campus: Evans Hall • $395

NEW THIS TERM
Writing Dynamic Speeches and Presentations
JOURN X485 • 1 semester unit in Journalism
Learn how to effectively compose and deliver strong presentations. Organize and structure speeches easily, according to your content and your intended audience. Develop tools to create eloquent, powerful material (including those created in PowerPoint) while also handling audience inquiries. Finally, deliver information in ways that enhance your content using silent messages, voice tones, and personal connection with the content and audience.
Sec. 001
Deborah Biron, B.A.
6 meetings
Tuesdays, 6:30–9:30 pm
Sept. 22–Oct. 28
San Francisco: San Francisco Campus • $395

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. 002
Jessica Pishko, J.D., M.F.A.
6 meetings
Sundays, 10:30 am–1 pm
Nov. 9–Dec. 21 (no meeting on Nov. 30)
Berkeley: Golden Bear Center • $395

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 you 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.
Sec. 006
Margaret Steen, M.J., Extension Honored Instructor
Sept. 16–Oct. 28
Online • $395
Sec. 007
Instructor to be announced
5 meetings
Wednesdays, 6–9 pm
Oct. 1–29
San Francisco: San Francisco Campus • $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. 002
Erica Wright, M.F.A.
Enroll anytime
Online • Proctored final exam • $695

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. 002
Erica Wright, M.F.A.
Enroll anytime
Online • Proctored final exam • $695

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
A graduate of the Certificate Program in Clinical Research Conduct and Management, Joyce Nortey is now a clinical research associate—a position she believes is the result of receiving the certificate. “Prior to obtaining my certificate, it was hard to justify to potential employers that I was qualified to work in the industry solely with my B.A. in psychology,” Nortey says.

“When I applied for my current position in November 2013, my résumé said that I would be completing the certificate in December 2013,” Nortey continues. “I received the offer after I had completed the certificate and was eventually hired with the title of clinical research associate. I personally believe having this certificate from a reputable institution made me a stronger candidate within the industry.”

Having completed the certificate online, Nortey feels that the interactions with instructors and students help bring the curriculum to life. “I was able to ask the instructors questions about the coursework and about my job,” she says. “The discussion boards were helpful with connecting with fellow students; we were able to bounce ideas off of each other.”
Get Berkeley quality online. More than 165 online courses let you experience world-class education at your convenience. UC Berkeley reviews and approves our online curricula, and all courses are offered for college credit.

A large and devoted online department, including student services and technical support, guides you through your online experience. Our experienced and talented instructors combine a love of teaching with expertise in the latest online learning techniques.

Courses in a wide range of subjects—computer technology and information management, humanities, business, education, science, and more—ensure UC Berkeley Extension has the online education you want. We offer online courses in two formats: The continuous-enrollment format enables you to enroll anytime throughout the year. The fixed-date format is offered on a semester basis. Readings, projects, case studies, and interactions with your peers and instructors give you many ways to learn. Plus, you can tailor your study to your needs, choosing from individual courses or a professional certificate or specialized program of study in a field such as project management or editing.
Art and Design

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

Visual Arts

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 screenwriting. You are responsible for renting and viewing films as part of this course.

Sec. 002
L. Thomas Pollard, Ph.D.
Enroll anytime
Online • $715

Graphic and Interactive Design

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. 004
Catherine Chanse, M.A.
Sept. 23–Dec. 16
Online • $595

Interior Design and Interior Architecture

ONLINE 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.

Wednesday, 12–12:45 pm
Aug. 27
Online • FREE

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. 009
Jayne Bunce, B.A., B.F.A., ASID, CID
Sept. 16–Oct. 28
Online • $565

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. 003
David Waldorf, M.Arch., BSID, CGBP
Nov. 4–Dec. 16
Online • $550

Behavioral Health Sciences

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

Counseling and Psychotherapy

ONLINE INFORMATION SESSION
CEU Workshop Series for Licensed Mental Health Clinicians
Find out how UC Berkeley Extension’s CEU workshops can strengthen your knowledge in specific presenting problems and help you care for your clients and expand your practice.

Visit extension.berkeley.edu/counseling to register.

Thursday, 12–1 pm
Oct. 1
Online • FREE

Ethical Decision Making in Complex Cases

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

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

Sec. 005
John de Miranda, M.Ed., LAADC
Enroll anytime
Online • $195
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 signs of abuse and neglect, and review guidelines for interviewing children.

Sec. 005
Allison Briscoe-Smith, Ph.D.
Enroll anytime
Online • $205

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. 005
Rick Nizzardi, J.D., LCSW
Enroll anytime
Online • $285

Assessment and Treatment of Alcohol and Drug Problems

PB HLTH X437 • 1 semester unit in Public Health
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 and 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 dependency 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. 002
Nancy A. Piotrowski, Ph.D.
Enroll anytime
Online • $365

General Psychology

ONLINE 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 p. 42 or visit extension.berkeley.edu/spos/psychologyprofessions.html to register.

Wednesday, 12–1 pm
Aug. 20
Online • FREE

Abnormal Psychology

PSYCH X146 • 3 semester units in Psychology
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. 006
Darrel Richards, Ph.D.
Enroll anytime
Online • Proctored final exam • $730

Research Methods in Psychology

PSYCH X106 • 3 semester units in Psychology
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. 008
Bernadette M. Guimberteau, Ph.D.
Sept. 9–Dec. 2
Online • Proctored final exam • $745

Psychology of Personality

PSYCH X176 • 3 semester units in Psychology
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 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. 008
Christopher Gade, Ph.D.
Sept. 9–Dec. 2
Online • Proctored final exam • $730

Introduction to Developmental Psychology

PSYCH X140 • 3 semester units in Psychology
45 hours CE credit

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

Study the life-span approach to developmental psychology, including prenat al 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. 007
Jennifer Shultz, Ph.D.
Enroll anytime
Online • $730

Biological Psychology

PSYCH X155 • 3 semester units in Psychology
45 hours CE credit: BRN

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. 005
Robert Blumenfeld, Ph.D.
Sept. 16–Dec. 9
Online • Proctored final exam • $730

ENROLL NOW VISIT EXTENSION.BERKELEY.EDU CALL (510) 642-4111
ONLINE
**Psychology of Communication**

PSYCH X156.1 • 3 semester units in Psychology
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. You explore how people communicate to themselves, to others and in cross-cultural communications.

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

**Sec. 003**
Michael Swett, Ph.D.
Enroll anytime
Online • Proctored final exam • $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. 003**
Darrel Richards, Ph.D.
Enroll anytime
Online • Proctored final exam • $730

**General Psychology**

PSYCH X1BW • 3 semester units in Psychology
45 hours CE credit: BRN

**Important:** Special academic policies apply to XBW courses. See p. 240 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. 002**
Gwynne Pacheco, Ed.D.
Enroll anytime
Online • Proctored final exam • $730

**Public Health and Health Management**

**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 a 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 they impact the cost, quality and access to services to better understand and critique them from an informed perspective.

**Sec. 006**
Robin Flagg, M.P.H., Ph.D.
Sept. 9–Dec. 2
Online • $575

**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. 003**
Alanna Nimau Vigil, M.S., RD
Enroll anytime
Online • Proctored final exam • $770

**Business**

**ONLINE COURSE INFORMATION**

(510) 643-1550 and (510) 644-4979
extension.berkeley.edu/online

**Accounting**

**ONLINE 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. 57 or visit extension.berkeley.edu/cert/account.html.

Tuesday, 5:30–6:30 pm
July 22
Online • FREE

Wednesday, 5:30–6:30 pm
Nov. 12
Online • FREE

**Introduction to Financial Accounting**

UGBA XBW102A • 3 semester units in Business Administration

We recommend you take this course and Introduction to Managerial Accounting UGBA XBW12 before you register for the Certificate Program in Accounting.

**Important:** Special academic policies apply to XBW courses. See p. 240 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. 004**
Andrew Barnett, Ph.D., CPA,
Extension Honored Instructor
Enroll anytime
Online • Proctored final exam • $900

**Sec. 005**
Joseph McPeak, M.B.A., M.S., CPA,
Extension Honored Instructor
Enroll anytime
Online • Proctored final exam • $900
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 X421.4 (offered this term)
- Auditing and Attestation
  BUS ADM X422.1
- 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
extension-business@berkeley.edu
See p. 57 for complete certificate details.
Auditing

UGBA XB126 • 4 semester units in Business Administration

Important: Special academic policies apply to XBW courses. See p. 240 for details.

A requirement in the Certificate Program in Accounting

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 Examination, and work as part of a team on an audit plan.

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

Sec. 002
Martha Doran, Ph.D., CPA
Enroll anytime
Online • Proctored final exam • $1,025

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.

Prerequisite: Intermediate Accounting I
BUS ADM X421.1 or Intermediate Accounting II
BUS ADM X421.2

Sec. 004
Harry Lorsbach, M.B.A., CIA, CPA
Sept. 2–Dec. 9
Online • Proctored final exam • $900

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. 006
Joseph McPeak, M.B.A., M.S., CPA,
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

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 UGBA XB102A and Introduction to Managerial Accounting UGBA XB102B or equivalent

Sec. 010
Suzanne Garrett, M.B.A., PMP,
Extension Honored Instructor
Sept. 2–Dec. 9
Online • Proctored final exam • $900

Business 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. 015
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. 016
Derek Day, M.B.A.
Sept. 9–Dec. 2
Online • $800

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. 005
Christopher Lai, M.B.A., Ph.D.
Enroll anytime
Online • $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. 003
Gwynne Pacheco, Ed.D.
Enroll anytime
Online • Proctored final exam • $800
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 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 Brochure extent-business@berkeley.edu/cert/busanalysis.html (510) 642-4231
See p. 65 for complete certificate details.

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

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

Business Analysis

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. 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.

Sec. 008
Ashley Wright, B.S., M.B.A.
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 009
Ashley Wright, B.S., M.B.A.
Oct. 23–Dec. 18
Online • Proctored final exam • $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®).

Sec. 007
David Zhu, B.S., CBAP, CISA, PMP
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 008
David Zhu, B.S., CBAP, CISA, PMP
Oct. 23–Dec. 18
Online • Proctored final exam • $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®).

Sec. 007
David Zhu, B.S., CBAP, CISA, PMP
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 008
David Zhu, B.S., CBAP, CISA, PMP
Oct. 23–Dec. 18
Online • Proctored final exam • $995

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 fits 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 meet 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®).

Sec. 007
Ashley Wright, B.S., M.B.A.
Aug. 27–Oct. 22
Online • Proctored final exam • $995

Sec. 008
Ashley Wright, B.S., M.B.A.
Oct. 23–Dec. 18
Online • Proctored final exam • $995
### Business and Professional Communication

**ONLINE INFORMATION SESSION**

**Program in Professional Communication**

Learn how this program can improve your communication skills and benefit your career. For program details, see p. 67 and visit extension.berkeley.edu/cert/communication.html to register for this information session.

**Wednesday, 12–12:45 pm**

**Sept. 24**

Online • FREE

### Business Writing Review

ENGLISH 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. 002**

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. 015**

Martin A. Medeiros, M.A.,

Extension Honored Instructor

Enroll anytime

Online • $800

### 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. 004**

Martin A. Medeiros, M.A.,

Extension Honored Instructor

Enroll anytime

Online • $800

### 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 to your everyday business dealings to make more effective decisions.

**Sec. 006**

Edward Derbin, M.A., M.B.A.

Enroll anytime

Online • Proctored final exam • $900

### Introduction to Macroeconomics

ECON 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. 006**

Larry O’Connell, M.A., M.S., M.B.A.

Enroll anytime

Online • Proctored final exam • $900

### Entrepreneurship and Small Business Management

**ONLINE 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. 73 or visit extension.berkeley.edu/cert/entrepreneur.html.

**Wednesday, 12–12:45 pm**

**Nov. 19**

Online • FREE

### Finance

**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. 006**

Rene-Francois Cervantes, M.B.A.

Sept. 9–Dec. 2

Online • $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 multinational finance.

Sec. 010
Instructor to be announced
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Sec. 011
Lawrence Cox, B.S., M.B.A.
Sept. 16–Dec. 9
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. 011
Tee Lim, M.B.A., Ph.D.
Sept. 16–Oct. 28
Online • Proctored final exam • $645

Sec. 012
Catherine Pinkas, M.B.A., PMP
Nov. 4–Dec. 16
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. 016
Instructor to be announced
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Sec. 013
Grace Kalili, M.B.A.
Sept. 16–Dec. 9
Online • Proctored final exam • $800

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. 008
Lawrence Cox, B.S., M.B.A.
Sept. 9–Dec. 2
Online • $800

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
extension-business@berkeley.edu
See p. 79 for complete certificate details.
Financial Planning and Analysis

ONLINE 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. 79 or visit extension.berkeley.edu/cert/financial_planning_and_analysis.html.

Wednesday, 5:30–6:30
Aug. 6
Online • FREE

Wednesday, 5:30–6:30
Dec. 3
Online • FREE

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. 018
Brad Fox, M.B.A.
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Sec. 019
Fernando Garcia, J.D., M.B.A.
Sept. 16–Dec. 9
Online • Proctored final exam • $800

Sec. 020
Tee Lim, M.B.A., Ph.D.
Sept. 23–Dec. 16
Online • Proctored final exam • $800

Business Valuation
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. 014
Robert Coackley, B.S.
Sept. 9–Dec. 2
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. 013
Donald R. Byrne, M.B.A., Ph.D.
Sept. 9–Dec. 2
Online • Proctored final exam • $800

Sec. 014
Kenneth Kurtz, M.Acc.
Sept. 16–Dec. 9
Online • Proctored final exam • $800

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 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. 006
Richard Lehman, M.B.A.
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 that 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. You 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. 005
Donna R. 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
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, in your own business environment to spur sales and profit growth.

Sec. 006
Erick Ahrens, B.S., M.B.A.
Sept. 9–Dec. 2
Online • Proctored final exam • $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. 008
Catherine McKnight, M.A.

**NEW THIS TERM**
**Introduction to Human Capital Analytics**
BUS ADM X417.5 • 2 semester units in Business Administration

An elective in the Certificate Program in Human Resource Management

Learn to assess and measure employee and organizational performance to 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
Instructor to be announced

Sept. 9–Dec. 2

Online • $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. 003
Richard Takahashi, M.B.A.

Enroll anytime

Online • $800

Law

**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. 002
Brien Walton, J.D., LL.M.

Enroll anytime

Online • $800

**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. 007
Jason Lum, J.D.

Sept. 9–Dec. 2

Online • $800

Paralegal Studies

**ONLINE 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.

**Wednesday, 12–12:45 pm**
Aug. 13
Online • FREE

**Wednesday, 12–12:45 pm**
Oct. 15
Online • FREE

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. 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.
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. 004
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 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, and 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. 004
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

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. 002
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. 001
Tammi Clearfield, J.D., M.S.
Enroll anytime
Online • $875
Marketing

ONLINE INFORMATION SESSION
Certificate Program in Marketing and Professional Sequences in Marketing Metrics and ROI and in Managing Marketing Communications
UNEX 1046

Find out how UC Berkeley Extension’s Certificate Program in Marketing and the professional sequences in Marketing Metrics and ROI and in Managing Marketing Communications equip you with a solid understanding of marketing’s most up-to-date concepts and techniques. For more information about the Certificate Program in Marketing, see p. 93 or visit extension.berkeley.edu/cert/marketing.html. For more information about the Professional Sequence in Managing Marketing Communications, see p. 99 or visit extension.berkeley.edu/cert/marketing_communications.html. For more information about the Professional Sequence in Marketing Metrics and ROI, see p. 96 or visit extension.berkeley.edu/cert/marketing_metrics.html.

Wednesday, 12–12:45 pm
July 16
Online • FREE

Wednesday, 12–12:45 pm
Nov. 5
Online • FREE

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. 024
Woody Alexander, M.B.A.
Sept. 9–Dec. 2
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. 013
Nicki Shovar, Ph.D.
Sept. 9–Dec. 2
Online • $800

Marketing Strategy
BUS ADM X415 • 2 semester units in Business Administration
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. 013
Suzanne Powers, M.B.A.
Sept. 9–Dec. 2
Online • $800

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. 008
Woody Alexander, M.B.A.
Enroll anytime
Online • Proctored final exam • $800

See extension.berkeley.edu/cert/marketing.html for a list of electives available this term.

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

See p. 93 for complete certificate details.
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.

Prerequisite: Introduction to Marketing BUS ADM X460.1 or equivalent, or consent of instructor

Sec. 009
Susan G. Gaide, M.B.A.
Sept. 9–Dec. 2
Online • $800

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. 006
Mohsin Hafeez, M.B.A., CFP®
Enroll anytime
Online • Proctored final exam • $800

Project Management
Project Management
BUS ADM X470 • 2 semester units in Business Administration • 30 pdp: PMI® provider 1173
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. 071
Edmond Matevosian, B.S., PE, PMP
Aug. 27–Oct. 22
Online • $800

Sec. 072
Anthony Minstein, B.A., CPIM, PMP
Extension Honored Instructor
Aug. 27–Oct. 22
Online • $800

Sec. 074
Mark Angel, B.S., M.B.A., PMP
Sept. 9–Dec. 2
Online • $800

Sec. 077
Ali Aiyed, Ph.D., PMP
Sept. 16–Dec. 9
Online • $800

Sec. 078
Alex Brown, IPMA-C, PMP
Oct. 23–Dec. 18
Online • $800

Sec. 079
Timothy Donahue-Bombosch, Ph.D.
Oct. 23–Dec. 18
Online • $800

Project Cost and Procurement Management
Project Cost and Procurement Management
BUS ADM X474.3 • 2 semester units in Business Administration • 30 pdp: 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. 025
Timothy Donahue-Bombosch, Ph.D.
Aug. 27–Oct. 22
Online • $800

Sec. 026
Timothy Donahue-Bombosch, Ph.D.
Sept. 16–Dec. 9
Online • $800

Sec. 027
Catherine Pinkas, M.B.A., PMP
Oct. 23–Dec. 18
Online • $800

Project Scope and Quality Management
Project Scope and Quality Management
BUS ADM X470.9 • 2 semester units in Business Administration • 30 pdp: 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. 027
Murray Millet, M.B.A., M.S.
Aug. 27–Oct. 22
Online • $800

Sec. 028
Murray Millet, M.B.A., M.S.
Sept. 16–Dec. 9
Online • $800

Sec. 029
Murray Millet, M.B.A., M.S.
Oct. 23–Dec. 18
Online • $800
Project Leadership and Building High-Performance Teams

BUS ADM X469.2 • 2 semester units in Business Administration • 30 pdus: PMI® provider 1173

A requirement in the Certificate Program in Project Management and in the Professional Sequence in Project Human Resource Management

Gain the leadership and communication skills to support successful projects in your organization. Through team-based activities and projects, master the most difficult aspects of team management. Discover how to build and maintain a high-performing, motivated project team using techniques such as teamwork and employee empowerment. Learn how to work together with your project team to avoid and resolve conflicts.

**Prerequisite:** Project Management BUS ADM X470

**Sec. 034**
Alex Brown, IPMA-C, PMP
Aug. 27–Oct. 22
Online • $800

**Sec. 035**
Catherine McKnight, M.A.
Sept. 9–Dec. 2
Online • $800

**Sec. 037**
Instructor to be announced
Sept. 16–Dec. 9
Online • $800

**Sec. 036**
Ali Aiyed, Ph.D., PMP
Oct. 23–Dec. 18
Online • $800

Project Schedule and Risk Management

BUS ADM X440.4 • 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

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. 027**
Madeleine Bronstone, MLHR, PMP
Aug. 27–Oct. 22
Online • $800

**Sec. 028**
Anthony Minstein, B.A., CPIM, PMP,
Extension Honored Instructor
Sept. 16–Dec. 9
Online • $800

**Sec. 029**
Madeleine Bronstone, MLHR, PMP
Oct. 23–Dec. 18
Online • $800

Project Execution and Control

BUS ADM X471.9 • 2 semester units in Business Administration • 30 pdus: 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. 027**
Anthony Minstein, B.A., CPIM, PMP,
Extension Honored Instructor
Aug. 27–Oct. 22
Online • $800

**Sec. 028**
Anthony Minstein, B.A., CPIM, PMP,
Extension Honored Instructor
Sept. 16–Dec. 9
Online • $800

**Sec. 029**
Deann Smith, B.A., CKM, PMP
Oct. 23–Dec. 18
Online • $800

Intensive PMP®/CAPM® Exam Preparation

BUS ADM X474.9 • 2 semester units in Business Administration • 35 pdus: 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 (PMBOOK® 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.

**Sec. 014**
Edmond Matevosian, B.S., PE, PMP
Aug. 27–Oct. 22
Online • $1,650

**Sec. 015**
Edmond Matevosian, B.S., PE, PMP
Oct. 23–Dec. 18
Online • $1,650

Online Certificate Program in Project Management

The Certificate Program in Project Management gives you the skills you need to keep projects on track, 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 (PDU®) 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 X479.8 (offered this term)
- Project Execution and Control BUS ADM X479.7 (offered this term)

**Primary Electives**

You must take at least two of the following three courses:

- Project Scope and Quality Management BUS ADM X474.4 (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

See p. 107 for complete certificate details.
Education

COURSE INFORMATION
(510) 642-1171
extension-educa@berkeley.edu
extension.berkeley.edu/education

ONLINE INFORMATION SESSION
Designated Subjects Adult Education and Career Technical Education Teaching Credentials and Professional Programs
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 this page or visit extension.berkeley.edu/spos/admission.html. For more information about career technical education, see p. 126 or visit extension.berkeley.edu/spos/dscte.html.

Thursday, 12–12:45 pm
Aug. 28
Online • FREE

ONLINE INFORMATION SESSIONS
Certificate Program in College Admissions and Career Planning and Professional Program in College Admission Counseling
UNEX 1039
For details on the Certificate Program in College Admissions and Career Planning, see p. 135 or visit extension.berkeley.edu/cert/college.html. For details on the Professional Program in College Admission Counseling, see this page or visit extension.berkeley.edu/spos/admission.html.

Wednesday, 5:30–6:15 pm
Sept. 3
Online • FREE

Wednesday, 5:30–6:15 pm
Dec. 10
Online • FREE

Humanities and Languages

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

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. 240 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.
See website for available section number
Arthur Kane Scott, M.A.
Enroll anytime
Online • Proctored final exam • $795

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. 240 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.
See website for available section number
Arthur Kane Scott, M.A.
Enroll anytime
Online • Proctored final exam • $795

Principles of Sociology: A Multicultural Perspective
SOCIOI 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. 002
Gwynne Pacheco, Ed.D.
Enroll anytime
Online • Proctored final exam • $695

Introduction to American Politics
POL SCI XBW1 • 4 semester units in Political Science
Important: Special academic policies apply to XBW courses. See p. 240 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 bureaucracies. 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. 002
Nina Clark, Ph.D.
Enroll anytime
Online • Proctored final exam • $795

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. You pay particular attention to how these books address the two audiences of children’s literature: the child and the adult.
Sec. 004
Celeste Mannis, B.A., M.B.A.
Sept. 16–Dec. 9
Online • $695
The English Novel
ENGLISH X125 • 4 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Survey the English novel by reading authors such as E.M. Forster, Anthony Trollope, Charles Dickens, Charlotte Brontë, George Eliot, Oscar Wilde, Thomas Hardy and Robert Louis Stevenson. Gain perspective on this literary form with emphasis on how moral, social, psychological, political and philosophical problems were perceived during the Victorian and Edwardian periods.
Sec. 002
Kathryn Kleypas, Ph.D.
Enroll anytime
Online • Proctored final exam • $795

American Fiction
ENGLISH X135A • 3 semester units in English
An elective in the Post-Baccalaureate Certificate Program in Writing
Survey the major American novelists and short-story writers of the 19th and early-20th centuries, including Mark Twain, Edgar Allen Poe, Stephen Crane, Herman Melville, Edith Wharton, Nathaniel Hawthorne and Jack London. Learn about various literary movements—such as romanticism, realism and naturalism—and consider questions of aesthetics, morality, poverty, racism, gender and power.
Sec. 002
Zachary Gordon, Ph.D.
Enroll anytime
Online • Proctored final exam • $695

American Environmental and Cultural History
ESPM XBW160AC • 4 semester units in Environmental Science, Policy and Management
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. 002
Douglas Greenberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $795

Philosophy and Religion
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. 002
Eric Boynton, M.A., Ph.D.
Enroll anytime
Online • Proctored final exam • $695

Views of the Absolute in World Religions
RELIGST X10 • 3 semester units in Religious Studies
Explore 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. 002
Bret Lewis, Ph.D.
Enroll anytime
Online • Proctored final exam • $695

Sciences, Mathematics and Biotechnology
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. 003
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. 002
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 human 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. 015
Kashif Ahmad, M.B.B.S., M.Sc., Ph.D.
Enroll anytime
Online • Proctored final exam • $850
Sec. 016
James Smiley, B.A., D.C.
Enroll anytime
Online • Proctored final exam • $850

Introduction to Human Physiology
MCELLBI XBW32 • 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
Important:
Special academic policies apply to XB and XBW courses. See p. 240 for details.
Understand the complexities of the cells, tissues, and major organs and systems of the human body. Study a different system each week, concentrating on basic mechanisms underlying human life processes and important diseases affecting normal human function.
Prerequisite: One year of high school or college chemistry
Sec. 011
Kashif Ahmad, M.B.B.S., M.Sc., 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.
See website for available section number
This course has rotating sections with varying instructors: Nidhi Ahuja, Weiwei Gu, Rebekah Marsh and Paul Tarr
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.
Prerequisite: One year of college-level general biology
See website for available online section number
This course has rotating sections with varying instructors: Marina Crowder, Christina Morales, John Placyk and Paul Tarr
Enroll anytime
Online • Proctored final exam • $850

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. 005
Nidhi Ahuja, Ph.D.
Enroll anytime
Online • Proctored final exam • $880

Principles and Techniques of Molecular Cell Biology
MCELLBI X121 • 3 semester units in Molecular and Cell Biology
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. 003
Susan Parkinson, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

FOR COURSE AND SCHEDULE INFORMATION VISIT EXTENSION.BERKELEY.EDU/CATALOG
**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.

Prerequisite: One year of college-level general biology for majors

Sec. 011
Amy Morgan, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

Sec. 012
Monica Ranes-Goldberg, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

**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. 002
David Lieu, M.D., Ph.D.
Enroll anytime
Online • Proctored final exam • $850

**Advanced Bioscience**

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 professionals can also benefit from this course.

Sec. 007
Monica Ranes-Goldberg, Ph.D.
Sept. 9–Dec. 2
Online • $585

**Clinical Laboratory Science**

**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. 011
Monica Ranes-Goldberg, 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 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. 003
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.

Prerequisite: One course in introductory chemistry and knowledge of basic algebra

Sec. 004
Weiwei Gu, Ph.D.
Enroll anytime
Online • Proctored final exam • $850

**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. 003
Raja Almukhhal, Ph.D.
Enroll anytime
Online • Proctored final exam • $850
ONLINE INFORMATION SESSION

**Professional Program in Life Sciences Business**

Gain the knowledge in this professional program to start, develop, expand and operate a successful business in the life science industries. For details, see p. 167 or visit extension.berkeley.edu/spos/lifesciences_business.html.

Friday, 12–12:45 pm
Sept. 12
Online • FREE

**Clinical Research**

**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. 013**
Peter Dubinsky, B.S.
Aug. 27–Oct. 22
Online • $1,895

**Sec. 014**
Peter Dubinsky, B.S.
Oct. 23–Dec. 18
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:** Introduction to Clinical Research: Clinical Trial Phases and Design PB HLTH X400.2

**Sec. 011**
Peter Dubinsky, B.S., and Karen A. Henry, M.P.H.
Aug. 27–Oct. 22
Online • $1,895

**Sec. 012**
Peter Dubinsky, B.S., and Karen A. Henry, M.P.H.
Oct. 23–Dec. 18
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 time lines.

**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. 010**
Aug. 27–Oct. 22
Online • $1,895

**Sec. 011**
Oct. 23–Dec. 18
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. 010**
Daniel Redline, B.A., CCRP
Aug. 27–Oct. 22
Online • $1,895

**Sec. 011**
Daniel Redline, B.A., CCRP
Oct. 23–Dec. 18
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 work, 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. 002**
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.

**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. 002**
Flor Feldman, M.Sc., Extension Honored Instructor
Enroll anytime
Online • Proctored final exam • $720

**Life Science Business**
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.

Prerequisites: Three-and-a-half years of high school mathematics, including trigonometry and analytic geometry

Sec. 004
Merlin Miller, M.A.
Enroll anytime
Online • Proctored final exam • $860

Sec. 005
Steven Pon, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Sec. 006
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. 004
Merlin Miller, M.A.
Enroll anytime
Online • Proctored final exam • $860

Sec. 005
Hillel Raz, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Sec. 006
Makan Rokni, Ph.D.
Enroll anytime
Online • Proctored final exam • $860

Introduction to Statistics

STAT XB2 • XBW2 for online sections
4 semester units in Statistics

An elective in the Advanced Biosciences Program, in the Clinical Laboratory Scientist Preparatory Program and in the Post-Baccalaureate Health Professions Program

Important: Special academic policies apply to XB and XBW courses. See p. 240 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.

Prerequisites: Two years of high school algebra. A recent course in college algebra is recommended.

Sec. 008
Guohua Pan, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Sec. 009
Makan Rokni, Ph.D.
Enroll anytime
Online, proctored final exam • $860

Sec. 010
Dieter Jurkat, M.S., Extension Honored Instructor
Enroll anytime
Online, proctored final exam • $860

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 (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)

Learn More and View the Brochure
extension.berkeley.edu/cert/clinical.html
extension-science@berkeley.edu
(510) 642-1062

See p. 165 for complete certificate details.
Technology and Information Management

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

Leadership, Systems and Technology Management

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

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

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 (ROI) analysis.

Sec. 008  
Todd Landreneau, Ph.D., CHC, CPHQ  
Sept. 9–Dec. 2  
Online • $820

Data Administration

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 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. 008  
Mark Angel, B.S., M.B.A., PMP  
Sept. 9–Dec. 2  
Online • $820

Programming Languages and Object-Oriented Programming

Introduction to C Language Programming
EL ENG 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 its fundamental programming concepts. Gain the knowledge to write simple C language applications and undertake future 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. 002  
Robert Adams, M.S.  
Enroll anytime  
Online • Proctored final exam • $595

C++ Programming I
EL ENG X412.1 • 2 semester units in Computer Science

An elective in the Post-Baccalaureate Certificate in Information Systems and Management

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 EL ENG X24 or reasonable knowledge of the C programming language, including familiarity with C data types, structures and arrays; decision and looping constructs; use of pointers; and defining and invoking functions.

Access to a C++ compiler is required.

Sec. 003  
Robert Adams, M.S.  
Enroll anytime  
Online • Proctored final exam • $715

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. 008  
Robert Oppel, B.A.  
Enroll anytime  
Online • Proctored final exam • $799
**C# Programming I**
EL ENG X444.3 • 1 semester unit in Computer Science
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. 003**
David Gewirtz, B.S.
Enroll anytime
Online • Proctored final exam • $595

**Introduction to Perl Programming**
EL ENG X416.7 • 1 semester unit in Computer Science
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Perl 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. 005**
Carl Limsico, B.A., Certified Java Programmer
Enroll anytime
Online • $595

**Python Programming**
EL ENG X442.9 • 1 semester unit in Computer Science
An elective in the Post-Baccalaureate Certificate in Information Systems and Management
Python, an open-source scripting language that allows rapid application development of both large and small software systems, is object oriented by design and provides an excellent platform for learning the basics of language programming. Learn this language, ideal for team projects, that provides access to databases, CGI programming, system administration and other useful services.

Although no previous programming experience is required, you must have access to a computer running Python or access to the Internet to download Python.

**Sec. 003**
Carl Limsico, B.A., Certified Java Programmer
Enroll anytime
Online • Proctored final exam • $595

**PHP Programming for the Web**
EL ENG 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 of disk space, MySQL and PHP. In general, most Web hosts offer workable sites. Free PHP Web-hosting options are also available.

**Sec. 002**
Robert Adams, M.S.
Enroll anytime
Online • $595

**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 design so that you can write simple applications and take intermediate courses in Java.

**Prerequisites:** First Course in Java EL ENG X429.9, C++ Programming (EL ENG X412.1 or equivalent), and some experience with object-oriented design and techniques

**Sec. 006**
Carl Limsico, B.A., Certified Java Programmer
Enroll anytime
Online • $715

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**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) 642-4115
extension-techeng@berkeley.edu

See p. 177 for complete certificate details.
Electrical Engineering

Fundamentals of Data Communications and Networking

COMPSCI X423 • 2 semester units in Computer Science

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. 002
Ching-Cheng Lee, Ph.D.
Enroll anytime
Online • $715

Integrated Circuit (IC) Design and Engineering

Semiconductor Devices for IC Design

EL ENG X138 • 2 semester units in Electrical Engineering

(Formerly Semiconductor Devices for Integrated Circuit Design)

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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Fundamental Analog ICs

EL ENG X139 • 2 semester units in Electrical Engineering

(Formerly Advanced Analog Microelectronics)

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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

IC Filters and Oscillators

EL ENG X140 • 2 semester units in Electrical Engineering

(Formerly Fundamentals of Analog 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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Analog IC Design

EL ENG X141 • 2 semester units in Electrical Engineering

(Formerly Advanced Design Techniques for Analog Integrated Circuits)

A requirement in the Certificate Program in Integrated Circuit Design and Techniques

Advances in signal processing, analog-to-digital conversion and the continued scaling down of complementary metal-oxide semiconductor (CMOS) nanotechnology have ushered in the era of analog IC design with multistandard challenges. Topics include stability of feedback, frequency compensation, multistage operational amplifiers (op-amps) and optimized CMOS op-amp designs. Prepare to work on a design project to meet a required product specification. The scope of the project covers design of an advanced CMOS op-amp and of high-performance CMOS comparators for flash analog-to-digital converter (ADC) applications.

Sec. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $525

Introduction to Microelectronics

EL ENG X30 • 1 semester unit in Electrical Engineering

(Formerly Introduction to Microelectronic Theory and Applications)

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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265
Introduction to Microelectronic Circuits
EL ENG X31 • 1 semester unit in Electrical Engineering
(Formerly Fundamentals of Integrated Circuit Design)

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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Semiconductor IC Amplifiers
EL ENG X33 • 1 semester unit in Electrical Engineering
(Formerly Fundamentals of Analog Microelectronic Techniques)

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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Digital ICs
EL ENG X34 • 2 semester units in Electrical Engineering
(Formerly Digital Integrated Circuit Design)

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. 002
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 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 IC Design EL ENG X138 (offered this term)
- Fundamental Analog ICs EL ENG X139 (offered this term)
- IC Filters and Oscillators EL ENG X140 (offered this term)
- Analog IC Design 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) 642-4151
course@extension.berkeley.edu
See p. 193 for complete certificate details.
Computer Simulation of Electronic Circuits

EL ENG X405 • 1 semester unit in Electrical Engineering
(Formerly Effective SPICE Circuit Simulation Techniques)

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. 002
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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

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. 002
Vincent Chang, Ph.D.
Enroll anytime
Online • $265

Writing, Editing and Technical Communication

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

Editing

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. 022
Amanda Kaufmann, M.A.
Sept. 9–Dec. 2
Online • $645

Sec. 023
Diane Martin, M.A.
Sept. 16–Dec. 9
Online • $645

Sec. 025
David Kudler, M.F.A.
Sept. 16–Dec. 9
Online • $645

Sec. 024
Barbara Magalnick, M.S.
Sept. 23–Dec. 16
Online • $645
**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. 018**  
Cathleen Small, B.A., M.A.  
Sept. 9–Dec. 2  
Online • $645  
**Sec. 017**  
Beth Burke, B.S., M.A.  
Sept. 16–Dec. 9  
Online • $645  
**Sec. 016**  
Leda Cirraolo, Ph.D.  
Sept. 23–Dec. 16  
Online • $645  

**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. 010**  
Lisa Carlson, B.A.  
Sept. 9–Dec. 2  
Online • $645  
**Sec. 009**  
Leda Cirraolo, Ph.D.  
Sept. 23–Dec. 16  
Online • $645  

**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 II: Intermediate Copyediting JOURN X415  
**Sec. 009**  
Gail Hynes Shea, B.A.  
Sept. 9–Dec. 2  
Online • $645  

**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 website for details.  
**See website for available section number**  
This course has five rotating sections with varying instructors: Sylvia D. Coates, Heather Ebbs, Fred Leise, Max McMaster and Ruth Pincoe.  
**Enroll anytime**  
Online • $695  

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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)  

*A 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/spos/edit.html (510) 642-6362  
extension-letters@berkeley.edu  
See p. 199 for complete program details.
NEW THIS TERM
Embedded Indexing and Indexing of E-Books
JOURN X477.1 • 3 semester units in Journalism
Publishers often require indexers to embed index entries into the text files of their books because of the prevalence of digital publishing and the need to quickly get books to press. Discuss current industry demands and speculate about future developments. Learn to embed index entries into documents using various software programs and file formats, including Microsoft Word, Adobe FrameMaker and InDesign, XML, ePub, and Mobi. Learn to install and use add-on tools in indexing programs to be more efficient and to broaden your skill set. Practice embedding index entries into Web and intranet pages.
Prerequisite: Indexing, Theory and Application JOURN X477 or experience as a professional indexer
Sec. 001 Kevin A. Broccoli
Enroll anytime
Online • $695

Technical Communication

Technical Writing
ENGLISH X412 • 3 semester units in English
May be substituted for Technical Communication I JOURN X455 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. 002 John Tabor, B.A.
Enroll anytime
Online • $770

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. 004 David Rompf, J.D.
Sept. 16–Dec. 9
Online • $575

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. Enrollment is limited.
Sec. 011 David Rompf, J.D.
Sept. 16–Dec. 9
Online • $575
Sec. 012 Erich Miller, M.F.A.
Sept. 23–Dec. 16
Online • $575

The Craft of Reading
ENGLISH X429 • 2 semester units in English
A requirement 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, 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. 003 Marc Schiffman, M.F.A.
Sept. 16–Dec. 9
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. 006 Marc Schiffman, M.F.A.
Sept. 16–Dec. 9
Online • $575

Developing the Novel
ENGLISH X407 • 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.
We recommend you have some previous creative writing experience and an idea for a novel.
Sec. 002 James Frost, M.F.A.
Sept. 16–Dec. 9
Online • $575

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. 013 Katherine Sharpe, M.A.
Sept. 9–Dec. 2
Online • $575
Sec. 014 Timothy Peters, B.S., M.A.
Sept. 16–Dec. 9
Online • $575

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. 007 Katherine Sharpe, M.A.
Sept. 16–Dec. 9
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. 005
Margaret Steen, M.J.,
Extension Honored Instructor
Sept. 16–Dec. 9
Online • $575

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. 002
Erica Wright, M.F.A.
Enroll anytime
Online • Proctored final exam • $695

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. 002
Erica Wright, M.F.A.
Enroll anytime
Online • Proctored final exam • $695
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. 245. 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. 240 or extension.berkeley.edu/static/studentservices/enrollment.

Concurrent enrollment application procedures and deadlines differ from other Extension courses; for information specific to concurrent enrollment, refer to extension.berkeley.edu/static/studentservices/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 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, and update other information.

Phone

Call (510) 642-4111. Telephone registration hours are 9 am–5 pm, Monday–Friday, except holidays (see p. 245). 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 in Berkeley. See p. 246 for center hours and location.

When to Enroll

Enrollment for the fall 2014 term opens July 7. Enrollments are processed in the order received, so we recommend that you enroll early to ensure a place and adequate course materials. Payment is due at the time of enrollment.

Classroom Visitors

In courses with six or more classroom meetings, visitors may attend the first scheduled class without charge unless otherwise stated in the course listing and if space or enrollment limitations permit. You must, however, formally enroll in the course and pay all fees before the second classroom meeting.

In courses with five or fewer classroom meetings, visitors are not permitted, and you must formally enroll in the course and pay all fees prior to the course start date.

You are not permitted to audit UC Berkeley Extension courses. For course status or availability information, 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 and pay all fees 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 Your Enrollment Fees

You are not officially enrolled until fees are paid in full. Partial payments and deposits are not accepted unless otherwise indicated in the course or program description. All fees are subject to change without notice. For the most current information, call (510) 642-4111 or search the Course Catalog. Please review When to Enroll for more information regarding enrollment, payment and classroom visitor policies and deadlines.

A hold may be placed on your student records and transcript 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, Diners Club and 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 or employer tuition voucher, please fax the completed enrollment form with the purchase order from a sponsoring company or organization to (510) 642-3910. Extension cannot accept purchase order enrollments by phone. For additional questions regarding purchase order processing, please email extension-ar@berkeley.edu.

Americorps (National Service Trust)

You can use your Segal Education Award to enroll and directly pay UC Berkeley Extension for your course tuition fees and registration and application fees for professional certificates and other programs. On successful completion of your course(s), you can also request to receive a $150 per course textbook allowance. To enroll, complete a UC Berkeley Extension enrollment form, log on to https://my.americorps.gov and request to transfer the course fee to UC Berkeley Extension. Print a copy or screenshot of the Americorps voucher, attach it to your enrollment form and follow instructions on the form to enroll by mail or in person. For more information, visit extension.berkeley.edu/static/studentservices/enrollment/#americorps.

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 time lines. The time lines stated below are standard transfer policy time lines; these time lines, 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.

Approvals for transfers are based on course and space availability and the scheduled course start date. 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 extension-refund@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 course meeting. The time line 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 drop/refunds up to six days after you enroll.

Drops and Refunds
Within the time lines below, you can request a drop/refund through your student account, by phone at (510) 642-4111 or in person at the Golden Bear Center in Berkeley. To request a drop/refund online, you can log in to your student account and navigate to your Enrollment History page to request a drop/refund within the time lines listed below. Note that online drop/refund requests are processed in the order they are received during regular business hours: Monday–Friday, 9 am–5 pm, Pacific time.

Unless specified otherwise in the course description, all drop/refund requests are subject to a nonrefundable refund processing fee of $50 per class and must be made within the drop/refund policy time lines. The time lines stated below are standard drop/refund time lines; these time lines, however, may vary for specific course sections. Drop/refund requests that are a result of a course cancellation are not subject to the drop/refund processing fee.

If it is necessary for UC Berkeley Extension to cancel a course, your full course fee is refunded. We do not reimburse textbook fees, travel or accommodation costs, or any expense other than the full course fee in the event of course cancellation. If you have any questions regarding the drop/refund policy, call (510) 642-4111 or email extension-refund@berkeley.edu.

Note: 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.

Drops/Refunds for Classroom and Hybrid Courses
If you enroll in a course and then cannot attend, request a drop/refund within the following time lines:

- Courses with fewer than six meetings: You must make your drop/refund request no later than one day prior to the first course meeting.
- Courses with six or more meetings: You must make your drop/refund request no later than one day prior to the second course meeting. The time line for drop/refunds varies from one to 14 days after the course start date depending upon the meeting pattern of the course.

Drops/Refunds for Online Courses
For fixed-date online courses, you can request drop/refunds up to six days after the course start date. For continuous-enrollment online courses, you can request drop/refunds 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 extension-refund@berkeley.edu. You may also write to the Registrar’s Office, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000, or fax a request to (510) 642-0374. Include your name, the course 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 the review process.

Cancellation of Courses and Schedule Changes

Extension cancels courses only when absolutely necessary, but we must reserve the right to do so, as well as to reschedule courses and change instructors. UC Berkeley Extension receives no state or University funding and is self-supporting from course fees. If a course is canceled, you may either request a transfer to another course or you automatically receive a full refund, usually within four weeks.

Course Credit and Grades

Academic Standards

All academic credit courses numbered X, X100–199 and XB100–199 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 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 153 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/coci/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. Many employers and relicensure agencies accept these units as evidence of a student’s serious commitment to career advancement and the maintenance of professional competence. The letter’s 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 grades or CEU values are recorded on your transcript. Noncredit courses that carry no academic credit, grades or CEU values are not 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) by submitting a Petition for Grade Option Change, which can be found at extension.berkeley.edu/upload/grade_option_change.pdf. 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  Withdrawn 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 extension.berkeley.edu/static/studentservices/enrollment/#xb 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.

I  Incomplete; Issued for coursework of passing quality but not finished during the term or enrollment period due to circumstances beyond the student’s control. Incomplete grades are contingent upon instructor approval, and instructors are under no obligation to grant them. This Incomplete policy applies only to UC Berkeley Extension classroom and online courses. It does not apply to the Fall Program for Freshmen, Concurrent Enrollment, contract training or any other course or program. Incomplete grades are not generally permitted for international students with F-1 non-immigrant status; exceptions must be approved by International Student Administrative Services. If left unresolved, the grade ‘Incomplete’ (I) in any course becomes part of your permanent academic record.

An I designation is issued only if:

• You present extenuating circumstances to your instructor for not completing the course by the final class meeting date or by the online course end date.
• You must have successfully completed the majority of the assignments, assessments or projects at least three weeks prior to the final class meeting or online course end date.
• You have made prior written arrangements with the instructor(s) on the work required to complete the course, the percentage of the grade that will be based upon the remaining work, and a due date by which you will submit the work to the instructor. The due date should be within three months of the final class meeting date or online course end date.

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,
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 student 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.

Ordering Transcripts Online
Order transcripts online (including rush transcripts) through Credential Solutions Transcript Ordering Services at https://www.credentialsonline.com/berkeleyext?

Ordering Transcripts by Mail
Order transcripts (including rush transcripts) by mail 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). 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 digital 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 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(s), the person 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.

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 grade(s)” 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.

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 Ordering 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/student/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 give 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. 278–279.)

Getting Started
Consult the certificate’s description in this catalog for recommended beginning courses.
Transfer Credit

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.

Transfer credit is only accepted if:

1. You completed all coursework to be transferred prior to beginning the certificate at UC Berkeley Extension.
2. 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.
3. You have obtained a B or higher grade in all transfer coursework.
4. You completed all transfer coursework at a regionally accredited university or college.
5. You completed all transfer coursework within five years of beginning your professional certificate at UC Berkeley Extension.

Accepted transfer credit within the UC system is calculated into your professional certificate GPA.

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>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter units</td>
<td>1½</td>
<td>3</td>
<td>4½</td>
<td>6</td>
</tr>
</tbody>
</table>

Online Professional Certificates and Specialized Programs of Study

Several professional certificates and specialized programs of study are offered online. For more information, visit extension.berkeley.edu/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 or post-baccalaureate program 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 in-school 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 extension-finasst@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 each term 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 extension-finast@berkeley.edu for information.

California Workforce Development
UC Berkeley Extension participates in the California Employment Development Department’s (EDD) programs, including the Workforce Investment Act (WIA) and Trade Adjustment Assistance (TAA). Only tuition and certificate fees can be certified. For more information, contact extension-careercounseling@berkeley.edu. Please note that UC Berkeley Extension does not monitor attendance or career outcomes for these programs.

Verification of Enrollment
UC Berkeley Extension is not approved to complete loan deferments for federally sponsored financial assistance (Title IV). For other types of loan deferments, 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 extension-records@berkeley.edu.

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>

Call (510) 643-2843 or email extension-finast@berkeley.edu for information regarding full- and half-time study.

Satisfactory Academic Progress
For financial assistance purposes, satisfactory academic progress is 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.

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 B/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/student/services/policies for specific restrictions before enrolling.

Military Educational Benefits
Tuition Assistance for Active Duty Military
Effective July 15, 2014, UC Berkeley Extension will no longer be eligible to participate in tuition assistance programs for military. The Department of Defense Voluntary Education Program requires that all programs and courses be certified to participate in the U.S. Department of Education’s Title IV student aid programs, and UC Berkeley Extension’s continuing education programs and courses do not meet this new requirement.

Military Spouse Career Advancement Accounts (MyCAA)
UC Berkeley Extension participates in the 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 UC Berkeley Extension, please complete the following steps:

1. Establish your MyCAA account at aiportal.acc.af.mil/mycaa.
2. Email extension-studentaffairs@berkeley.edu for assistance with developing your Education and Training Plan (ETTP). Guidelines for the ETTP can be found at http://bit.ly/19j6U4j.
3. Create and submit your Education and Training Plan 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 honored.

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 your course application is accepted 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 extension.berkeley.edu/static/student/services/grades/ttcredit for more information.

Tuition Assistance for Active Duty Military
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 extension-studentaffairs@berkeley.edu for additional information.

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 advisor 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 your course application is accepted 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 extension.berkeley.edu/static/student/services/grades/ttcredit 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/student/services/concurrent. Late applications are not accepted.

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.
Students services
For frequently asked questions about concurrent enrollment, visit extension.berkeley.edu/static/studentservices/concurrent/faq or contact us at extension-concurrent@berkeley.edu.

Policies and General Information

Holidays
UC Berkeley Extension is closed on:

- Fourth of July: July 4
- Labor Day: Sept. 1
- Veterans Day: Nov. 11
- Thanksgiving: Nov. 27–28
- Winter Break: Dec. 24–25

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 student record. The form is available online at extension.berkeley.edu/static/studentservices/geninfo/#addresschange 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
The mission of UC Berkeley Extension's Disabled Student Services (EXDSS) is to provide equal access and opportunities to all Extension programs and services for persons with disabilities and special needs. To ensure access to our courses and programs, EXDSS facilitates collaboration between students, academic departments, instructors and the campus community.

If you are a student with special needs, you should contact the academic department and request to review the course syllabus to help you determine if academic support is required for your course. We highly recommend that you contact EXDSS as soon as you realize you might have a need so that you can take full advantage of our resources and so that we can arrange any required support services for you in a timely manner.

Before the start date of your course, contact EXDSS at:

- UC Berkeley Extension
- Disabled Student Services
- 1995 University Ave., Ste. 110
- Berkeley, CA 94704-7000
- (510) 643-5732

extension-dss@berkeley.edu
Fax: (510) 642-0274
For more information, visit extension.berkeley.edu/static/studentservices/career/#disabled.

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
You may be eligible for tax credits through the Taxpayer Relief Act of 1997. To determine eligibility, contact the Internal Revenue Service (IRS), a tax consultant or an accountant. UC Berkeley Extension issues you a 1098-T if you had at least one reportable transaction (such as a tuition payment or a program application or registration fee) during the calendar year. The IRS requires all educational institutions to request students provide a Social Security Number or an Individual Taxpayer Identification Number; log in to your student account to update this information under My Profile before the end of the tax year.

On or after Jan. 31 after each tax year has ended, you can access your 1098-T online by logging in to www.1098t.com. Form 1098-Ts will no longer be mailed via the U.S. Postal Service. Visit www.1098t.com to retrieve your 1098-T or call (877) 467-3821 for further assistance.

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 extension-rentals@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.

Honor Code and Student Conduct
All members of the UC Berkeley Extension Community are expected to act with honesty, integrity and respect for others. For further information, refer to:
- How to Maintain Your Academic Integrity: extension.berkeley.edu/static/studentservices/policies/#integrity.
- UC Berkeley Extension Code of Student Conduct: extension.berkeley.edu/static/studentservices/policies/#conduct

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 extension-registrar@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/geninfo/#recording.

**UC Berkeley Non-Smoking Policy**
Consistent with its emphasis on health and environmental protection, the University of California, Berkeley, is tobacco-free effective Jan. 1, 2014, meaning the use of tobacco, smokeless tobacco, or unregulated nicotine products (i.e., e-cigarettes) is strictly prohibited in indoor and outdoor spaces owned or leased by UC Berkeley. Anyone found violating this policy will be asked to cease the activity immediately.

**Comments and Feedback**
Please email customer service comments and feedback to extension-registrar@berkeley.edu.

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**Location Information**

**Berkeley: Golden Bear Center**
1995 University Ave., Berkeley, CA 94704
(p) 510 642-4111

**Office hours:** Monday–Friday, 8:30 am–5 pm, except holidays (see p. 245). 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. 245, 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 two-hour street parking is also available.

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**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 (p) 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 (p) 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 (p) 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), (p) 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, (p) 510 642-0518 or visit http://dsp .berkeley.edu. See p. 245 for information about the accessibility of UC Berkeley Extension courses. See also the information under Campus Night Safety and Services on this page.
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. 245, 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.

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. 245, 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 UC Berkeley Extension’s 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.

San Francisco: San Francisco Campus
160 Spear St., Floors 5, 6 and 7
San Francisco, CA 94105
(415) 284-1060
Office hours: Monday–Friday, 8 am–5 pm. The facility is open later on weekday evenings and on 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
Spear St. building access Monday–Friday, 7:30 am–7:30 pm. Use Main St. entrance after 7:30 pm and on Saturday. Please bring your enrollment confirmation, along with valid Photo ID, and check in at the security desk.
Access for Students With Disabilities
See Disabled Student Services, p. 245, 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 UC Berkeley Extension’s San Francisco Campus.
Parking
Public parking garages are located at 75 Howard St. and 121 Spear St., and there is a parking garage under the building. Please check posted signage for hours and rates.
Cal Alumni Members

Save 10% on Courses at UC Berkeley Extension

Cal Alumni Association (CAA) members enjoy access to all UC libraries, career networking and counseling, along with other great benefits. Membership is open to all, so join now.

alumni.berkeley.edu
(888) 225-2586

You must enroll by phone or in person through UC Berkeley Extension to receive the discount. Limitations apply. Visit extension.berkeley.edu/static/studentservices/enrollment/#discounts for details.
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 (Eureka, Calif.).

Edward Abramson, Ph.D., is an internationally recognized authority on emotional eating, weight control and eating disorders. A licensed clinical psychologist, Abramson is the author of four books, including Body Intelligence (McGraw-Hill, 2005), as well as 20 scientific studies. Abramson is professor emeritus of psychology and former director of the Eating Disorders Center at Chico Community Hospital.

Robert Adams, 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.

Linda Adler, M.A., M.P.H., is the CEO and founder of Pathfinders Medical, a medical advocacy and consulting organization. She has dedicated her professional life to making the patient experience both personal and manageable. Adler’s professional experience spans the areas of decision support, health education and technology.

Shalini Agrawal, M.Arch., is the principal of a design consulting business in the Bay Area and has worked as an architect in New York City and Chicago. She has taught design classes at Chicago’s Columbia College and co-founded a nonprofit organization that partners architects, artists and designers with community groups to implement changes in their environment.

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.

Kashif Ahmad, M.B.B.S., M.Sc., Ph.D., is a medical doctor who has taught a variety of graduate and undergraduate life sciences courses—including anatomy, physiology, pharmacology and general biology—in both classroom and online formats. He has more than 12 years of teaching experience. His research focuses on apoptosis (cell death) and redox regulation, and he has been published in Cancer Research and International Journal of Biochemistry and Cell Biology.

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 Ayed, Ph.D., PMP, is an information technology manager with Bayer Corp. in Berkeley. Ayed’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 garden writer based in Sonoma, Calif. He works with the Albert Group, a San Francisco project management firm, and is the publisher of Harvesttablet.com.

Thomas Albert, Ph.D., is an advisory technical writer at Accelyrs, 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.

Patricia Algar, M.L.A., is a skilled landscape designer with a passion for community engagement through public outreach. Her design firm, BASE, specializes in productive landscapes, an art she calls foodscaping. She is co-founder of the Algarden Demonstration Urban Farm in Berkeley.

Shafinaz Ali, Ph.D., has taught introductory physics and conceptual physics at University of Delaware. Her research interests include the study of cosmic microwave background radiation and cryogenic radiation detectors.

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, including Physics Laboratory Experiments for the Gifted: Middle and High School (Gifted Education, 2005).

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 the organization’s executive director. He founded SNAP! Labels and sold it to Adobe in 2002. Alter has received national awards for public speaking and presentation.

Yvette Alva-Campbell, Ph.D., studies population genetics, ecology and geology in order to understand the underlying evolutionary mechanisms responsible for dispersal among marine fish.

Rebecca Anderson, M.E.H.S., LEED AP, is an environmental specialist at UC Berkeley, specializing in air and water protection, as well as sustainability for the built environment.

Mark Angel, B.S., M.B.A., PMP, has more than 30 years of experience in the IT, telecommunications, city government, aerospace, airline and banking sectors. He is a senior program manager in the telecommunications industry. His expertise includes project management, systems analysis and system implementation.

Miguel Angeles, M.P.H., M.D., is an anatomy instructor at Stanford University School of Medicine. He also teaches anatomy and physiology at De Anza College and Merritt College. His background as a medical doctor and specialist in obstetrics and gynecology gives him his classes a practical approach and emphasis in clinical situations to understand the function of the human body.

Kristen Aramthanaporn, Ph.D., 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, Aramthanaporn was the lead chemistry developer for Wolfram Research Inc.

Rich Arzaga, B.S., CCIM, CPP®, 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 advisers 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 W. Asmar, M.S.E., CKM, PMP, Extension Honored Instructor, is co-founder and president of Interpro.com. He leads teams in developing and implementing strategic initiatives for global organizations in the semiconductor, information technology and biotechnology industries.

Kathleen Azevedo, MSN, R.N., 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.

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). Barnett was a member of the American Institute of CPAs’ (AICPA) Board of Examiners and Accounting and Review Services Committee.

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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.

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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.

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INSTRUCTOR BIOGRAPHIES

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Kevin A. Broccoli has been indexing for more than 17 years, creating standard back-of-the-book indexes, embedded indexes and indexes for online content. He has experience indexing using Microsoft Word, Adobe FrameMaker and InDesign, DocBook, HTML and XML. He is the co-author of a chapter entitled “Web Indexing—Anchors Away!” in the book Beyond Book Indexing (Information Today, 2005). Along with one of his employees at BLM Publishing Services, Broccoli invented a unique methodology for post-production linking of indexes. He has served as the vice president of the New York City Chapter of the American Society of Indexers and Chairman of the Web Indexing Special Interest Group of ASI.

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Ronald 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.

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Marcelo Carvalho, M.A., is a data network, voice communications and software application engineer at Usabound. He has been teaching UNIX, shell programming, C language and Perl programming classes at UC Berkeley Extension since 2000. Carvalho was technical reviewer for the third edition of UNIX Made Easy (McGraw-Hill Osborne Media, 2002) and developed a textbook on Perl programming.

David Casuto, M.A., M.Ed., teaches computer courses at UC Berkeley, San Francisco State University, Academy X, Ciber Training and Synergy School. He owns and operates Senior Surf, a nonprofit computer training company that educates older adults on all things technological. He specializes in teaching graphic design, digital photography, videography, Web 2.0 and Microsoft Office applications.

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Randall Chin, B.S., possesses more than 20 years of IT management experience. He has served as an IT manager, an IT director and an IT vice president, as well as a CIO, for San Francisco Bay Area companies, including Clif Bar, DHL Worldwide Express, Silicon Valley Bank, The North Face, Chey's Fresh Mex, Boudin Bakery, Mervyns and Revel Systems.

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Leda Cirao, Ph.D., has taught mythology, history and classical languages and is a published author and editor. Since 1994, she has been the owner of The Written Word, an independent editing and writing consultancy business in Oakland, Calif.

Christopher Clark, M.A., has taught Web-development courses at City College of San Francisco for more than a decade. He is passionate about Web technologies and introducing production techniques, tools and resources to burgeoning Web developers and designers. Clark is currently lead Web developer for the College of Liberal and Creative Arts at San Francisco State University.

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Robert Coackley, B.S., is an engineer and Fellow of the Institution of Engineering and Technology (IET). A mentor and coach for CEOs, Coackley has more than 20 years of experience as a CEO of both public and private companies. He has been an instructor for Golden Gate University and currently serves as an instructor in public education for the United States Coast Guard Auxiliary.

Rosemary Coates, M.B.A., is the president of Blue Silk Consulting. She is an Amazon.com top-selling author of three books: 42 Rules for Sourcing and Manufacturing in China (Super Star Press, 2009), 42 Rules for Superior Field Service (Super Star Press, 2013) and Negotiation Blueprinting for Buyers (Rosemary Coates and Brian Dietmeyer, 2013). Coates serves on the board of directors for the University of San Diego Supply Chain Management Institute.

Sylvia D. Coates, B.S., has been a full-time freelance index editor since 1989, working for scholarly, textbook and trade book presses. She has written numerous publications on indexing and has taught workshops and a basic indexing course since 1999. Coates developed the Indexing: Theory and Application course for UC Berkeley Extension.

Terri Cohn, M.A., is a writer, curator and art historian. She is a contributing editor to Artweek and writes for Sculpture Magazine, Art Papers, Camerawork, Release Print and Women Artists of the American West. She has taught at San Francisco State University, San Clara University, San Francisco Art Institute and California College of the Arts.
William Coleman, B.A., is a 35-year veteran of the global environmental and sustainability movement. In addition to having expertise in conventional air and water quality, waste and biodiversity management, his training includes ecosystem restoration, ecological economics and environmental psychology. Coleman has worked for nonprofits and commercial businesses where, in addition to the above topics, he developed capability in environmental markets, greenhouse gas management and renewable energy.

Michael Coronado, Ph.D., is a scientist at Stanford University researching how 6-adrenergic receptors control bioenergetics in the heart. He was previously trained at Johns Hopkins University where his research emphasized the mechanisms of viral-induced myocarditis and dilated cardiomyopathy. He has more than seven years of experience researching the heart, and has been an assistant professor and instructor since 2006. He teaches at universities and corporate clients worldwide. He has been teaching for UC Irvine Extension, UCLA Extension and corporate clients since 1997, leading and motivating teachers and students in California's San Joaquin Valley. Working exclusively in high-poverty schools with high concentrations of English learners, he has led these schools to high achievement and academic success.

John de Miranda, Ed.D., LAADC, has a professional background in the human services field that spans 36 years. He has worked as a program administrator, management consultant, therapist, educator, government official, researcher and trainer. Until recently, de Miranda served as the president and CEO of Stepping Stone (San Diego, Calif.), an addiction treatment and recovery program that primarily assists the LGBT communities. He is also the pro bono executive director of the National Association on Alcohol, Drugs and Disabilities Inc.

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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 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).

Diane Dorrans Saeks, B.A., is the best-selling author of 21 books on design, architecture, interiors, designers and international decor. Her most recent design book is Ann Getty: Interior Style (Rizzoli, 2012). She has written on design and architecture for The New York Times, California Style, Papercity, House Beautiful, California Home + Design and The Washington Post. She is also the founder of design blog The Style Saloniste.

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 and created Stanford Hospital and Clinics’ first brand campaign. In 2006, Doyle launched Stagea 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.
INSTRUCTOR BIOGRAPHIES

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Neil Fiore, Ph.D., is a psychologist, author and keynote speaker who served as a lieutenant with the 101st Airborne. He also was a manager for Johnson & Johnson, an economic analyst for Shell Oil and a psychologist at UC Berkeley’s Counseling Center. Fiore is the author of six books and CDs, and was the recipient of the University of California’s Award for Distinguished Achievement.

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Robin Flagg, M.P.H., Ph.D., has worked on policy development and advocacy with numerous organizations including the California Association of Public Hospitals, the Centers for Medicare and Medicaid Services in the U.S. Department of Health and Human Services, and Kaiser Permanente. She held the position of director of health policy at the California Medical Association for eight years. Flagg currently lectures on U.S. health policy at the University of California, Berkeley, School of Public Health.

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Michael Fontanello, B.S., CPA, a partner of Fontanello, Duffield & Otake, LLP, has a practice that focuses on income and estate taxes, accounting and auditing, with an emphasis on nonprofits. He is a member of the American Institute of Certified Public Accountants, the California Society of CPAs and the San Francisco Bay Area CPA Society.

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INSTRUCTOR BIOGRAPHIES

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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 Franskovia, 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 perspective 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.

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Douglas Greenberg, Ph.D., has taught environmental studies, urban studies, geography and geology at the University of San Francisco, San Francisco State University, UC Berkeley and UC Berkeley Extension. He has researched the environmental impacts of urban expansion and studies how human activities have affected natural landscapes, past and present.

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INSTRUCTOR BIOGRAPHIES

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Austin Hedeman, M.A., is a graduate student at UC Berkeley. He has been a teaching assistant for large undergraduate Berkeley physics courses for more than 12 semesters.

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Glenn Hirsch, M.F.A., also teaches in the San Francisco Art Institute’s Community Education Program, and serves as an adviser and mentor for the Art Institute of Boston’s M.F.A. program. He has exhibited widely in the United States for 20 years, including a retrospective of his work at Stanford Art Spaces and a 2008 solo show at the California Institute for Integral Studies in San Francisco.

Peggy Hock-McCalley, Ph.D., has been helping students and their families in the transition to college for the past 15 years, 13 of them as the director of college counseling at a local independent high school. She is active in the Western Association for College Admission Counselors (WACAC).

Charles G. Hollins, B.S., is a Web technologist, consultant and teacher. He is the founder of Applied Internet Technology, a Web consulting firm that has helped many organizations in the United States and Italy reap the benefits of Web technology. Hollins has developed and taught more than 20 classroom and online courses related to the Web for UCLA and UC Irvine. He spoke at the 2000 Internet World conference in Bangkok.

Michael Hsieh, Ph.D., developed and teaches the smart grid curriculum for UC Berkeley Extension. Previously, he worked at Sun Microsystems Inc. for almost 20 years, where he designed and delivered Sun workstations and servers for cloud computing. Prior to Sun, Hsieh was a lead engineer at Intel and Ford, designing multiple microcontroller chips for controlling the embedded systems such as modern-day smart grids and Internet of Things.

Laura Huddle, B.A., B.S., is co-founder of Search Scholars, a boutique Internet-marketing firm based in San Francisco, and is also product marketing manager for Eventbrite, a San Francisco startup bringing people together through events. She serves as an advisory board member and lead blogger for the Online Marketing Institute.

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Bret Lewis, Ph.D., has written articles in a variety of peer-reviewed publications and has conducted grant-funded research in Indonesia and Tunisia. His research interests include world religions, comparative religion, religion and higher education, and religion and conflict. Lewis has taught for eight years in a variety of higher education contexts, including both public and private institutions.

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Janet K. Long, M.A., ATR-BC, CTP, M.FT, is an artist, psychotherapist, mind-body movement therapist and educator with 30 years of experience developing public programs in the creative arts therapies and her own private practice. She was a founding member of the Northern California Art Therapy Association (NCATA) in the early 1970s, and has been an active contributor to the field of art therapy ever since. Since 1981, she has taught art therapy and psychology courses at the California College of Arts and Crafts. Long is a winner of the Helen Landgarten Award for clinical excellence in art therapy.

Harry F. Lorsbach, M.B.A., CIA, CPA, has more than 40 years of auditing experience at a wide variety of organizations. He is an internal auditor with the University of California. Lorsbach has taught graduate and undergraduate auditing courses for more than 20 years at UC Berkeley and UC Santa Cruz extensions.

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Barbara Magalnick, M.S., is the author of English Reader (McGraw-Hill, 1979) and Safe Conduct (Lipstick, 2005). She has taught English and ESL in the United States and abroad. After working as an editor at several major publishing houses, she became a freelancer.

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Valeria Martinovic, Ph.D., is an instructor of biology and chemistry in the San Mateo Community College District. She has also taught medical biochemistry, anatomy, human biology and AP biology. Although Martinovic comes from a long line of chemists, her interest in science was ignited by her great-grandmother, who was a medieval herbalist of some repute in the Balkans.

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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.

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Bill Say, M.A., brings many years of experience to the intersection of diversity awareness, conflict resolution; and leadership, team and community building. He has consulted for health and mental health organizations, educational institutions, communities, nonprofits and international groups. He is a former faculty member of JFK and Naropa Universities, and a process work diplomate.

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).

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).
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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.

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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.

Jeffrey S. Sloan, J.D., M.M.H., is an attorney in private practice and an AVM Government-Rated expert in business law. For more than 32 years, he has represented businesses of all types and sizes, from Fortune 500 companies and international airlines to law firms, medical groups and family-owned businesses. Sloan also regularly advises startups and individual entrepreneurs on legal and strategic business matters.

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Hans Yip, M.S., is a senior information technology architect at AT&T. He has more than 20 years of software development, project management, and infrastructure and platform design experience. Yip also has more than 14 years of experience teaching computer programming, database and Web technologies at the college level.

Mary Alice Yund, Ph.D., Extension Honored Instructor, has more than 15 years of academic research experience in developmental genetics at UC Berkeley. She has taught genetics at UC Berkeley and California State University, East Bay, and genetics, developmental biology, functional genomics and an introduction to biotechnology at UC Berkeley Extension.

Daniel Xu, J.D., M.S., is a patent and trademark attorney specializing in all facets of intellectual property law. He has prosecuted applications in technological fields as diverse as electronics, software, chemical and biotechnology.

David Yip, J.D., LL.B., is a business and litigation attorney. Yang has litigation experience in both state and federal courts and has two published opinions in the U.S. Court of Appeals for the Ninth Circuit. He is admitted to practice in the U.S. Supreme Court and U.S. Court of Appeals, Ninth Circuit.

Linda Yang, Ph.D., spent the past 18 years working for pharmaceutical-related companies and is an expert in regulatory and quality compliance. She has played a leadership role in product development, business process optimization, quality compliance and regulatory strategy. Yang has experience working with U.S., European and global regulatory regulations. She co-authored the book Fundamentals of U.S. Regulatory Affairs (RAPS, 2009).

Eric Yap, M.B.A., has extensive experience in all areas of finance, accounting and business operations. He has worked for companies of various sizes in diverse industries, including manufacturing, distribution, logistics, service, retail and government, and has helped improve their sales and profits by recommending and implementing innovative ideas. In addition, Yap has been teaching a variety of business courses for Bay Area universities and community colleges for more than 15 years.

Mary Alice Yund, Ph.D., Extension Honored Instructor, has more than 15 years of academic research experience in developmental genetics at UC Berkeley. She has taught genetics at UC Berkeley and California State University, East Bay, and genetics, developmental biology, functional genomics and an introduction to biotechnology at UC Berkeley Extension.

Location Guide

For detailed information, see p. 246.

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

Berkeley Campus See campus map, p. 247. If no building location is given, visit extension.berkeley.edu for updated information.

Berkeley: Golden Bear Center 1995 University Ave., Berkeley

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

San Francisco: San Francisco Campus 160 Spear St., Floors 5, 6 and 7, 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.
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- Integrated Circuit Design and Techniques  
  $150 registration fee
- Post-Baccalaureate Certificate in Information Systems and Management  
  $150 registration fee

#### Specialized Programs of Study
- Business Intelligence and SAS Analytics Software  
  $100 registration fee
- Data Administration and Management  
  $50 registration fee
- Microsoft Access Series  
  $50 registration fee
- Quantitative Analysis  
  $100 registration fee
- Smart Grid Technology  
  $50 registration fee
- Virtual and Cloud Computing  
  $50 registration fee

### Writing, Editing and Technical Communication

#### Professional Certificate
- Post-Baccalaureate Certificate Program in Writing  
  $150 registration fee

#### Specialized Programs of Study
- Editing  
  $100 registration fee
- Professional Writing  
  $100 registration fee
- Technical Communication  
  $100 registration fee
Professional certificates and specialized programs of study require you to register to receive your official completion documents. We strongly recommend you register no later than after completing the third course in any curriculum. Here’s how to register:

1. Submit this form by mail or in person. Be sure to include the appropriate fee (see preceding spread).
2. Complete your coursework. The program description on the Web at extension.berkeley.edu/cert and our academic representatives can guide you through this process.
3. Request your certificate or Award of Completion. When you have completed your coursework, call or email your academic representative. Once the department has verified your successful completion of all requirements, it will issue your certificate or any other relevant completion documents. For information about transcripts or duplicate documents, go to extension.berkeley.edu/static/studentservices.

### REGISTRATION FORM FOR PROFESSIONAL CERTIFICATES AND SPECIALIZED PROGRAMS OF STUDY

**Title of:**

- [ ] Professional Certificate
- [ ] Specialized Program of Study

**Fee**

- [ ] $150 professional certificate
- [ ] $100 specialized program of study
- [ ] $ 50 specialized program of study

(Certificate and program application fees vary; see preceding spread for details.)

**Note:** A separate application process is required for teaching credential programs. For more details, visit extension.berkeley.edu/cert.

Please include certificate or program title.

**Application fee is nonrefundable, nontransferable and must accompany your application.**

- [ ] To pay by check, make check payable to the UC Regents.
- [ ] Visa □ MasterCard □ American Express □ Diners Club

**Billing address**

- [ ] To pay by credit card, fill out this information completely.

**Card holder name**

- [ ] Card number
- [ ] Expiration date

**Pay by check**

- [ ] Check payable to the UC Regents.

**Pay by credit card**

- [ ] Visa □ MasterCard □ American Express □ Diners Club

Please print your permanent student record, the address below is my  
- [ ] home  
- [ ] business

**Name**

- [ ] last  
- [ ] first  
- [ ] initial

**Company/agency**

- [ ] (Business address only)

**Address**

- [ ] street  
- [ ] apt. no.

- [ ] city  
- [ ] state  
- [ ] zip/postal code  
- [ ] country

**Daytime phone**

- [ ] –  
- [ ] –  
- [ ] –  
- [ ] –

**Evening phone**

- [ ] –  
- [ ] –  
- [ ] –  
- [ ] –

**Fax**

- [ ] –  
- [ ] –  
- [ ] –

**Job title**

- [ ]

**Please print**

**Term and year in which you first completed (or will enroll in) courses that apply to this certificate or program:**

Please list UC Berkeley Extension courses already completed that satisfy curriculum requirements:

- [ ]
- [ ]
- [ ]

You can mail your completed form accompanied by check or credit card number to Dept. B, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000.

We cannot accept applications by phone.

To register online, complete the Web-based form linked in your certificate or program’s page at extension.berkeley.edu/cert.
| Company/agency (For business address only) |   |   |   |   |   |   |   |   |   |
| Address |   |   |   |   |   |   |   |   |   |
| Daytime phone* |   |   |   |   |   |   |   |   |   |
| Fax |   |   |   |   |   |   |   |   |   |
| Title/occupation |   |   |   |   |   |   |   |   |   |
| Social Security number† |   |   |   |   |   |   |   |   |   |
| Courses: The course title, course number and section number are essential for processing your enrollment. Fee less discount if applicable ‡ |
| Location (city) | Beginning date | Section number |   |
| Fee | less discount if applicable ‡ |
| Location (city) | Beginning date | Section number |   |
| Fee | less discount if applicable ‡ |

† The University is required by federal law to report your Social Security number and other pertinent information to the Internal Revenue Service pursuant to the reporting requirements imposed by the Taxpayer Relief Act of 1997. Social Security number disclosure is mandatory. This notification is provided to you as required by the Federal Privacy Act of 1974.

‡ Discounts must include a copy of valid California Alumni Association membership card.

To enroll online, visit extension.berkeley.edu.

To enroll by phone, call (510) 642-4111 with your credit card Monday–Friday, 9 am–5 pm.

To enroll by mail, mail this entire page to Dept. B, UC Berkeley Extension, 1995 University Ave., Suite 110, Berkeley, CA 94704-7000.

For refund policy, see p. 239.
Enroll Today!

Online
extension.berkeley.edu

By Phone
(510) 642-4111 with your credit card
Monday–Friday, 9 am–5 pm

By Mail
Fill out the enrollment form on the inside back cover of this catalog, and mail it to:
Dept. B, UC Berkeley Extension
1995 University Ave., Suite 110
Berkeley, CA 94704-7000

Visit Our New San Francisco Campus This Fall!

We're excited to announce the opening of our newest San Francisco center, located at 160 Spear St. Inside are three floors of classrooms, multiple meeting spaces and a student hub for relaxing and chatting with fellow students. Outside is a vibrant neighborhood with cafés and restaurants close by. You're blocks away from BART and Muni, and the Embarcadero is just a few minutes' walk.

We hope you enjoy the new state-of-the-art classrooms. Classes begin in late August. Check inside the catalog for courses and sections in the new location.

For details about our new campus and our other locations in Belmont, Berkeley and San Francisco, see p. 246 or visit extension.berkeley.edu/static/locations.