

CONTINUING EDUCATION SOLUTIONS

SUMMER 2000

CONTINUING EDUCATION SOLUTIONS CONTINUING EDUCATION SOLUTIONS CONTINUING EDUCATION SOLUTIONS CONTINUING EDUCATION SOLUTIONS CONTINUING EDUCATION SOLUTIONS



New and NOTEWORTHY

CATALOG TIPS. For your convenience, we have reorganized the catalog to improve flow and make things easier to find. For example, all credit courses are now grouped together in the front of the catalog. We think you'll find these adjustments helpful. See pages 5 and 6 for information on for-credit registration using CU Connect or the Web.

WEB SITE. Our online presence has been expanded and updated with new courses, additional class sections and locations and lots of helpful information. Drop in and see: www.colorado.edu/conted

GARDENING CLASSES. New and fun, the Summer Gardening Series is a selection of seven classes on Saturday mornings in June and July, covering everything from organic vegetable gardening to composting, herbs and gardening with children. The instructor, Selina Rossiter Hunter, has worked at both the Denver and Brooklyn Botanic Gardens. This is an exceptional opportunity and an exceptional value. For details, see page 24.

SCHOLARSHIPS AVAILABLE. Scholarship funds are available for Continuing Education courses. For more information, call 303-492-5148.



CONTENTS

3

BOULDER EVENING CREDIT CLASSES

University of Colorado credit courses offered weekdays after 5 p.m. through the departments of communication, English, mathematics, psychology, sociology, Spanish, and more.

11

INDEPENDENT LEARNING PROGRAMS

For people in transition, on the road, or just busy with multiple demands, an excellent solution for disciplined independent learners.

16

CATECS (Center for Advanced Training in Engineering and Computer Science)

Graduate engineering courses delivered directly to business or industry via live TV broadcast and videotape.

17

ADDITIONAL CREDIT PROGRAMS

ACCESS (Available Credit Courses for Eligible Special Students) Program
High School Concurrent Program
CU-Boulder Summer Session
High School Summer Scholars

19

PERSONAL ENRICHMENT COURSES

A lively, relevant approach to the arts, languages, lifestyles, test preparation, and writing.

26

BUSINESS COURSES

Noncredit classes to meet challenging business situations, including accounting, marketing, supervision, writing and leadership. Management Development and Entrepreneurship Certificates also available.

29

COMPUTER APPLICATIONS PROGRAM

Hands-on instruction from user-friendly instructors, to teach you the basics or take you to the power-user edge. Certificates in Computer Applications, Network Administration, Programming and Web Site Design available.

47

REAL ESTATE AND APPRAISAL PROGRAM

A full curriculum of noncredit real estate and appraisal courses for professional licensure and license renewal in the state of Colorado.

49

SPECIAL PROGRAMS

International English Center
CU Interlocken Center

51

CAMPUS MAP

52

REGISTRATION INFORMATION

Dates, deadlines, eligibility, financial aid, tuition, refunds, residency and more.

53

CREDIT REGISTRATION FORM

55

NONCREDIT/CERTIFICATE REGISTRATION FORM

57

INDEX

CATALOG PRODUCTION

Catalog production is wholly self-sustaining and does not involve funds allocated by the legislature for the university at large. Recycled paper is used throughout the book. Share your catalog with friends, and recycle all appropriate materials. Thank you.



**FIVE WAYS TO
BEGINNING
SEE PAGE 52
MAY 8
REGISTER**



BOULDER EVENING COURSES: CONTINUING SOLUTIONS FOR YOUR BUSY LIFE.

BOULDER EVENING CREDIT offers university courses that give you more options and more flexibility, to help you continue your education while juggling the demands of a busy life. To understand exactly how Evening Credit courses fit into your program of study, make an appointment to talk to an advisor. Evening Credit courses provide solutions to help you:

- ❖ Begin your degree
- ❖ Complete your degree
- ❖ Fulfill core requirements
- ❖ Make a difficult schedule work better for you
- ❖ Pick up credits you've overlooked or postponed
- ❖ Try on the idea of going back to school
- ❖ Try on the idea of applying to CU

ELIGIBILITY: All you need is a high school diploma or GED. (Individuals on University of Colorado financial stops or academic suspension from the College of Engineering and Applied Science may not enroll.)

RESIDENCY: If you have lived in Colorado for the past 12 months, you may be eligible for in-state tuition rates although you may be asked for documentation.

UNDER 23? If you're not 23 years old by the first day of classes, you are assumed to have the same legal residence as your parents. If your parents live out of state, you may petition the University of Colorado for resident status as an emancipated minor. If you believe your initial classification is incorrect, talk to the Classification Coordinator at 303-492-5148.

TUITION: Tuition is determined by residency status. Resident tuition is \$100 per credit hour. Some courses requiring special equipment or materials may be slightly higher. Non-residents of Colorado are assessed tuition based on the number of semester hours for which they register. Non-residents may register for up to three (3) semester hours at the rate of \$180 per credit hour. Non-residents registering for four (4) or more semester hours of credit courses offered by the Division may be assessed non-resident tuition at the rate established by the Board of Regents. The Division will charge our in-state rate for Boulder Evening classes when a non-resident student pays for full-time, out of state tuition through Summer Session and then enrolls for additional Boulder Evening courses.

Joel Guenther teaches Public Speaking (COMM 1300, see page 8) through the Boulder Evening Credit program. The course is a practical solution for people who need public speaking skills because the class provides useful experience in a nonthreatening environment. (Note: pizza is involved.) Through the course, students learn communication survival skills adaptable to any career Joel says, adding, "and we have a lot of fun." He studied Communication as an undergrad at the University of Wisconsin, Stevens Point, and at the University of Northern Iowa, where he earned an MA. He came to Colorado to do some graduate work at CU, and stayed. He says he had no idea he wanted to teach until he started doing it and then, "it just grew on me." Personal interests include reading, horseback riding and target shooting, and he enjoys exploring the parks and trail systems in the Boulder area.

PRIVILEGES: As a Boulder Evening Credit student, total library services are available at no additional charge.

STUDENT FEES: Boulder Evening students have the option of paying student fees for use of campus facilities (RTD bus pass, Recreation Center, Wardenburg Health Center and other student services). Information on cost and paying student fees may be obtained by calling 303-492-5148.

ACADEMIC ADVISING: An academic advisor is available to help you plan a degree program, decide on a major, or simply explore your options. Feel free to call 303-492-5145 for an appointment.

FINANCIAL AID: Degree students may qualify for all financial aid programs if eligible. Nondegree students taking courses for credit may qualify for a Stafford Loan (formerly GSL) if eligible. Applications are available in the Office of Financial Aid, Environmental Design building, Room 2 (303-492-4518).

Nondegree students 25 years and over are eligible for the Non-traditional Student Scholarship for Continuing Education enrollment. May 8 is the application deadline. Applications are available at the Division of Continuing Education. Scholarship awards range up to \$240.

VETERAN BENEFITS: As an eligible veteran or veteran dependent, you may enroll in evening classes and apply credit toward a degree. If you have questions about your eligibility and benefits, contact Veterans Services in the Office of Financial Aid, Environmental Design building, Room 2 or call 303-492-7322.

TO ENROLL: Advance registration is necessary, by CU Connect, the web, by mail, by FAX, or in person at the Division of Continuing Education. See the instructions on page 52 of this catalog.

PASS/FAIL: Any Boulder Evening course taken for pass/fail is subject to restrictions established by your school or college.

TO DROP: To drop a credit course and ensure that you receive any tuition refund that may be due, come to the Division of Continuing Education and complete a drop voucher. If you don't officially withdraw from a course, you may receive a grade of "F" for that class.

SPECIAL FACULTY-STAFF REGISTRATION: Faculty and staff of the University of Colorado at Boulder may enroll in Boulder Evening Credit Courses at half the regular tuition on a space available basis. Please bring a current copy of your PAF (showing at least half-time employment) to registration. See page 4 for registration dates.

SURVIVAL TIPS: Boulder Evening tuition is assessed in addition to any tuition paid on campus (resident or nonresident).

IMPORTANT DATES

MAY 8

Boulder Evening registration through CU Connect or the web begins 7 a.m. - midnight.
Registration is also available by mail, fax, or in person at the Division of Continuing Education,
1505 University, 8 a.m.-5 p.m. Monday through Friday.

MAY 8

Deadline to apply for Non-traditional Student Scholarship.
Applications available at the Division of Continuing Education.

JUNE 5

Summer Boulder Evening classes begin.
Faculty/Staff registration. 50% discount. Current PAF required.

JUNE 7

Deadline to petition for in-state classification for classes.

JUNE 9

5 p.m. deadline to register for classes, add your name to a wait list, request pass/fail status or drop with a 100% refund.
Withdrawals from classes after this date will appear as a "W" on student's academic record and must be received in writing.

JUNE 12

Instructor's signature required to drop classes.

JUNE 19

Petition required to drop classes.

JULY 3-4

No classes

JULY 31-AUGUST 1

Classes end

REFUNDS

100% through 5 p.m. June 9*
60% June 12 through 5 p.m. June 16
40% June 19 through 5 p.m. June 23

NONE THEREAFTER

*All refund requests received after this date must be in writing.



REGISTER USING CU CONNECT OR THE WEB

IN ADDITION TO REGISTERING by mail, fax (303-492-3962), or in person (1505 University Avenue), Boulder Evening students are eligible to register using CU Connect (the telephone registration system) or the web. To be eligible to use either CU Connect or the web, students must have a current Continuing Education term record and have no academic or financial stops which could prevent them from registering. To set up a term record, return the registration form on page 53. You will be sent an Invitation to Register through the mail verifying your eligibility along with your Personal Identification Number (PIN). Please remember to keep your PIN confidential. Use of CU Connect or the web obligates you for any tuition charges as a result of adding any course.

CU Connect and the web are normally available Monday through Friday 7 a.m. to midnight and Sundays from 11 a.m. to midnight. They are **not** available on Saturdays, on May 29 or on July 4.

WEB REGISTRATION

Eligible Boulder Evening students can register on the web by accessing the CU home page at www.colorado.edu and choosing Personal Lookup Services or going directly to www.colorado.edu/plus and selecting the "Registration" button. You will then need to enter your student ID number and personal identification number (PIN). Then choose Continuing Education and follow the instructions on the web page from there to add or drop and request pass/fail or no credit. You will need to enter the 5 digit course call numbers to register for courses and click on the "submit" button to process each course request. To verify your course selections, click

on the "Schedule" tab at the bottom of the page. When you're finished, be sure to exit web registration.

You can also conduct online course searches via web registration. The web registration course search tool allows you to search by subject, level, course number, core requirements, and by meeting time. The course search is updated on a real-time basis, so if you need a course you would like to sign up for, you immediately know whether there is still room in the course.

CU CONNECT REGISTRATION

Call CU Connect, 303-938-8110, from any touch-tone phone to register. Use the confirmed registration function codes listed below.

- ❖ the Boulder-campus code 1
- ❖ the Continuing Education code 1
- ❖ the registration application code 1
- ❖ the term code 004
- ❖ your University student number _____
- ❖ your personal identification number (PIN) _____

Fill out the information below completely. When prompted, enter the courses you've listed below. Press the star (*) or pound (#) keys as indicated. Whenever you press the # key, wait for the computer voice to respond before proceeding with the next entry. For more time between entries, press #.

ADD CODE	COURSE CALL NUMBER	Department Abbreviation	Course Number	Credit Hours	Enrolled Waitlisted?
2 *	_____	# _____	_____	_____	_____
2 *	_____	# _____	_____	_____	_____
2 *	_____	# _____	_____	_____	_____
2 *	_____	# _____	_____	_____	_____
2 *	_____	# _____	_____	_____	_____

OTHER CU CONNECT FUNCTIONS

- To **add** a course, press 2*, the course call number, then #
- To **drop** a course, press 3*, the course call number, then #
- To request a course for **no credit**, press *1 between the course call number and #
- To request a course for **pass/fail**, press *2 between the course call number and #
- To **list** your courses, **verify** your schedule, or check your **wait list** position, press 5#
- To **search** for open sections, press 7#
- To place your name on a **wait list**, press 9#
- To **cancel** an entry, press *# before you have completed the transaction
- To **exit** the registration application, press 8# then 1 to access the student billing application for your **account balance and/or credit card payment options**; or press 2 to **end** the call.



CU CONNECT/WEB REGISTRATION INFORMATION-continued

VERIFYING AND ADJUSTING YOUR SCHEDULE

Once you have registered, it is important that you verify your schedule either through CU Connect or the web. Your schedule can be adjusted through the dates listed on the calendar on page 4.

6

WAIT LISTS

Placing your name on a wait list does not guarantee that you will be enrolled in that course. Enrollment is determined by the total number of spaces and the demand for each particular course. Spaces may or may not become available at a future time.

You can check your position on any course wait list either on the web at www.colorado.edu/plus or by calling CU Connect and pressing 5# (list schedule function).

If you choose to wait list for a Boulder Evening course and a space becomes available, you will automatically be enrolled in the course and additional tuition and fees will be assessed. We, therefore, encourage you to check your wait list position often to avoid paying additional tuition and fees and receiving an "F" for the course.

ACCOUNT BALANCES

The amount of tuition you owe is available both through CU Connect and the web. Credit card payments, using VISA, MasterCard or Discover, can be made on CU Connect only. You can also call our accounting office at 303-492-2212 to make a credit card payment, fax your credit card information to 303-492-3962, or visit our office at 1505 University Avenue.

COURSE RESTRICTIONS

Some Boulder Evening courses have prerequisites and enrollment restrictions. It is your responsibility to ensure that you have met the listed prerequisites and/or restrictions. If you are unsure, please call 303-492-5145 and make an appointment with our academic advisor.

GRADES

To access your grades through the web, log on to www.colorado.edu/plus, enter your student ID number and PIN, and choose the grades option. To access your grades through CU Connect call 303-938-8110 from any touch tone phone, press 1 for the Boulder campus, 1 for Continuing Education, 2 for the grade code function and enter the term code (004 for summer) followed by your student number and PIN. To determine the term code for previous semesters, the first two digits are the year and the last digit the semester (1=Spring, 4=Summer, 7=Fall).

ADDITIONAL WEB FUNCTIONS

With your student identification number and PIN, in addition to registering, you are also able to find the following:

- ❖ degree program information (primary and secondary college, major, residency, gpa, and class standing)
- ❖ registration status (advising requirements and academic or financial stops)
- ❖ class schedule for all current and past terms enrolled and all future terms for which you have registered
- ❖ current semester billing and financial aid information
- ❖ address changes
- ❖ PIN changes
- ❖ degree audit (for certain colleges)

PROBLEMS? QUESTIONS?

If you have any type of registration stop, you will not be allowed to enroll via CU Connect or the web. Please call our registration office at 303-492-5148 for more information on your stop.

If you have a Continuing Education term record for summer and no registration stop, please call 303-492-5148 between 8:30 a.m. and 5 p.m. Monday-Friday for further assistance. After hours, please call 303-492-5145 for a recorded message.



BOULDER EVENING CREDIT CLASSES

Courses On Mondays and Wednesdays Courses begin June 5 and end July 31

Course No.	Section	Call#	Times	Course Title	Core
COMM 1300-3	300	60029	6:30-9:10 p.m.	Public Speaking	none
ENGL 3060-3	300	60022	6-8:40 p.m.	Modern and Contemporary Literature	literature and the arts
GEOG 1982-3	300	60014	5:30-8:10 p.m.	World Regional Geography	none
HIST 2100-3	300	60026	6-8:40 p.m.	Revolution in History	historical context
HIST 3317-3	300	60031	6:30-9:10 p.m.	Seminar in the American West	critical thinking
MATH 1011-3	300	60016	5:30-8:10 p.m.	Fundamentals and Techniques of College Algebra	quantitative reasoning and mathematical skills
SOCY 1005-3	300	60019	6-8:40 p.m.	Social Conflict and Social Values	contemporary societies or ideals and values
SPAN 2110-3	300	60018	5:30-8:10 p.m.	Second-Year Spanish 1	foreign language
UWRP 3020-3	300	60221	5:30-8:10 p.m.	Topics in Writing: Plato's Symposium	written communication

Courses On Tuesdays and Thursdays Courses begin June 6 and end August 1

Course No.	Section	Call #	Times	Course Title	Core
ECON 2010-4	300	60028	6-9:15 p.m.	Principles of Microeconomics	contemporary societies
ENGL 1500-3	300	60017	5:30-8:10 p.m.	Masterpieces of British Literature	literature and the arts
ENGL 3051-3	300	60027	6-8:40 p.m.	Intermediate Fiction Workshop	none
KAPH 3420-3	300	60025	6-8:40 p.m.	Nutrition, Health and Performance	natural science
PHIL 3140-3	300	60024	6-8:40 p.m.	Environmental Ethics	ideals and values
PSCI 4734-3	300	60015	5:30-8:10 p.m.	Politics and Literature	critical thinking
PSYC 4303-3	300	60021	6-8:40 p.m.	Abnormal Psychology	none
SOCY 3151-3	300	60020	6:30-9:10 p.m.	Self in Modern Society	United States context or ideals and values
UWRP 3020-3	301	60222	6-8:40 p.m.	Topics in Writing: Environmental Issues	written communication

Alyssa Jardine is taking Abnormal Psychology through the Boulder Evening Credit program because "I decided very late that I was going to transfer to CU and I wasn't able to get in as a fulltime student." Evening Credit lets her pick up credits while waiting for admission. She adds, "I enjoy Continuing Education classes. They're very interesting and they're at night, which allows me to work full time."



COMMUNICATION**Public Speaking
COMM 1300-3**

Covers theory and skills of speaking in various public settings. Treats fundamental principles from rhetorical and communication theory and applies them to oral presentations.

Joel Guenther, M.A.

Section 300: Call No. 60029 Mondays and Wednesdays, 6:30-9:10 p.m. Humanities 186. \$300 (resident).

ECONOMICS**Principles of Microeconomics
ECON 2010-4**

Examines basic concepts of microeconomics, or the behavior and interactions of individuals, firms, and government. Topics include determining economic problems, how consumers and businesses make decisions, how markets work and how they fail, and how government actions affect markets. Students may not receive credit for ECON 2010 and 2011 or 1000 or 1001. Approved for arts and sciences core curriculum: contemporary societies.

Rachael Small, M.A.

Section 300: Call No. 60028 Tuesdays and Thursdays, 6-9:15 p.m. Economics 2. \$400 (resident).

ENGLISH**Masterpieces of British Literature
ENGL 1500-3**

Introduces students to a range of major works of British literature, including at least one play by Shakespeare, a pre-twentieth-century English novel, and works by Chaucer and/or Milton. Approved for arts and sciences core curriculum: literature and the arts (lower division).

Jan Whitt, Ph.D.

Section 300: Call No. 60017 Tuesdays and Thursdays, 5:30-8:10 p.m. Hale 240. \$300 (resident).

**Intermediate Fiction Workshop
ENGL 3051-3**

Intermediate course in fiction writing. May be taken up to three times for credit.

George Moore, Ph.D.

Section 300: Call No. 60027 Tuesdays and Thursdays, 6-8:40 p.m. Hellems 259. \$300 (resident).

**Modern and Contemporary Literature
ENGL 3060-3**

Close study of significant twentieth-century poetry, drama and prose works. Readings range from 1920s to the present. Prereq., sophomore standing. Approved for arts and sciences core curriculum: literature and the arts (upper division).

George Moore, Ph.D.

Section 300: Call No. 60022 Mondays and Wednesdays, 6-8:40 p.m. Hellems 241. \$300 (resident).

Dr. Vann teaches Abnormal Psychology (PSYC 4303) for the Boulder Evening Credit program. The class attracts a broad array of students who are either in the field, or interested in exploring a career in psychology. Text readings are supplemented by hypothetical case studies done in teams, so that students have the opportunity to apply theory and methodology in a "real world" context that gives them a taste of what it is like to do assessment and diagnosis of adult mental disorders. Prof. Vann is a licensed psychologist with an active community practice. January marked his 20th anniversary as a Continuing Education instructor.

**GEOGRAPHY****World Regional Geography
GEOG 1982-3**

Involves an intellectual journey around the globe, stopping at major regions to study the people, their environments, and how they interact.

Topics include the political/economic tensions in changing Europe, conflicts in Brazilian rain forests, transitions facing African peoples, and rapid changes in China. Meets University's Minimum Academic Preparation Standards (MAPS).

Betsy Forrest, M.A.

Section 300: Call No. 60014 Mondays and Wednesdays, 5:30-8:10 p.m. Ketchum 119. \$300 (resident).



HISTORY**Revolution in History
HIST 2100-3**

Examines the causes, character, and significance of political revolution in world history. Concentrating on the 1917 Russian Revolutions, this course will examine why revolutions occur, who participates in revolution and to what effect. The course will also discuss the relevancy of the 1917 revolutions to the Gorbachev years and the current state of affairs in the former Soviet Union. Approved for arts and sciences core curriculum: historical context.

Merle Funk, Ph.D.

Section 300: Call No. 60026 Mondays and Wednesdays, 6-8:40 p.m. Education 143. \$300 (resident).

**Seminar in the American West
HIST 3317-3**

Examines the conflict between the popular perceptions of the American West and the reality of the region. In this course, students will develop critical thinking and writing skills as they discuss the "mythology" surrounding the West. Along with enhancing their knowledge and understanding of the region, students will explore the impact of the American West on the development of the nation. Approved for arts and sciences core curriculum: critical thinking.

James Fell, Ph.D.

Section 300: Call No. 60031 Mondays and Wednesdays, 6:30-9:10 p.m. Ketchum 120. \$300 (resident).

**KINESIOLOGY AND APPLIED
PHYSIOLOGY****Nutrition, Health and Performance
KAPH 3420-3**

Highlights basic principles of nutrition and their relationship to health. Students may not receive credit for both KAPH 3420 and PSYC 2062. Prereq., junior standing (pre-nursing students are exempt). Approved for arts and sciences core curriculum: natural science.

Nanci Grayson, M.S.

Section 300: Call No. 60025 Tuesdays and Thursdays, 6-8:40 p.m. Clare Small 207. \$300 (resident).

Deborah Milburn is a Psychology major. She's taking PSYC 4303 because "I'm interested in counseling. In this class, Dr. Vann has been teaching us a little bit about his clinical practice. We're going over lots of cases—how you diagnose and how you treat. It's interesting and helpful."

MATHEMATICS**Fundamentals and Techniques of College
Algebra
MATH 1011-3**

Covers simplifying algebraic expressions, factoring linear and quadratic equations, inequalities, exponentials, logarithms, functions and graphs, complex numbers, and binomial theorem. Students may not receive credit for both MATH 1011 and 1000/1020. Prereq., one year of high school algebra or placement. Approved for arts and sciences core curriculum: quantitative reasoning and mathematical skills.

Craig McBride, M.S.

Section 300: Call No. 60016 Mondays and Wednesdays, 5:30-8:10 p.m. Duane Physics G2B60. \$300 (resident).

PHILOSOPHY**Environmental Ethics
PHIL 3140-3**

Examines major traditions in moral philosophy to see what light they shed on value issues in environmental policy and the value presuppositions of the economic, ecological, and juridical approaches to the environment. Prereq., junior standing, or PHIL 1100, 1200, 2200, 3100 or 3200. Approved for arts and sciences core curriculum: ideals and values

Pascal Bercker, M.A.

Section 300: Call No. 60024 Tuesdays and Thursdays, 6-8:40 p.m. Hellems 263. \$300 (resident).

POLITICAL SCIENCE**Politics and Literature
PSCI 4734-3**

Broadly examines political topics as they are presented in important literary works and analyzes the possibilities involved in using the literary mode to present political teachings. Prereq., junior or senior standing. Approved for arts and sciences core curriculum: critical thinking.

Loren Weinberg, Ph.D.

Section 300: Call No. 60015 Tuesdays and Thursdays, 5:30-8:10 p.m. Ketchum 303. \$300 (resident).



PSYCHOLOGY**Abnormal Psychology
PSYC 4303-3**

Examines borderline disorders as extreme variations of the normal personality. Focuses on major functional and organic disorders, theories of mental disorders, and methods of psychotherapy. Not open for credit to those who have credit for PSYC 3313 or 4313. Prereq., PSYC 1001.

Patrick Vann, Ph.D.

Section 300: Call No. 60021 Tuesdays and Thursdays, 6-8:40 p.m. Muenzinger E131. \$300 (resident).

SOCIOLOGY**Social Conflict and Social Values
SOCY 1005-3**

Explores origin, escalation, and resolution of social conflict. Focuses on major conflict theories, human values and social action, and use of simulation and negotiation exercises for learning conflict management skills. Approved for arts and sciences core curriculum: contemporary societies or ideals and values.

TBA

Section 300: Call No. 60019 Mondays and Wednesdays, 6-8:40 p.m. Ketchum 301. \$300 (resident).

**Self in Modern Society
SOCY 3151-3**

Using a variety of eastern and western perspectives, explores how modern social institutions and culture shape our personal experiences, how personal experiences can affect the nature of those institutions and culture, and how strategies can be developed for achieving balance between the individual and society. Approved for arts and sciences core curriculum: United States context or ideals and values.

TBA

Section 300: Call No. 60020 Tuesdays and Thursdays, 6:30-9:10 p.m. Duane Physics G131. \$300 (resident).

SPANISH**Second-Year Spanish 1
SPAN 2110-3**

Grammar review. Emphasizes reading, writing, and speaking skills. Attendance at the language laboratory may be mandatory. Prereq., SPAN 1020 or 1150 with a grade of C- or better, or placement. Similar to SPAN 2150. Approved for arts and sciences core curriculum: foreign language.

Javier Garces, B.A.

Section 300: Call No. 60018 Mondays and Wednesdays, 5:30-8:10 p.m. Hale 236. \$320 (resident).

**UNIVERSITY WRITING
PROGRAM****Topics in Writing
UWRP 3020-3**

Each instructor assigns two or more readings on a given topic. Students choose an essay, abstract its argument, analyze it, and agree or disagree with the author. They thus learn the principal modes of academic rhetoric: description, analysis and argument. Approved for arts and sciences core curriculum: written communication.

Plato's Symposium

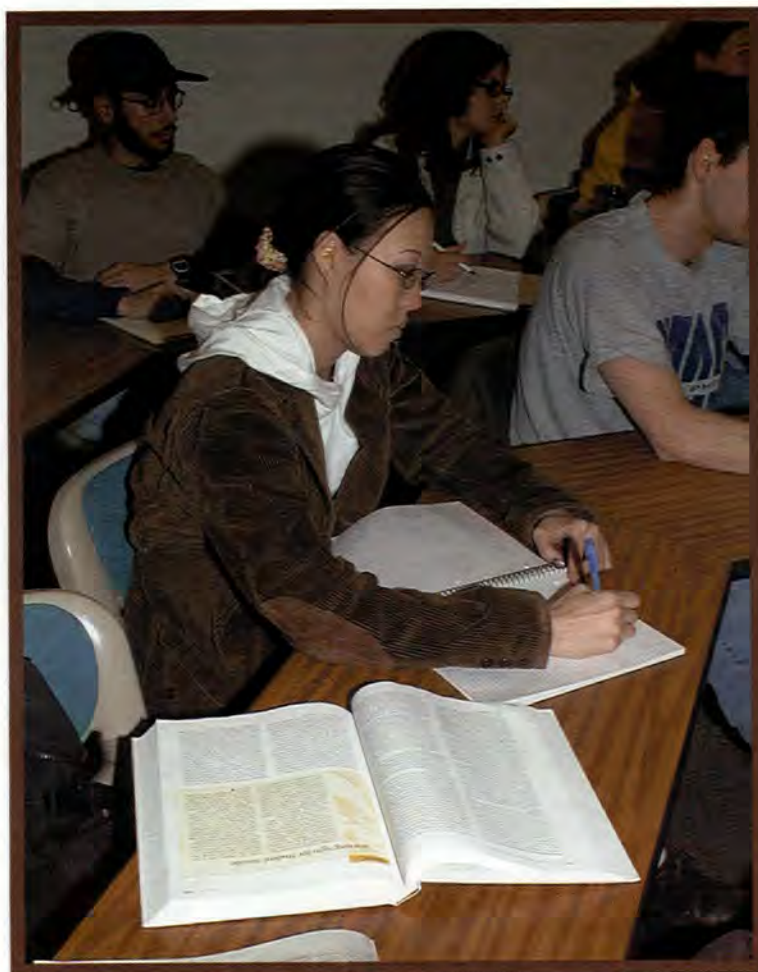
Erik Fisher, M.A.

Section 300: Call No. 60221 Mondays and Wednesdays, 5:30-8:10 p.m. Engineering Center CR 110. \$300 (resident).

Environmental Issues

Anne Bliss, Ph.D.

Section 301: Call No. 60222 Tuesdays and Thursdays, 6-8:40 p.m. Ketchum 119. \$300 (resident).



Jacquelyn Cho is a Psychology major. She's taking Abnormal Psychology because "I've taken Dr. Vann's classes before. I like how he interacts with the class and I like the case study and discussion format. It keeps you on your toes all the time. I've learned a lot about people from his classes."

Additional language courses are available through the Personal Enrichment Program. See page 22.

INDEPENDENT LEARNING – IT’S UP TO YOU.

INDEPENDENT LEARNING courses put you in control, with choices to make about when you learn and how you learn. Many of our courses are correspondence courses, with a printed study guide and student-instructor communication by US Postal Service (and increasingly, by e-mail). Some of our courses also have an online version, and growing numbers of our courses are delivered entirely via the World Wide Web, with all communication with the instructor and among fellow students conducted on the Internet.

- ❖ Self-paced courses are open for registration at any time.
- ❖ Term-based courses provide rich interaction among students.
- ❖ Learn wherever you are.

So, it's up to you to challenge yourself and to decide how you want to take a course. Complete course descriptions are available from Independent Learning Programs or on the World Wide Web-
www.Colorado.EDU/cewww.

SECTION CODE:

580 = online term-based course, follows academic calendar.

640 = online self-paced course.

650 = print-based course, self-paced.

680 = print-based course, self-paced.

ANTHROPOLOGY

ANTH 1030	.....650 3	.....Principles of Anthropology 1.....	Kathy Greene, M.A.	.....\$240
ANTH 1040	.....650 3	.....Principles of Anthropology 2.....	Kathy Greene, M.A.	.....\$240
ANTH 2010	.....650 3	.....Introduction to Physical Anthropology 1	Kathy Greene, M.A.	.....\$240
ANTH 2020	.....650 3	.....Introduction to Physical Anthropology 2	Kathy Greene, M.A.	.....\$240
ANTH 2070	.....640 3	.....Bones, Bodies, and Disease	Dawn Mulhern, Ph.D.	.....\$300
ANTH 2200	.....650 3	.....Introduction to Archaeology	Kathy Greene, M.A.	.....\$240

COMMUNICATION

COMM 2400	.....640 3	.....Communication and Society	Robert Agne, M.A.	.....\$300
COMM 2400	.....650 3	.....Communication and Society	Robert Agne, M.A.	.....\$300
COMM 4600	.....640 3	.....Senior Seminar: Computer-Mediated Communication in Organizations	Brenda J. Allen, Ph.D.	.....\$300

COMPUTER SCIENCE

CSCI 2830	.....640 1	.....Special Topics: Social, Ethical, and Professional Issues in Computer Science	James P. Gately, M.T.	.....\$100
CSCI 2830	.....650 1	.....Special Topics: Social, Ethical, and Professional Issues in Computer Science	James P. Gately, M.T.	.....\$100

ECONOMICS

ECON 2010	.....640 4	.....Principles of Microeconomics	Laura Argys, Ph.D.	.....\$400
ECON 2010	.....650 4	.....Principles of Microeconomics	Laura Argys, Ph.D.	.....\$400
ECON 2020	.....640 4	.....Principles of Macroeconomics	Jules Kaplan, Ph.D.	.....\$400
ECON 2020	.....650 4	.....Principles of Macroeconomics	Laura Argys, Ph.D.	.....\$400
ECON 3403	.....640 3	.....International Economics and Policy	Jules Kaplan, Ph.D.	.....\$300
ECON 4111	.....640 3	.....Money and Banking Systems	Jules Kaplan, Ph.D.	.....\$300

EDUCATION

EDUC 4161	.....650 3	.....Children's Literature.....	Phyllis Kennemer, Ed.D.	.....\$240
EDUC 4322	.....650 3	.....Literature for Middle School and Secondary School Teachers.....	Caroline McKinney, M.A.	.....\$240

ENGLISH

ENGL 1191	.....650 3	.....Introduction to Creative Writing.....	Michael Arvey, M.A.	\$240
ENGL 1260	.....650 3	.....Introduction to Women's Literature.....	Nancy Story, M.A.	\$240
ENGL 1600	.....650 3	.....Masterpieces of American Literature.....	James Colwell, Ph.D.	\$240
ENGL 2021	.....650 3	.....Introductory Poetry Workshop.....	Michael Arvey, M.A.	\$240
ENGL 3000	.....650 3	.....Shakespeare for Non-majors.....	Rhonda Sanford, Ph.D.	\$240
ENGL 3051	.....650 3	.....Intermediate Fiction Workshop.....	Todd Pinney, Ph.D.	\$240
ENGL 3060	.....650 3	.....Modern and Contemporary Literature.....	James Colwell, Ph.D.	\$240
ENGL 3081	.....650 3	.....Intermediate Nonfiction Workshop: Travel Journal Writing.....	Todd Pinney, Ph.D.	\$240
ENGL 3553	.....650 3	.....Chaucer: The Canterbury Tales.....	Zelda Rouillard, Ph.D.	\$240
ENGL 3563	.....650 3	.....Shakespeare 1.....	Rhonda Sanford, Ph.D.	\$240
ENGL 3573	.....650 3	.....Shakespeare 2.....	Rhonda Sanford, Ph.D.	\$240
ENGL 3655	.....640 3	.....American Literature to 1860.....	Todd Pinney, Ph.D.	\$300
ENGL 3655	.....650 3	.....American Literature to 1860.....	Todd Pinney, Ph.D.	\$300
ENGL 3665	.....640 3	.....American Literature after 1860.....	Todd Pinney, Ph.D.	\$300
ENGL 3665	.....650 3	.....American Literature after 1860.....	Todd Pinney, Ph.D.	\$300
ENGL 4100	.....650 3	.....The English Language.....	Zelda Rouillard, Ph.D.	\$240

FINE ARTS

FINE 1012	.....650 3	.....Basic Drawing (Multimedia).....	Patricia Cheyne, M.F.A.	\$240
FINE 3636	.....650 3	.....Art for the Elementary Teacher.....	Patricia Cheyne, M.F.A.	\$240

GEOGRAPHY

GEOG 1001	.....650 4	.....Environmental Systems 1: Climate and Vegetation.....	Dixon Smith, Ph.D.	\$320
GEOG 1011	.....650 4	.....Environmental Systems 2: Landscapes and Water.....	Dixon Smith, Ph.D.	\$320
GEOG 1992	.....640 3	.....Human Geographies.....	Jeffrey Bury, M.A.	\$300

GEOLOGY

GEOL 1010	.....640 3	.....Introduction to Geology 1.....	Abbas Sharaky, M.A.	\$300
GEOL 1010	.....650 3	.....Introduction to Geology 1.....	Abbas Sharaky, M.A.	\$300
GEOL 1020	.....650 3	.....Introduction to Geology 2.....	Hilde Schwartz, Ph.D.	\$240

HISTORY

HIST 1010	.....650 3	.....Western Civilization 1: Antiquity to the 16th Century.....	Jeanne Christensen, M.A.	\$240
HIST 1015	.....650 3	.....History of the United States to 1865.....	James Fell, Ph.D.	\$240
HIST 1020	.....650 3	.....Western Civilization 2: 16th Century to the Present.....	Jeanne Christensen, M.A.	\$240
HIST 1025	.....650 3	.....History of the United States Since 1865.....	James Fell, Ph.D.	\$240
HIST 2117	.....640 3	.....History of Colorado.....	James Fell, Ph.D.	\$300
HIST 2117	.....650 3	.....History of Colorado.....	James Fell, Ph.D.	\$300
HIST 4217	.....650 3	.....The American West in the 19th Century.....	Anthony McGinnis, Ph.D.	\$240
HIST 4227	.....650 3	.....The American West in the 20th Century.....	Anthony McGinnis, Ph.D.	\$240
HIST 4733	.....640 3	.....The Russian Revolution and the Soviet Regime.....	David Pretty, Ph.D.	\$300

JOURNALISM

JOUR 3771640 3Mass Communication History.....Wendy Redal, Ph.D.\$300

KINESIOLOGY AND APPLIED PHYSIOLOGY

KAPH 3420650 3Nutrition, Health, and PerformanceFrank Konishi, Ph.D.\$240

MATHEMATICS

MATH 1011650 3Fundamentals and Techniques of College AlgebraBrian Clark, M.A.\$240

MATH 1021650 2Numerical and Analytical College TrigonometryKristen Marshall, Ph.D.\$160

MATH 1071650 3Finite Mathematics for Social Science and BusinessKristen Marshall, Ph.D.\$240

MATH 1081650 3Calculus for Social Science and Business.....Kristen Marshall, Ph.D.\$240

MATH 1300650 5Analytic Geometry and Calculus 1Curtis Caravone, M.A.\$400

MATH 2300650 5Analytic Geometry and Calculus 2Kristen Marshall, Ph.D.\$400

MUSIC

EMUS 1081650 3Basic Music TheoryDaniel Jones, Ph.D.....\$240

PHILOSOPHY

PHIL 1000650 3Introduction to PhilosophyBarbara Morrison, Ph.D.\$240

PHIL 1100650 3Ethics.....Barbara Morrison, Ph.D.\$240

PHIL 1600650 3Philosophy and ReligionBarbara Morrison, Ph.D.\$240

PHIL 4040650 3Twentieth-Century Philosophy.....Barbara Morrison, Ph.D.\$240

POLITICAL SCIENCE

PSCI 1101650 3The American Political SystemJeffrey Ian Ross, Ph.D.\$240

PSCI 2223650 3Introduction to International RelationsJeffrey Ian Ross, Ph.D.\$240

Megan Nehr is a Psychology and Business major who works full time as a supervisor for Frontier Airlines. She says, "I don't have time to go to day school. Evening Credit classes have been a valuable solution in getting requirements filled. This class just fit my schedule and my interests. And I like the prof. He's really good."



PSYCHOLOGY

PSYC 1001	.....650 3	.....General Psychology	.....Tim Bockes, Ph.D.	.....\$240
PSYC 2012	.....640 3	.....Biological Psychology 1	.....Howard Bashinski, Ph.D.	.....\$300
PSYC 2012	.....650 3	.....Biological Psychology 1	.....Howard Bashinski, Ph.D.	.....\$300
PSYC 2022	.....650 3	.....Biological Psychology 2	.....Howard Bashinski, Ph.D.	.....\$240
PSYC 2303	.....650 3	.....Psychology of Adjustment	.....Gary Stern, Ph.D.	.....\$240
PSYC 2606	.....650 3	.....Social Psychology	.....Gary Stern, Ph.D.	.....\$240
PSYC 3101	.....640 4	.....Statistics and Research Methods in Psychology	.....Howard Bashinski	.....\$400
PSYC 3101	.....650 4	.....Statistics and Research Methods in Psychology	.....Howard Bashinski	.....\$400
PSYC 4303	.....650 3	.....Abnormal Psychology	.....Brett King, Ph.D.	.....\$240
PSYC 4456	.....650 3	.....Psychology of Personality	.....Tim Bockes, Ph.D.	.....\$240
PSYC 4511	.....650 3	.....History of Psychology	.....Wayne Viney, Ph.D.	.....\$240
PSYC 4684	.....650 3	.....Developmental Psychology	.....Cheryl Sanders, Ph.D.	.....\$240

REAL ESTATE

NCRE 20	.....680 0	.....Colorado Real Estate Contracts and License Law (under revision)	.....Richard Burger, G.R.I.	.....\$280
NCRE 7	.....680 0	.....Real Estate Law and Practice (under revision)	.....Edward Prill, Ph.D.	.....\$280

SOCIOLOGY

SOCY 1001	.....650 3	.....Analyzing Society	.....Steve Wilson, Ph.D.	.....\$240
SOCY 1005	.....650 3	.....Social Conflict and Social Values	.....Roxanne Rhodes, M.A.	.....\$240
SOCY 1016	.....650 3	.....Sex, Gender and Society 1	.....Eleanor Hubbard, Ph.D.	.....\$240
SOCY 4014	.....640 3	.....Criminology	.....Steve Wilson, Ph.D.	.....\$300
SOCY 4014	.....650 3	.....Criminology	.....Steve Wilson, Ph.D.	.....\$300
SOCY 4025	.....640 3	.....Conflict Management in Social Systems	.....Guy Burgess, Ph.D.	.....\$300
SOCY 4086	.....641 3	.....Family and Society	.....Eleanor Hubbard, Ph.D.	.....\$300

WRITING FOR INTERNATIONAL STUDENTS

NIWC 316640 0Computerized Research Writing for International StudentsLarry Fisher, M.A.\$495
----------	------------	---	-------------------------	------------

SUMMER 2000 TERM-BASED COURSES.

These courses are offered on a term basis in order to provide rich interaction with your instructor and the other students in the course. They follow a calendar of assignments and examinations. Note the term dates carefully.

UWRP 3040	.....580 3	.....Writing on Business and Society	.....Anne Bliss, Ph.D.	.....\$444	Term A: June 5-July 7, 2000
UWRP 3040	.....581 3	.....Writing on Business and Society	.....Anne Bliss, Ph.D.	.....\$444	Term B: July 11-August 11, 2000
UWRP 3040	.....582 3	.....Writing on Business and Society	.....Amy Goodloe, Ph.D.	.....\$444	Term D: June 5-August 11, 2000

WRITING ON BUSINESS AND SOCIETY

Through selected readings and daily writing assignments, students examine ethical and social issues that arise in business. Focusing on critical thinking, analytical and argumentative writing, and oral presentation, the course emphasizes effective communication with non-technical audiences. Classes are conducted as workshops.

Prerequisite: junior standing. Course intended for business majors and minors; open to other majors. Approved for arts and sciences core curriculum: written communication. Course available via WWW only. Internet-ready computer and SLIP/PPP connection or online service required. Students must have access to and use Microsoft Word, version 6.0 or higher. **Note: terms A and B are intensive, requiring 4-6 hours per day.**

HIGH SCHOOL INDEPENDENT LEARNING

IN COOPERATION WITH YOUR HIGH SCHOOL, we offer high school correspondence courses. You can take these courses with the approval of your school. Your high school grants credit when you complete. And it's up to you to decide when and where to learn. Self-paced courses put you in control. Additional information and course descriptions are available from Independent Learning Programs or on the World Wide Web-www.Colorado.EDU/cewww.

BUSINESS EDUCATION

HBUS 1755 Office Systems
 HBUS 1901 Consumer Education and Economics
 HBUS 2355 Beginning Accounting 1
 HBUS 2455 Beginning Accounting 2
 HBUS 2756 Business English and Communication

ENGLISH

HENG 0155 Basic Grammar
 HENG 0255 Intermediate Grammar
 HENG 1701 The Short Story
 HENG 2102 The American Short Story
 HENG 2302 Basic Expository Writing
 HENG 3155 Ninth Grade English 1
 HENG 3255 Ninth Grade English 2
 HENG 3555 Tenth Grade English 1
 HENG 3655 Tenth Grade English 2
 HENG 3955 Eleventh Grade English 1
 HENG 4055 Eleventh Grade English 2
 HENG 4355 Twelfth Grade English 1
 HENG 4455 Twelfth Grade English 2

HOME ECONOMICS

HFCS 1155 Personal Adjustment and Family Living

MATHEMATICS

HMTH 0155 Basic Mathematics 1
 HMTH 0255 Basic Mathematics 2
 HMTH 0555 General Mathematics 1
 HMTH 0655 General Mathematics 2
 HMTH 0956 Business and Consumer Mathematics 1
 HMTH 1056 Business and Consumer Mathematics 2
 HMTH 3157 Beginning Algebra 1
 HMTH 3257 Beginning Algebra 2
 HMTH 3555 Geometry 1
 HMTH 3655 Geometry 2
 HMTH 3955 Advanced Algebra 1
 HMTH 4055 Advanced Algebra 2
 HMTH 4356 Precalculus 1: Analytical Geometry and Algebra
 HMTH 4456 Precalculus 2: Trigonometry

All courses are for 1 semester (half-unit) of high school credit. Registration for credit requires the approval and cooperation of the student's high school. Tuition is \$70 per course. Syllabus and text are extra.

High school students may also register for CU-Boulder university courses as concurrent students, earning credit at the university and at their high school.

SCIENCE

HSCI 0155 Health Science 1
 HSCI 0255 Health Science 2
 HSCI 2556 Biology 1
 HSCI 2656 Biology 2
 HSCI 5155 Biology 3: Advanced Biology

SOCIAL STUDIES

HSST 0155 Civics
 HSST 0355 Sociology
 HSST 0755 Psychology
 HSST 1755 Ethnic Studies and Human Relations
 HSST 2157 World Geography 1
 HSST 2257 World Geography 2
 HSST 3155 World History 1
 HSST 3255 World History 2
 HSST 3356 American History 1
 HSST 3456 American History 2
 HSST 3755 American Government: Theories, Policies, and Politics
 HSST 3855 American Government: National Level

STUDY SKILLS

HSTS 0101 Effective Methods of Study

INDEPENDENT LEARNING-IT'S UP TO YOU.

On the web-www.colorado.edu/cewww
 303-492-8757 (toll free, 800-331-2801)



GRADUATE ENGINEERING COURSES DELIVERED TO YOUR WORKSITE.

CATECS (Center for Advanced Training in Engineering and Computer Science)

CATECS offers professionals a way to continue their education at a distance from campus:

- ❖ Graduate engineering courses delivered to your worksite via live microwave TV broadcasts with two-way audio and via videotape.
- ❖ Master's degree programs and some certificate programs are available in Aerospace Engineering, Computer Science, Electrical

and Computer Engineering, Engineering Management, Mechanical Engineering and Telecommunications.

- ❖ Courses given during the semester can be taken for professional development or toward a master's degree.
- ❖ Courses given in previous semesters can also be taken for credit or noncredit and are available for rent or purchase on videotape through the CATECS Tape Library.

SESSION A (JUNE 5 - JULY 7)

TELECOMMUNICATIONS

TLEN 5110	.....Contemporary Issues	Johnson	2:00 - 4:45 p.m.	MWF
TLEN 5300	.....Telecommunications Theory & Application.....	Mercer	7:30 - 9:05 a.m.	M - F
	.....Recitation.....		9:15 - 10:15 a.m.	TR
TLEN 5830	.....Network Management	Ramkumar	12:10 - 1:45 p.m.	M - F

SESSION C (JUNE 5 - JULY 28)

AEROSPACE ENGINEERING

ASEN 5148Spacecraft Design	Brown	9:30 a.m. - 12:00 p.m.	TR
-----------	------------------------------	-------------	-----------------------------	----

ENGINEERING MANAGEMENT

EMEN 5042	.....Methods for Quality Improvement.....	TBA.....	9:30 a.m. - 12:00 p.m.	MW
EMEN 5050	.....Leadership and Management	Micucci.....	9:30 a.m. - 12:00 p.m.	TR

SPECIAL CREDIT COURSE FOR UNDERGRADUATE STUDENTS

EMEN 4830Professional Communication for Engineering ManagersFisherTape Library

This course fulfills the College of Engineering undergraduate writing requirement and is an approved substitute for UWRP 3030. Registered students may pick up the videotapes and instructor notes in May prior to leaving campus for summer break. For further information about the course (syllabus, assignments, etc.) contact Erik Fisher at (303) 492-3883 or erik.fisher@spot.colorado.edu.

HOW TO REGISTER FOR CATECS COURSES

Registration for Summer 2000 Courses: May 1 - 19

Late Registration: May 20 - June 9

1. Complete the Registration Form available from our web site at www.colorado.edu/CATECS or from the CATECS Office at (303) 492-6331.
2. Mail, fax or bring your registration form to CATECS (do not both fax and mail your form).
If faxing, call the same day to confirm receipt.
3. You will receive a confirmation packet by mail within two weeks of receipt.
4. Call the CU Bookstore about three weeks prior to the first class to verify the correct text(s) and place your order: (800) 255-9168 or (303) 492-3444 or online at cubooks.colorado.edu
5. Tuition for all CATECS courses is \$1,200 per course.

FOR MORE INFORMATION ABOUT CATECS, COURSES OFFERED AND REGISTRATION:

(303) 492-6331

www.colorado.edu/CATECS

Additional
engineering
courses are
available for
registration
through
Summer Session.
See page 17.

ADDITIONAL CREDIT OPPORTUNITIES TO MEET COMMUNITY NEEDS.

ACCESS PROGRAM

Want to take a credit course at CU-Boulder during the day? Perhaps you're interested in a particular class for personal or professional development or plan to enroll in a degree program in the future. Each Fall and Spring, the ACCESS (Available Credit Courses for Eligible Special Students) program enables nondegree students to enroll in on-campus undergraduate or graduate courses.

Registration for Fall semester begins Friday, August 25 and classes begin Monday, August 28. Call 303-492-6226 for more information or visit the ACCESS web site at www.colorado.edu/conted/access.htm

HIGH SCHOOL CONCURRENT PROGRAM

If you are a high school student interested in the challenge of university coursework, you may enroll in Summer Session 2000 or Boulder Evening credit courses at the University of Colorado at Boulder. In addition, you may be able to use the credit you earn toward high school graduation requirements and for college credit. Participation in the High School Concurrent Program requires written permission from your high school counselor and parent/guardian. You may obtain more information on Boulder Evening courses in this catalog and on the Summer Session 2000 courses at www.colorado.edu/sacs/summer

During the Fall and Spring semesters, high school juniors and seniors may request tuition reimbursement from their school district for the successful completion of up to two university courses each term. You must also notify your counselor of your intent to enroll at least two months prior to the beginning of the term. You may register for main campus courses through the ACCESS (Available Credit Courses for Eligible Special Students) Program or enroll in Boulder Evening credit courses. Call 303-492-6226 for an application and more information or visit the High School Concurrent web site at www.colorado.edu/conted/hsconcur.htm

Uri Talmor is taking Dr. Vann's Abnormal Psychology class because he needs the course as a prerequisite for graduate school. He says, "It's a wonderful opportunity to take a class that I need at a quality school where I know I'm going to get all the information I need to help me prepare for grad school in the fall." He says Dr. Vann is "wonderful, a very nice guy with 30 years clinical experience."

SUMMER SESSION 2000

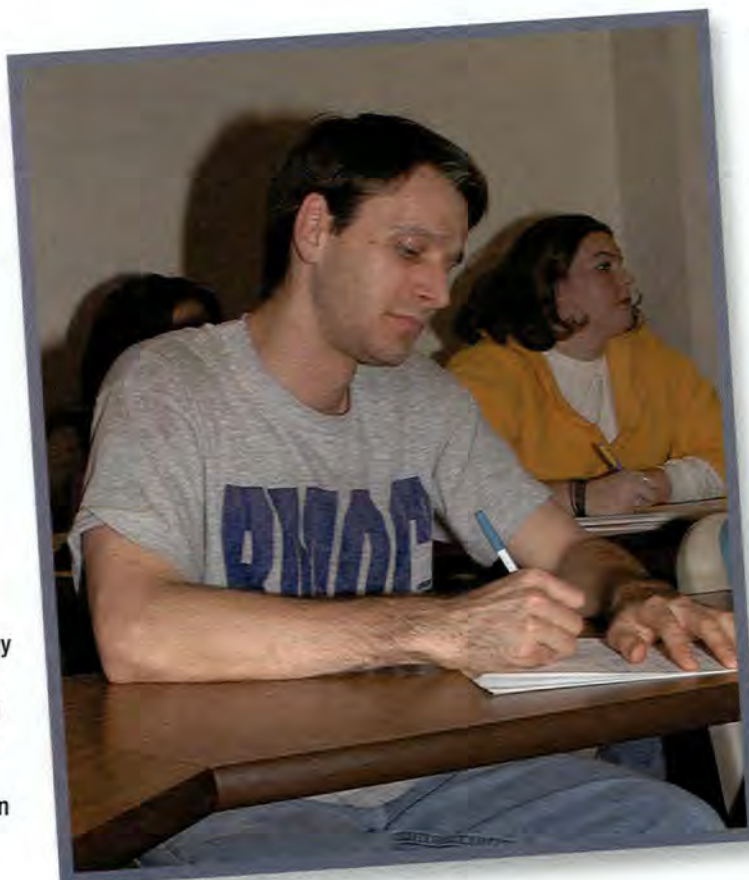
Summer Session on the Boulder campus is special. Over 500 classes allow you to complete requirements and explore new subjects. Classes are smaller, more relaxed and more personal. You have the opportunity to take classes (most meet for five weeks) and have time for other activities. We welcome visiting high school students, undergraduates, graduate students, and others to join us in Boulder for Summer Session.

For more information on summer session call 303-492-5146 or visit the web site (www.colorado.edu/sacs/summer) to request a Summer Session catalog.

HIGH SCHOOL SUMMER SCHOLARS

July 9-August 12

Are you a high school sophomore or junior looking ahead to college and wondering what it will be like? The CU High School Summer Scholars was designed for high school students to experience college life. The five-week program offers the challenge of college credit classes combined with social and recreational activities and more! Now in its fourth year, participating students have enjoyed the chance to be at CU in the summer. To place your name on the catalog mailing list, call 303-492-5146 or visit the web site at www.colorado.edu/conted/scholars.





COURSES TAILORED TO YOUR INTERESTS—IN A CONVENIENT, NONCREDIT FORMAT.

PERSONAL ENRICHMENT COURSES enable you to enjoy courses tailored to your personal interests in a convenient, noncredit format. The program includes a broad range of popular offerings including foreign language study, creative writing, literature, and fine arts classes. What's your passion? What's your pleasure?

- ❖ Bonjour! Hola! Learn a new language.
- ❖ Write that Great American Novel.
- ❖ Explore Boulder's rich history.
- ❖ Tap into your creative side with painting, drawing and photography.
- ❖ Learn how to take the perfect photo.

Tuition and classroom information is listed at the end of each course description. Full refunds are given for withdrawals prior to the first class meeting. If you need to withdraw from a course, contact the Division of Continuing Education. Please keep in mind that non-attendance or non-payment does not constitute withdrawal.

Courses may be cancelled due to low enrollment. Please register one week prior to the first class meeting to ensure this doesn't happen to a course you intend to take. Only pre-registered students may attend class.

FACULTY/STAFF REGISTRATION

Permanent, full-time CU-Boulder faculty and staff are eligible for a 25% discount off tuition. A copy of your current PAF is required to receive this discount. Call 303-492-5148 for more information.

Su Wright says there's a growing market for free lance travel writing and that "you don't have to travel very far" to be a travel writer. Because Colorado is a destination location, there's a market for stories you can research practically in your backyard. Aspiring journalists can pick up practical information and constructive feedback on written work through Su's Travel Writing class this summer (see page 25). Best of all, for people with the travel bug, this course offers a wealth of insights applicable at all levels of skill and interest. Instruction will show you how to take better notes and become a more insightful observer of life and society. You'll also learn how to get serious about getting published in newspapers and magazines and how to look for writing assignments that will cover your travel expenses. Su Wright is a former newspaper editor and reporter as well as a former Fodor Travel Guide researcher/editor, and researcher for the first edition of the book, *Colorado Off the Beaten Path*. She is the author of a soon-to-be available e-book, *The Fabjob.com Guide to Becoming a Travel Writer*. Personal interests include reading and writing, quilting and travel, "of course," with a special interest in Canada and the Western United States.



PERSONAL ENRICHMENT, SUMMER 2000

FINE ARTS21

- Fearless Basic Photography
- Creative Photography Workshop
- Water Media
- Introduction to Drawing

FOR KIDS AND TEENS ONLY21

- Cartooning for Kids 8-12
- Cartooning for Teens 13-18

FOREIGN LANGUAGES22

- French: Beginning Conversational Skills
- French: Intermediate Conversational Skills
- German: Beginning Conversational Skills
- German: Conversational Skills for Advanced Beginners
- Italian: Beginning Conversational Skills
- Italian: Conversational Skills for Advanced Beginners
- Japanese: Beginning Conversational and Written Skills
- Spanish: Beginning Conversational Skills
- Spanish: Conversational Skills for Advanced Beginners
- Spanish: Intermediate Conversational Skills

HISTORY23

- Historic Tour of Western Boulder County

INVESTMENTS AND PERSONAL FINANCE23

- Basic Investing
- Advanced Investment Strategies
- The Debt Free Prosperous Living Seminar

SCIENCE AND OUTDOORS24

- An Introduction to the Universe
- Boulder Geology: A Field Trip

SUMMER GARDENING SERIES24

- Organic Vegetable Gardens
- Introduction to Horticulture
- Gardening with Herbs
- The No-Fuss Herbalist
- Stalking the Wild Herb
- Gardening with Children
- Backyard and Worm Bin Composting
- The Herb Series
- The Gardening Series

TEST PREPARATION25

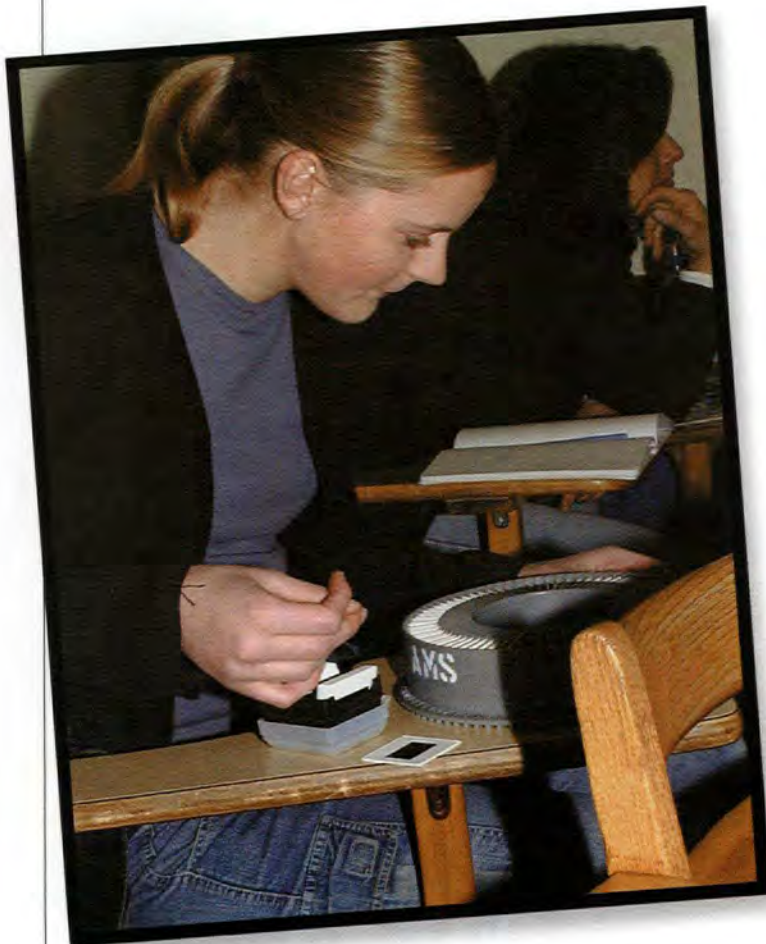
- Preparing for the Graduate Record Exam (GRE)
- Preparing for the Law School Admission Test (LSAT)

THEATRE AND MUSIC25

- Behind the Scenes! The Colorado Shakespeare Festival
- Acting Basics

WRITING25

- Travel Writing
- Writing Science Fiction



Kristina Schwarte took Roddy MacInnes' Documentary Photography class in the spring because "I'm very interested in photography and I'd like to connect journalism and photography. Kristina is from Germany, visiting here for a year, and wants to study journalism when she returns home. (See page 21 for summer semester photography classes.)

FINE ARTS

**Fearless Basic Photography
NCFA 001**

This is a how-to course for beginning photographers. Come prepared to have fun while learning how to operate your 35mm camera. Learn about lenses, film, accessories, exposure, composition, and technique. You will discover how easy it is to take great photographs. Participants in the class will be given photo assignments and encouraged to engage in critiques of class work. Bring your 35mm camera (any variety) and enthusiasm for learning a new skill.

Roddy MacInnes has exhibited photographs and videos internationally. He has a B.A. in photography from Napier University and an M.F.A. from CU-Boulder.

Section 100: Wednesdays, June 7-July 26, 6:30-8:30 p.m. 8 sessions. Humanities 145. \$130.

**Creative Photography Workshop
NCFA 002**

Learn about amazing new films and special effects, telephoto and wide angle lens use, filters, electronic flash, macro shots, action, professional tricks, and composition. Receive an introduction to digital photography with Adobe Photoshop and detailed darkroom instruction covering black and white printmaking and color enlargements from negatives. The course includes four 2-hour classroom periods, two 3-hour darkroom classes, and three weeks unlimited use of the black and white and color darkrooms. Access to the computer imaging equipment is based on student proficiency. The cost of the darkroom chemicals is included, but you must provide your own film and paper after the first class. Bring your own camera to the first class.

Don Oberbeck is a professional photographer who has taught for more than 20 years and runs the Boulder Photo Center.

Section 100: Thursdays, June 22-August 3, 7:30-9:30 p.m. 7 sessions. Ketchum 301. \$135.

**Water Media
NCFA 009**

This class is designed to introduce students to a variety of watercolor applications. Discussions focus on understanding color, developing the composition, as well as various techniques. Students explore watercolor as a medium to record visual information in their journals as well as in their finished work. We will examine a variety of resources such as still life, the human figure, and photographs. We will send you a supply list at the time of your registration. Come to class prepared for a colorful experience.

Sandy Lane, M.F.A. from CU-Boulder, exhibits her work internationally and is a member of the EDGE gallery. She teaches drawing, painting, print making, and computer imaging to students of all ages.

Section 100: Mondays, June 5-July 31 (no class on July 3), 7-9 p.m. 8 sessions. Fine Arts N103. \$140.

**Introduction to Drawing
NCFA 020**

Learn to translate your observations through drawing! You will explore line, value, texture, perspective, and more. Working with different materials such as paper, pencil, graphite, ink, charcoal, and house paint, you will experience the different approaches to contemporary drawing. No experience is necessary to start drawing now! Supplies will cost approximately \$50.

Kimberlee Sullivan, M.F.A. in Painting and Drawing from CU-Boulder, is an Associate of the Rocky Mountain Women's Institute and a current member of the EDGE Gallery.

Section 100: Wednesdays, June 7-July 26, 7-9 p.m. 8 sessions. Fine Arts N298. \$140.

FOR KIDS AND TEENS ONLY

**Cartooning for Kids 8-12
NCFA 365**

In three fun-filled mornings, kids are introduced to the basics of cartooning including expression, movement, character, animals and more. This step-by-step introductory workshop provides kids with useful art techniques for creating greeting cards, comic strips, T-shirt designs and much more. Bring a fine-line black marker and a #2 pencil to each session. All other materials provided. New assignments for returning students.

Eric Teitelbaum is a cartoonist with *The New Yorker* magazine and co-creator of the nationally syndicated cartoon "Bottom Liners."

Section 100: Monday, Tuesday, Wednesday, June 12-14, 9-12 p.m. 3 sessions. Continuing Education Center 140, 1505 University Avenue. \$80.

**Cartooning for Teens 13-18
NCFA 364**

A cartoon class created especially for teens. Young people learn not only the basics of character design, expression, and movement, but also special techniques for caricaturing famous people and celebrities, designing super heroes, and how to create and send cartoon ideas to comic book and publishing companies. A fun-filled, information-packed program and a lively experience for young artists. Bring a fine-line black marker and a #2 pencil to each session. All other materials provided. New assignments for returning students.

Eric Teitelbaum is a cartoonist with *The New Yorker* magazine and co-creator of the nationally syndicated cartoon "Bottom Liners."

Section 100: Monday, Tuesday, Wednesday, June 12-14, 1-4 p.m. 3 sessions. Continuing Education Center 140, 1505 University Avenue. \$80.

Guylaine Lalonde signed up for Roddy MacInnes Documentary Photography class (spring semester) "because I've always had an interest in photojournalism and the history of photography and I thought this class would touch on both. And it did. Photography is a relatively new hobby of mine and I want to be exposed to as many aspects of it as I can. She adds, "Roddy's really cool." This semester he's teaching Fearless Basic Photography (see page 21).



FOREIGN LANGUAGES

**French: Beginning Conversational Skills
NCFL 100**

Designed for students with little or no knowledge of French, this course covers grammar but emphasizes conversational skills. Cultural aspects of French life and practical conversation for travelers will also be covered. Required text, *Vis a Vis*, available at the CU Bookstore.

Cathy Jellenik, M.A., is currently a Ph.D. student of French Literature and is an instructor at CU-Boulder.

Section 100: Tuesdays, June 6-August 1 (no class on July 4), 7-9 p.m. 8 sessions. Humanities 125. \$120.

**French: Intermediate Conversational Skills
NCFL 200**

Students should be able to use the present tense before taking this class. Increased vocabulary and speaking skills are stressed. Required text, *Vis a Vis*, available at the CU Bookstore.

Cathy Jellenik, M.A., is currently a Ph.D. student of French Literature and is an instructor at CU-Boulder.

Section 100: Thursdays, June 8-July 27, 7-9 p.m. 8 sessions. Ketchum 118. \$120.

**German: Beginning Conversational Skills
NCFL 101**

Designed for students with little or no knowledge of German, this course covers grammar but emphasizes practical conversation for travelers. In addition students will learn cultural aspects to gain insight into German life today. Required text: *Communicating in German*, available at the CU Bookstore.

Carola Gorschboth, M.A. German and English Linguistics and Literature, is a native speaker of German with special interests in teaching methodology and modern American literature.

Section 100: Tuesdays, June 6-August 1 (no class on July 4), 7-9 p.m. 8 sessions. Clare 209. \$120.

**German: Conversational Skills for
Advanced Beginners
NCFL 201**

Review basic grammar concepts introduced in Beginning German as well as expand on vocabulary and expressions essential for conversational fluency in German. The course will continue to integrate aspects of modern German life and culture.

Carola Gorschboth, M.A. German and English Linguistics and Literature, is a native speaker of German with special interests in teaching methodology and modern American literature.

Section 100: Thursdays, June 1-July 20, 7-9 p.m. 8 sessions. Clare 209. \$120.

**Italian: Beginning Conversational Skills
NCFL 102**

This course examines the basics of Italian conversational grammar as well as various aspects of modern Italian culture and the Italian way of life. Participants will learn the elements of the language, view videos, and hold open discussions. Required text: *Italianissimo I*, available at the CU Bookstore.

Jim Walker, Ph.D. candidate, has lived and studied in Venice and has been teaching Italian for the last five years.

Section 100: Wednesdays, June 7-July 26, 6-8 p.m. 8 sessions. Ketchum 235. \$120.

**Italian: Conversational Skills for
Advanced Beginners
NCFL 202**

Review basic grammar concepts introduced in Beginning Italian as well as expand on vocabulary and expressions essential for conversational fluency in Italian. The course will continue to integrate aspects of modern Italian life and culture. Required text: *Italianissimo I*, available at the CU Bookstore.

Jim Walker, Ph.D. candidate, has lived and studied in Venice and has been teaching Italian for the last five years.

Section 100: Thursdays, June 1-July 20, 6-8 p.m. 8 sessions. Muenzinger E123. \$120.

**Japanese: Beginning Conversational
and Written Skills
NCFL 104**

We stress polite, practical and colloquial Japanese in order to build a foundation of survival skills and understand how the language works. Reading simple signs and texts is introduced. Required text: *Communicating in Japanese, Book 1* may be purchased from the instructor in class.

D.H. Gordon, M.A., has taught Japanese language classes since 1981.

Section 100: Fridays, June 2-July 21, 6-8 p.m. 8 sessions. Economics 117. \$120.

**Spanish: Beginning Conversational Skills
NCFL 103**

Basic but lively conversational Spanish for beginners. We stress practical vocabulary. Required text: *Getting Along in Spanish*, available at the CU Bookstore.

Elizabeth Medina, Ph.D., has taught at CU-Boulder since 1977.

Section 100: Tuesdays, June 6-August 1 (no class on July 4), 7-9 p.m. 8 sessions. Ketchum 235. \$120.



Spanish: Conversational Skills for Advanced Beginners
NCFL 203

This course is a continuation of Beginning Conversational Spanish. Using a fun, lively format, we'll develop more oral language skills and vocabulary, as we learn about Hispanic culture. Required text, *Getting Along in Spanish*, available at the CU Bookstore.

Itza Zavala, M.A., is a native speaker and is working on her Ph.D. in Spanish. She has over nine years teaching experience in Mexico and the U.S. Section 100: Wednesdays, June 7-July 26, 7-9 p.m. 8 sessions. Hellems 81. \$120.

Spanish: Intermediate Conversational Skills
NCFL 303

An opportunity to build vocabulary and conversational ability and address cultural and social aspects. Prerequisite: Beginning Spanish or equivalent. Required text: *Pasajes: Lengua*, available at the CU Bookstore.

Elizabeth Medina, Ph.D., has taught at CU-Boulder since 1977.

Section 100: Thursdays, June 1-July 20, 7-9 p.m. 8 sessions. Ketchum 235. \$120.

HISTORY

Historic Tour of Western Boulder County
NCH 018

Visit the historic mining communities of western Boulder County. Learn about the people, the changes, and sometimes the end of these old communities. Ride along the historic Moffat Road and see the Moffat Tunnel. How did a flood in Pueblo result in a tunnel in Boulder? Explore the sites, enjoy the scenery and learn about the glory days of old Boulder County. Dutch treat lunch in Nederland. Participants will carpool, leaving from the parking lot at 6th and Canyon at 8:30 a.m. sharp. Class size is limited.

Jay Fell, Ph.D., has taught Colorado History at CU-Boulder and has published books on the mining industry.

Section 100: Saturday, August 5, 8:30 a.m.-4:30 p.m. 1 session. \$60.

Roddy MacInnes takes a meter reading on Birga Behrendt. Roddy teaches Fearless Basic Photography (see page 21), a fun hands-on introduction for beginners. Roddy has a BA in photography from Napier University and an MFA from CU-Boulder. Birga is from Germany, near Hamburg. She's here for a year working as an au pair, and she's been taking a few courses to fulfill the requirements of her student visa. She says the class "is really interesting and fun."

INVESTMENTS AND PERSONAL FINANCE

Basic Investing
NCI 008

Complete, understandable explanations for beginners covering terminology, products, and basic strategies. Learn how to take concrete steps toward planning your financial future in today's environment. Optional text: *Getting Started in Stocks*, available at the CU Bookstore.

Mary Wright, B.A., is Senior Vice President with a large investment firm, and has more than 17 years experience in the field.

Section 100: Tuesdays, June 6-27, 6:30-8:30 p.m. 4 sessions. Economics 117. \$60.

Advanced Investment Strategies
NCI 007

Designed to build on foundations created in Basic Investing, this course will deepen your knowledge of investments and investment strategies. Learn the one factor that influences 90% of your portfolio's success. Understand income producing investments, yield curves, P/E ratios, betas and alphas. Evaluate the role of dividends in selecting stocks. Examine where mutual funds belong in your portfolio and how the economy impacts your investment decisions. Students should have a basic understanding of stocks, bonds, mutual funds and annuities.

John D. Bonica, B.A., is an investment advisor with a large investment firm with more than 10 years experience in asset management.

Section 100: Tuesdays, July 11-August 1, 6:30-8:30 p.m. 4 sessions. Stadium 140. \$60.

The Debt Free Prosperous Living Seminar
NCI 022

Get completely out of debt in 5-7 years, including mortgage. Sound impossible? This workshop is for those who really desire financial independence. Learn why your debt is your best first investment. You will leave with your own step-by-step plan. With your current income, in an average of 5-7 years, you'll be completely debt free. Learn how to live on 100% cash (no credit cards). If your contributing to a 401K, 403B, IRA or other retirement plan, you'll learn why you'll want to put those contributions on hold until you're out of debt. Bring list of all debts, calculator, and pencil. The suggested text is available in class for \$49. Jeff Meyer was a successful investment advisor when he began teaching the debt elimination program.

Section 100: Saturday, June 3, 9 a.m.-12 p.m. 1 session. Humanities 125. \$40.



SCIENCE AND OUTDOORS

**An Introduction to the Universe
NCSO 003**

Required background: None - just a keen interest in our universe. Take a guided tour of the solar system using slides obtained from NASA's manned and unmanned missions. Then, obtain an overview of the universe including: the origin, structure and evolution of stars; the nature of white dwarfs, neutron stars, and black holes; the dynamics of galaxies; and the origin and evolution of the universe, all illustrated with slides from ground-based and space-based telescopes, including Hubble.

Joe Romig, M.Sc., Ph.D., is a member of the NASA Voyager Science team and has been an instructor for 25 years.

Section 100: Sunday, June 11, 5:30-9 p.m.
1 session. Fiske Planetarium. \$30.

**Boulder Geology: A Field Trip
NCSO 027**

This weekend class will take participants on a tour of the geologic formations around Boulder. Focus is on the geologic history at our feet and how the topography has changed over time. Bring a hand lens with you for examining rock samples. A pre-trip meeting on Thursday will be used for organizing the field trip, giving hand-out materials and other instructions.

Barbara Mieras, Ph.D. Geological Sciences, has been an exploration geologist and science educator.

Section 100: Thursday, June 15, 7-9 p.m. and Saturday, June 17, 9 a.m.-4 p.m. 2 sessions.
Benson Earth Sciences 185. \$50.

SUMMER GARDENING SERIES

NCSO 050

Join us at The Iris Center, 3198 Broadway, for workshops focusing on summer gardening. The instructor, Selina Rossiter Hunter, has taught gardening and herb workshops at The Denver and Brooklyn Botanic Gardens as well as worked on an organic farm.

Organic Vegetable Gardens

Learn to plan, prepare, plant, maintain, and harvest an organic garden. We will cover site selection, seeds, mulching, irrigation, pests, and disease.

Section 101: Saturday, June 3, 9 a.m.-1 p.m.
1 session. The Iris Center. \$30.

Introduction to Horticulture

Learn botany basics such as starting seeds, planting, preparing soil, mulching and watering.

Section 102: Saturday, June 10, 9 a.m.-11 a.m.
1 session. The Iris Center. \$15.

Gardening with Herbs

This class covers a wide range of ways to garden with herbs and how to interplant herbs with vegetables and flowers.

Section 103: Saturday, June 17, 9 a.m.-11 a.m.
1 session. The Iris Center. \$15.

Kerstin Tisch signed up for Roddy MacInnes, photography class because the class schedule fit her needs and "it just sounded good." She says, "I like it very much. It's fun and not too hard."

The No-Fuss Herbalist

This is a perfect class for busy people looking for simple ways to incorporate herbs into their lives through cooking, cosmetics, and medicines. We use plants that are easy to grow or find at your natural food store.

Section 104: Saturday, June 24, 9 a.m.-11 a.m.
1 session. The Iris Center. \$15.

Stalking the Wild Herb

This class will introduce you to simple principles of herb botany, techniques for harvesting wild herbs, and give information about endangered herbs.

Section 105: Saturday, July 8, 9 a.m.-11 a.m.
1 session. The Iris Center. \$15.

Gardening with Children

A great workshop for anyone interested in making gardening fun for children. We will discuss appropriate rules and expectations and try a variety of garden crafts, games, snacks, and activities.

Section 106: Saturday, July 15, 9 a.m.-11 a.m.
1 session. The Iris Center. \$15.

Backyard and Worm Bin Composting

Learn why backyard and worm bin composting are important for the environment and garden. This is a great class for anyone who is new to composting or would like to do it better.

Section 107: Saturday, July 22, 9 a.m.-1 p.m.
1 session. The Iris Center. \$30.

The Herb Series

Take all three herb classes and save \$10.

Section 108: Saturdays, June 17-July 8 (no class July 1), 9 a.m.-11 a.m. 3 sessions. The Iris Center. \$35.

The Gardening Series

Take all seven classes and save \$20.

Section 109: Saturdays, June 3-July 22 (no class July 1), The Iris Center. \$100.



TEST PREPARATION

Preparing for the Graduate Record Exam (GRE)
NCT 301

Analyze and review basic test skills, reviewing relevant verbal, math and analytical problems. Students need 9th Edition, *Official Guide: Practicing to Take the GRE General Test* for the first class, available at the CU Bookstore. **Please note that students register separately for the exam. Exam registration deadlines may occur prior to the beginning of the class. Call 510-873-8100 for GRE exam registration information.** Strategies for the computer test are discussed. Class meets on Monday, Tuesday, Wednesday, and Thursday. Monday and Tuesday classes meet from 6-10 p.m. Wednesday and Thursday classes meet from 6-9 p.m.

Test review instructors from PREP Associates, Inc. in Wheatridge, Colorado.

Section 100: Monday and Tuesday, June 26-27, 6-10 p.m., and Wednesday and Thursday, June 28-29, 6-9 p.m. 4 sessions. Hale 260. \$165.

Preparing for the Law School Admission Test (LSAT)
NCT 490

This intensive class will prepare you to take the June 12 test. The class will address strategies for each section of the LSAT: writing sample, reading comprehension, logical reasoning, and analytical reasoning. Special focus is placed on demystifying the "logic games." Other topics include general test taking strategies and how to conquer test anxiety. Students need *Ten Actual, Official LSAT Prep Tests* at the first class, available at the CU Bookstore. Call 303-492-5148 for a list of required texts. **Please note that students register separately for the LSAT exam. Exam registration deadlines occur prior to the beginning of this class. Call 215-968-1001 for exam registration.**

Michelle Philip, J.D., is an attorney who has taught LSAT prep courses for over five years.

Section 100: Thursday June 1, Saturday June 3, Sunday June 4, Tuesday June 6 and a mock test on Saturday June 10, 9 a.m.-2:30 p.m. 5 sessions. Continuing Education Center 140, 1505 University Avenue. \$205.

Additional writing courses are available through the Boulder Evening Program and Business Courses.

THEATRE AND MUSIC

Behind the Scenes! The Colorado Shakespeare Festival
NCTH 001

Come join us for a behind the scenes peek at the plays and productions of the 2000 Colorado Shakespeare Festival. Meet CSF actors and artists for backstage tours and informal pre-show discussions of the plays. This year we offer *Julius Caesar*, *Henry V*, *The Tempest*, and *The Twelfth Night*. Ticket price is included in tuition so there will be no refunds. Enrollment is limited. Please enroll no later than one week prior to the performance

T. Kate Pagel is currently pursuing her Ph.D. in History/Theory of Theatre at CU-Boulder and has spent the past decade working onstage, backstage, and in the theatre classroom.

Section 101 - *Henry V*: Wednesday, July 12, 6:30-8 p.m. 1 session. Hellems 255. \$45.

Section 102 - *The Twelfth Night*: Wednesday, July 19, 6:30-8 p.m. 1 session. Hellems 255. \$45.

Section 103 - *Julius Caesar*: Wednesday, July 26, 6:30-8 p.m. 1 session. Hellems 255. \$45.

Section 104 - *The Tempest*: Wednesday, August 2, 6-7:15 p.m. 1 session. Hellems 255. \$45.

Acting Basics
NCTH 017

The goal of this class is to bring to life moments of true emotion once felt, imagined, or written while engaging your mind, body, spirit, and emotions. Relaxation exercises and voice and breathing warm-ups will be stressed. Each student will prepare a two minute monologue that can be used for auditions after the class is completed. We will also experiment with a variety of scene exercises involving two or more performers. In a supportive and safe environment you will gain tools for expression and refine your own natural talents. All levels of experience are welcome.

Beth Osnes, Ph.D. in Theatre, is an instructor, performer and director.

Section 100: Mondays, June 5-July 31, 6:30-8:30 p.m. 6 sessions. Economics 119. \$105.

WRITING

Travel Writing
NC W 088

Whether you want to enhance your traveling experience or pay for your trip, learn to write travel articles for magazines and newspapers. Throughout the class, students may bring parts of their articles for ongoing feedback while they learn how to write and market a travel article. Learn about different types of travel articles, how to find the right idea, how to write the article's lead and conclusion, as well as how to construct effective sidebars, take good notes, do the research, and get helpful photographs. Discover the art of the query, how to market your articles, and how to submit it to the right people. Study the works of published names in travel writing for a greater appreciation of this specialized form of writing.

Su Wright, B.S., is a former newspaper editor/reporter as well as former Fodor Travel Guide researcher/editor and researcher for the first edition of the book, *Colorado Off the Beaten Path*.

Section 100: Tuesdays, June 13-July 18 (no class on July 4), 6:30-8:30 p.m. 5 sessions. Education 134. \$70.

How to Write Science Fiction
NC W 089

Let your imagination go wild. During this course you will create a tool box of skills for writing science fiction. We will cover what science fiction is (and isn't), creating believable alien worlds and species, handling dialogue and different languages, plot tips and techniques, and finishing a salable product, whether short story, novelette, or novel. Marketing techniques will also be discussed. The instructor will give feedback on writing assignments.

Middie Morris is the author of a science fiction trilogy published in April 2000. She has been a copy editor, proofreader, and technical writer, as well as a writer of science fiction and fantasy.

Section 100: Thursdays, June 1-22, 6:30-8:30 p.m. 4 sessions. McKenna 112. \$60.



BUSINESS COURSES

TARGETED PROGRAMS to increase your business knowledge and job skills. Our business courses offer practical benefits and immediate value through certificate programs, workshops, and business classes. Continuing Education business classes provide continuing solutions to evolving needs:

- ❖ Have a great idea for a new business? Learn how to get started.
- ❖ Develop new skills to help you grow in your present job.
- ❖ Acquire new skills to prepare for a career transition.
- ❖ Understand the complexities of today's diverse work force.
- ❖ Learn strategies to become a more effective supervisor.

MANAGEMENT DEVELOPMENT CERTIFICATE

To earn this certificate, you must satisfactorily complete four required courses and three or more electives. Basic Skills for the Supervisor is recommended as a starting point. The required classes are: Critical Issues in Current Management, Accounting and Budgeting for the Non-Accountant, Understanding Marketing: Developing and Promoting your Product or Service, and Managing People.

CERTIFICATE OF ENTREPRENEURSHIP

The Certificate of Entrepreneurship is designed to give current and future business owners the skills to plan and lead a successful business venture.

Participants are required to take the following four core classes and two electives: Accounting and Budgeting for the Non-Accountant, Starting a Business From the Ground Up, Entrepreneurism-Are You Ready?, and Understanding Marketing: Developing and Promoting Your Product or Service.

Tuition and classroom information is listed at the end of each course description. Full refunds are given for withdrawals prior to the first class meeting. If you need to withdraw from a course, contact the Division of Continuing Education. Please keep in mind that non-attendance or non-payment does not constitute withdrawal.

Courses may be cancelled due to low enrollment. Please register one week prior to the first class meeting to ensure this doesn't happen to a course you intend to take. Only pre-registered students may attend class.

FACULTY/STAFF REGISTRATION

Permanent, full-time CU-Boulder faculty and staff are eligible for a 25% discount off tuition. A copy of your current PAF is required to receive this discount. Call 303-492-5148 for more information.

Can't make it to campus? Let us bring our classes to you. On-site professional development is available. Call 303-492-2499 to learn more.

BUSINESS WORKSHOPS, SUMMER 2000

ACCOUNTING AND FINANCE

Accounting and Budgeting for the Non-Accountant

ENTREPRENEURISM AND SMALL BUSINESS

Entrepreneurism - Are You Ready?
Writing a Business Plan

WRITING AND COMMUNICATION

Better Business Writing



Deborah Sapunar-Jursich says she signed up for Roddy MacInnes' Spring semester Documentary Photography class because "I've been taking pictures for quite a few years and I wanted more technical proficiency. I've been documenting my children's development and this offered an opportunity to step beyond point-and-shoot. Roddy is really good working with people of mixed abilities and experience." (See page 21 for summer semester photography classes.)

ACCOUNTING AND FINANCE

**Accounting and Budgeting for the Non-Accountant
NC B 110**

Beginning Level

Understand where the numbers come from and what they mean. Learn how transactions are reported, summarized, and compiled into financial statements. Gain an understanding of accounting principles focusing on the decision-making process and skills for insightful analysis of financial information in making important decisions. Finally, discover the seven secret ingredients of a bearable budget, the importance of vision and perspective, best-case and worst-case planning, and how to realistically project costs and revenue. Students need a hand-held calculator at the first class meeting.

Fred Moore, M.B.E., is a trainer nationwide in accounting and has been a small business start up specialty accountant for over 20 years in Boulder.

Section 100: Saturdays, June 10-17, 9 a.m.-4:30 p.m. 2 sessions. Economics 205. \$150.

ENTREPRENEURISM AND SMALL BUSINESS

**Entrepreneurism-Are You Ready?
NC B 400**

All Levels

What does it take to be an entrepreneur? Businesses fail for many reasons: undercapitalization, lack of preparation, failure to test the market, lack of financial control and doing too much too soon. This class gives you a smart start. We cover business plans, budgeting, cash flow, and other essential aspects including personal financial planning.

Aivars Ziedins, M.S.F.S, has over 26 years experience as a financial planner and entrepreneur.

Section 100: Saturday, June 10, 9 a.m.-4:30 p.m. 1 session. Hale 236. \$100.

**Writing Business Plans
NC B 120**

All Levels

Demystify the exciting and "risky" act of starting a new venture. Specifically, students will have an opportunity to review samples of successful business plans and learn how to construct their own. Students will also explore their business ideas with the class. Finally, there will be some discussion of the entrepreneurial process of which the business plan is the key component.

Boyd Cohen is a former Andersen Consultant and co-founder of Boulder CarShare, who is currently pursuing his Ph.D. in strategy and entrepreneurship at CU-Boulder with an emphasis on Internet-based start-up companies.

Section 100: Tuesdays, July 11-August 1, 6:30-8:30 p.m. 4 sessions. Ketchum 120. \$100.

WRITING AND COMMUNICATION

**Better Business Writing
NC B 022**

All Levels

Writing has a substantial influence in business and professional lives. This course will help you organize and express ideas to your target audience clearly and concisely to create successful business prose. In-class exercises will enhance your writing skills while focusing on the four modules of the course: organizing a document, research basics, the writing process, and editing. Assignments will guide you through the process of preparing and completing your final writing project.

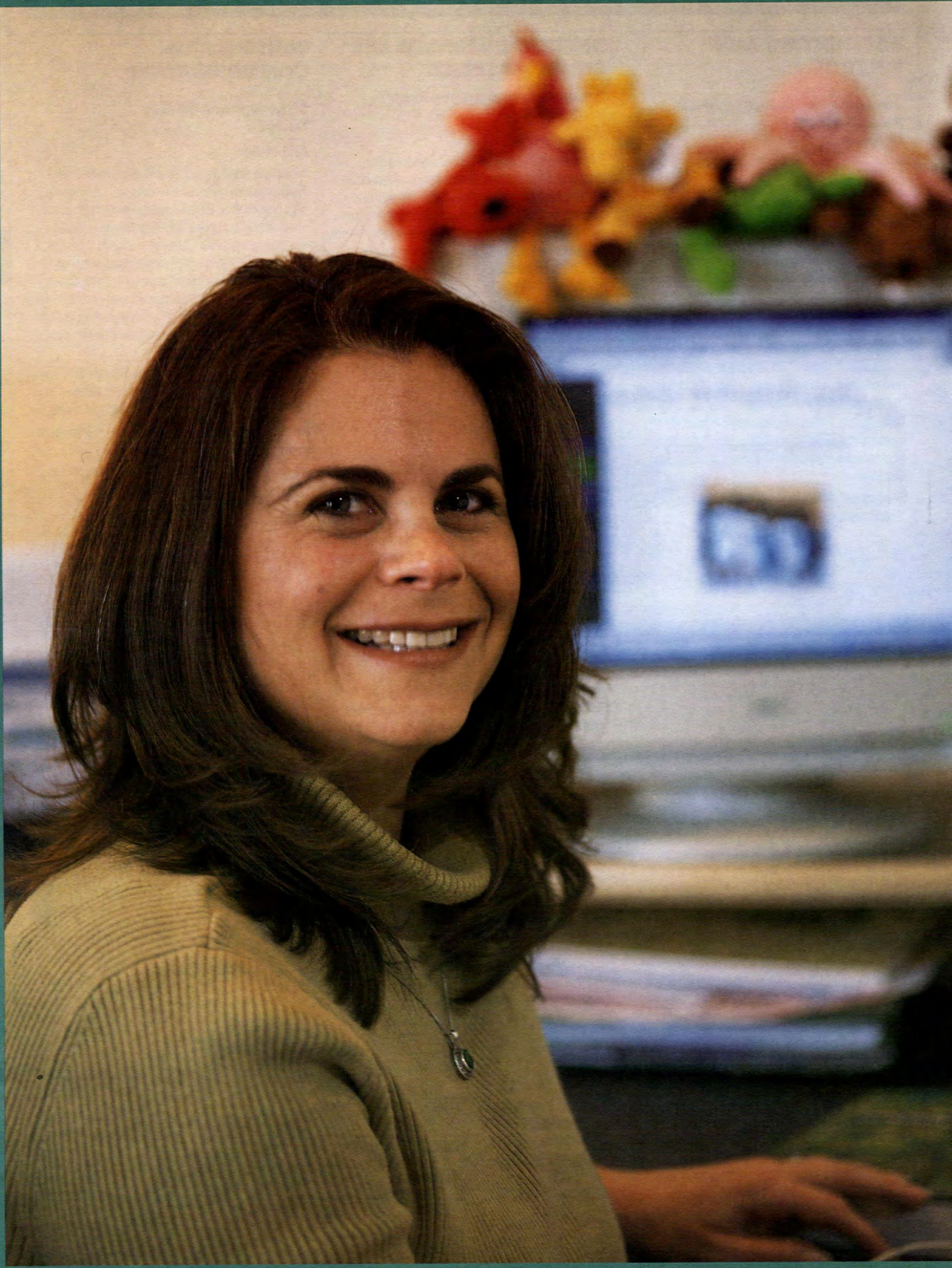
Robert Cook has an M.L.A. from Stanford University and is a graduate student at CU-Denver in the "Teaching of Writing" program.

Section 100: Thursdays, June 1-29, 6:30-9 p.m. 5 sessions. Hale. 236. \$150.



Katrin Mueller lives in Germany, near Berlin. She's here for a year working as an au pair. She signed up for Roddy MacInnes' photography class out of "a strong personal interest—I take a lot of pictures." She says the class is great and she's also favorably impressed with the overall Continuing Education program. "It's pretty good and affordable," she says.





DON'T FALL BEHIND. COMPUTER SKILLS ARE POWERFUL TOOLS FOR WORK AND PLAY.

COMPUTERS ARE BECOMING more and more important in our everyday life: for research, communication, planning and record keeping, creative endeavors, or just for keeping in touch with family and friends. Learn how to do what you need to do better, faster and more easily. We offer top-notch instruction by professionals who are experts in their fields, as well as certificate programs in Computer Applications, Network Administration, Programming and Web Site Design. Our program can help you:

- ❖ Enhance your basic computer skills.
- ❖ Position yourself for a career change.
- ❖ Build advanced technical skills.

COURSE LOCATIONS: The majority of courses offered through the Computer Applications Program are held in the University Computing Center (UCC) on 3645 Marine (at the corner of Arapahoe and Marine) and the University Management Systems (UMS) building on 4780 Pearl East Circle (east of Foothills Parkway on Pearl). Please check the course descriptions for the location of your class. Refer to the map on page 51.

PARKING: If you are attending a day class at the University Computing Center (UCC), you will receive a one-day parking permit from Continuing Education in your classroom the day of class. This permit is valid for parking lot #578, which is located southwest of the building. Please arrange to arrive at least 15 minutes before class begins to obtain your permit. **Note that there is limited parking space available in lot #578 and is on a first come, first served basis.** Other parking is available around the general vicinity. Permits are not needed for Saturday and evening parking at the UCC or any time at the University Management Systems (UMS) on Pearl East Circle.

Karis Vail Schmidt teaches HTML classes (see page 37) and Web Site Design with FrontPage 2000 (CACS 233, page 38). An integral part of the Web Certificate Program, the HTML classes are extremely popular and fill up fast. CACS 233 was added in the spring because FrontPage is a popular Web site creation and management tool that doesn't require knowledge of HTML. Karis owns and operates a business technology consulting firm, Virtual Dynamics. She holds degrees in Psychology and Hearing Disabilities and worked in real estate for years before she realized that computers and training were her true calling. (Early indicators include the fact that the Web site she designed for her family of 7 won a national award from PC Magazine.) Hobbies include cooking, travel, skiing, biking and more recently—quilting. Karis says friends laughed when she started quilting, thinking it didn't fit her personality. She explains that quilting requires both technical expertise and creativity, and that Web development is like that too. "I am both a right brain and a left brain person. Through this work I have really discovered who I am."

PREREQUISITES: Many courses require prerequisites. We want to assure you receive the most out of your classes and that you can actively participate. If you have not taken and satisfactorily completed a prerequisite course but have the equivalent background or experience, please e-mail us at cecas@colorado.edu or call us at 303-492-5148 to verify that you do have the equivalent background or experience.

ESSENTIAL INFORMATION: Enrollment is limited by the number of computers and seats available in each classroom, so early registration is advised. Only pre-registered students may attend class. University logins may be requested at the first class session. Access to University computers outside of class time is limited.

Grading Policy: All courses are non-credit, but (S)atisfactory or (U)nsatisfactory grades will be issued by the instructor at the end of the course. Grades are mostly determined by the student's class attendance (at least 75% of class attendance is needed in order to receive an S grade); however, factors such as the student's understanding of course material, homework assignments and quizzes may be used to determine S or U grades.

If you are working toward a certificate in Computer Applications, Programming, Network Administration, or Web Site Design, you must receive a satisfactory grade in all the courses that will apply toward your certificate. If you receive an unsatisfactory grade and wish to obtain a certificate, you must take the course over again and obtain a satisfactory grade.

TEXTBOOKS: Required or recommended textbooks will be indicated in the course descriptions. All textbooks are available at the University Bookstore in the University Memorial Center (UMC), room number 10.

TUITION AND REFUNDS: Cost varies from class to class. Tuition is listed at the end of each course description. **Full refunds are given on request before a course starts, but none thereafter.**

FACULTY/STAFF REGISTRATION: Permanent, full-time CU-Boulder faculty and staff are eligible for a 25% discount off tuition. A copy of your current PAF is required to receive this discount. Call 303-492-5148 for more information.

QUESTIONS? Please call the Division of Continuing Education at 303-492-5148, or outside the Denver Metro area, 1-800-331-2801.

VISIT OUR WEB SITE at www.colorado.edu/conted/computer.htm

CERTIFICATE PROGRAMS

CERTIFICATE IN COMPUTER APPLICATIONS

Gain a comprehensive understanding of an ever-changing computer industry. Earn your Certificate in Computer Applications by completing the following courses:

A. FIVE REQUIRED CORE COURSES:

1. CACS 100 Computer Literacy
2. CACS 201 Concepts of Computer Information Technology
3. CACS 202 Computer Applications Overview
4. CACS 204 Computer Systems Overview
5. CACS 220 Introduction to Networks

B. ONE COURSE IN PROGRAMMING:

Programming courses offered include C, C++ and Java.

C. FOUR ELECTIVE COURSES:

Any computer applications course not listed or taken as a requirement above qualifies as an elective. You may want to focus on a specific area of emphasis (i.e. computer graphics, databases, spreadsheets, etc.) to be more proficient in a type of application.

Other courses will be added to keep pace with industry standards.

CERTIFICATE IN NETWORK ADMINISTRATION

This Certificate is designed for you to gain a comprehensive understanding of the theoretical and practical skills necessary to maintain networked environments. You may earn this Certificate by completing the following course requirements:

A. CHOOSE ONE OF THREE TRACKS:

1. Windows/Intel Track

CACS 220 Introduction to Networks
CACS 321 Network Administration

2. Macintosh Track

CAMC 100 Introduction to the Macintosh

3. UNIX Track

CACS 211 Introduction to UNIX
CACS 311 Intermediate UNIX

B. OPERATING SYSTEMS (ALL COURSES ARE REQUIRED):

CACS 303 Computer Operating Systems
CACS 305 Computer Architecture
CACS 323 Network Operating Systems

C. REQUIRED ADMINISTRATION COURSE:

CACS 424 Wide Area Networking Topics

D. OTHER ADMINISTRATION COURSES (SELECT ONE):

CACS 304 Introduction to Windows NT 4.0 Administration
CACS 404 Intermediate Windows NT 4.0 Administration
CACS 414 NetWare Administration
CACS 415 UNIX System Administration

E. PROGRAMMING COURSE:

Choose one programming course

F. DATABASE COURSE:

Choose one database course.

Other courses will be added to keep pace with industry standards.

CERTIFICATE IN WEB SITE DESIGN

You can design professional Web sites using the latest computer technology and prepare yourself for one of the hottest job markets. Obtain your Certificate in Web Site Design by completing the following courses:

A. SEVEN REQUIRED CORE COURSES:

1. CACS 331 Internet Applications
2. CACS 334 Design Techniques for Web Sites
3. CACS 332 Introduction to HTML
4. CACS 432 Intermediate HTML
5. CACS 532 Advanced HTML
6. CACS 336 Introduction to JavaScript
7. CACS 436 JavaScript Language

B. MULTIMEDIA COURSE:

Choose any one course in Multimedia

C. ELECTIVES (CHOOSE ONE):

CAPC 282 Photoshop for Windows 95, Level I
CAPC 382 Photoshop for Windows 95, Level II
CAPC 283 Illustrator for Windows 95, Level I
CAMC 282 Photoshop for Macintosh, Level I
CAMC 382 Photoshop for Macintosh, Level II
CAMC 283 Illustrator for Macintosh, Level I
CAMC 383 Illustrator for Macintosh, Level II

D. CACS 600 WEB SITE DESIGN PROJECT

Capstone course for the Certificate.

Other courses will be added to keep pace with industry standards.

CERTIFICATE IN PROGRAMMING

If you wish to pursue a career involving programming or need to update your skills to stay current in this fast-paced industry, the Certificate in Programming is for you. Earn your Certificate by completing the following courses:

A. REQUIRED INTRODUCTORY COURSES (CHOOSE ONE OPTION):**Option 1: For absolute beginners**

- CACS 240 Introduction to Programming
- CACS 241 Introduction to Hands-on C++
- CACS 341 Intermediate Hands-on C++

Option 2: For beginners who have had some programming experience

- CACS 242 Introduction to Application Programming
- CACS 342 Intermediate Application Programming

B. CHOOSE ONE OF THREE TRACKS:**C Track (all courses required):**

1. CACS 243 Introduction to C for Programmers
2. CACS 343 Intermediate/Advanced C Programming
3. One hands-on lab in any programming course
4. One course from the C++ or Java track
5. One Special Topics Course

C++ Track (all courses required):

1. CACS 244 Intro to Object-Oriented Programming in C++
2. CACS 344 Inter./Advanced C++
3. CACS 444 C++ Gotchas
4. CACS 341 Intermediate Hands-on C++ or CACS 342 Intermediate Application Programming
5. Two Design Topics Courses

Java Track (all courses required):

1. CACS 247 Introduction to Object-Oriented Programming Using Java
2. CACS 347 Intermediate Java
3. CACS 447 Advanced Java Language
4. CACS 448 Advanced Java Library
5. One Java Topics Course
6. One Design Topics Course

C. ONE ELECTIVE TOPICS COURSE NOT ALREADY TAKEN FOR THE TRACK REQUIREMENTS.**TOPICS COURSES:****Java Topics**

- CACS 246 One-day Tour of the Java Programming Language
- CACS 348 GUI Programming in Java
- CACS 349 JavaBeans
- CACS 449 2D and 3D Graphics with Java
- CACS 248 Java Servlets

Design Topics

- CACS 345 Object-Oriented Design Patterns
- CACS 445 Object-Oriented Analysis and Design

Visual Basic Topics

- CAPC 437 Visual Basic Programming Using Excel
- CACS 245 Introduction to Hands-on Visual Basic Programming
- CACS 350 Intermediate Hands-on Visual Basic

Database Design Topics

- CAPC 357 Database Design Concepts
- CAPC 358 Relational Database Concepts and SQL Programming

Other courses will be added to keep pace with industry standards.

Students interested in using any of the above listed programming courses to fulfill prerequisites for undergraduate computer science courses at CU should contact Continuing Education at 303-492-5148.

GENERAL CERTIFICATE INFORMATION:

If you have a substantial background in computers or programming, you may request a waiver for a course by submitting a letter to the Computer Applications Program Manager at the Division of Continuing Education. Please document the equivalent education and/or experience for the course you wish to waive. You can only waive up to two courses for each certificate. You may e-mail your request to cecas@ucsu.colorado.edu.

If you are working toward a certificate in Computer Applications, Programming, Network Administration, or Web Site Design, you must receive a satisfactory grade in all the courses that apply toward your certificate. If you receive an unsatisfactory grade in any course and wish to obtain a certificate, you must take the course over again and obtain a satisfactory grade.

Once you have completed the requirements for your certificate, you must send a written request to receive your certificate. Send the request via e-mail to cecas@colorado.edu or to the Program Manager of Computer Applications, University of Colorado at Boulder, Division of Continuing Education, Campus Box 178, Boulder, CO 80309-0178.



COMPUTER APPLICATIONS COURSES, SUMMER 2000

THE COMPUTER SYSTEM

Understanding Computers	33
Networks	34
Operating Systems	35
The Internet	36
Programming	39

THE PC AND MACINTOSH SYSTEMS

OFFICE PACKAGES	42
Word Processing	42
Spreadsheets	43
Presentations	43
DATABASES	43
COMPUTER GRAPHICS	44
MULTIMEDIA	45
COMPUTER AIDED DESIGN	46

Instructor Carol Meier discusses a point with student Jim Howell. Carol says she's seen the popularity of JAVA increase enormously in the past couple of years. "Because of its broad appeal, everybody's considering this." Jim is taking the class "to firm up my understanding and get a stronger foundation in JAVA" to develop additional career skills. The idea of instruction from a pro appeals to him. Carol's experience as an instructor and trainer (Profile Consulting) fills the bill.



**FIVE WAYS TO
BEGINNING
SEE PAGE 52
MAY 8
REGISTER**

THE COMPUTER SYSTEM

UNDERSTANDING COMPUTERS

Computer Literacy CACS 100

Take the mystery out of basic computer jargon and learn start-up skills that will open the door to new opportunities. Learn concepts and terminology that will make successive computer courses easier to understand. An introductory lecture will prepare you for five hands-on labs: three on the Macintosh system and two on the personal computer (PC), or two on the Macintosh system and three on the PC. After the course, spreadsheet, word processing, database and communication applications will be familiar concepts to you.

Beth Sigren, B.S.

Section 101: Tuesday, June 6, 6-8 p.m. plus lab sections. Please indicate lab preference (10A or 10B) at registration: Lab Section 10A: Tuesdays and Thursdays, June 8-22, 6-8 p.m. Lab Section 10B: Tuesdays and Thursdays, June 8-22, 8-10 p.m. This section has three Macintosh labs and two PC labs. *Enrollment limit: 16.*

Jeff Forrest, M.A.

Section 102: Monday, July 10, 6-8 p.m. plus lab sections. Please indicate lab preference (10C or 10D) at registration: Lab Section 10C: Mondays and Wednesdays, July 12-26, 6-8 p.m. Lab Section 10D: Mondays and Wednesdays, July 12-26, 8-10 p.m. This section has two Macintosh labs and three PC labs. *Enrollment limit: 16.*

All Sections: 6 sessions. University Computing Center 123. \$150.

Concepts of Computer Information Technology CACS 201

Examine the evolution of computers and their current role at the heart of today's technology. Look at the Information Age including the Internet, Intranet and Extranet; the technologies that are changing the way we work and live; critical technology issues and decisions; and how to identify the best career opportunities in this exciting field. **Prerequisite:** CACS 100 Computer Literacy or equivalent.

Cherie Quaintance, B.A.

Section 100: Thursdays, July 6-August 10, 6-9 p.m. 6 sessions. Humanitiesj 125. \$240. *Enrollment limit: 45*

Computer Applications Overview CACS 202

Learn the various categories of software applications. Explore the features, functions and benefits of major commercial products through conceptual lectures, design discussions and demonstrations of word processing, spreadsheets, databases, graphics and other widely used applications. Find out how these tools can help improve the productivity of your computer.

Prerequisite: CACS 100 Computer Literacy or equivalent.

Chris Mattson, B.S.

Section 100: Mondays and Wednesdays, July 10-19, 6-9 p.m. 4 sessions. University Computing Center 124. \$195. *Enrollment limit: 13.*

Computer Systems Overview CACS 204

Learn what you need to know to make informed decisions on computer systems. This course presents an extensive overview of many of the system hardware components you may need and the appropriate software to make them work. Topics include: the computer (speed, memory, disk size, display, I/O, etc.), computer bus (ISA, VESA/VLB, PCI), printers (slow/fast, color or B/W, inkjet/laser), modems (14400/28800, computer/fax), networks (peer-to-peer, client-server), and multimedia. **Prerequisite:** CAPC 203

Windows 95 Level I or CAMC 100

Introduction to the Macintosh or equivalent.

Dale Heuer, MBA

Section 100: Mondays and Wednesdays, June 5-14, 6-9 p.m. 4 sessions. University Computing Center 124. \$195. *Enrollment limit: 13.*



NETWORKS

**Introduction to Networks
CACs 220**

Networked computer systems are becoming more and more prevalent in today's business environment. Making informed choices depends on understanding the basic concepts, grasping the "lingo" and accurately evaluating various configurations. This course also presents an overview of current network systems available on both DOS-based and Macintosh-based systems from small to medium sized businesses. **Prerequisite:** CAPC 203 Windows 95 Level I or CAMC 100 Introduction to the Macintosh or equivalent.

Nate Ahrens, B.A.

Section 101: Tuesdays and Thursdays, June 1-15, 6-9 p.m. 5 sessions.

Section 102: Monday, Tuesdays and Thursdays, July 10-20, 6-9 p.m. 5 sessions.

All Sections: University Computing Center 126. \$225. *Enrollment limit:* 16.

**Computer Architecture
CACs 305**

This course introduces the fundamentals of computer architecture, starting with the logical hierarchy. It also addresses how individual components such as CPUs, memory, hard drives, video cards, network adapters and other peripherals interact with each other on various platforms. Hardware standards are examined for each of the platforms including PCI, Nubus, SCSI, IDE, and enhanced IDE. **Prerequisite:** CACS 204 Computer Systems Overview or equivalent.

Dave Bodnar, M.S.

Section 100: Thursdays, June 22-July 13, 6-9 p.m. 4 sessions. University Computing Center 123. \$200. *Enrollment limit:* 20.

**Network Administration
CACs 321**

Explore one of the fastest growing areas in the computer industry. Learn a broad range of network management skills including managing user groups, network security, backups and other network resources. Develop effective troubleshooting techniques to minimize network problems. **Prerequisite:** CACS 220 Introduction to Networks or equivalent.

Bill Wyman, M.A.

Section 100: Tuesdays and Wednesdays, June 27-July 12 (skip July 4 and July 5), 6-9 p.m. 4 sessions. University Computing Center 123. \$200. *Enrollment limit:* 75.

**Network Operating Systems
CACs 323**

Examine the characteristics of network operating systems including multi-user access to files and resources, access rights, security, and file systems. These topics are explored through the examination of Novell, AppleShare and NT. Network topologies and hardware are also introduced. **Prerequisite:** CACS 321 Network Administration or equivalent. **Required text:** *Using Networks*, Derfler.

Bill Wyman, M.A.

Section 100: Monday, Tuesday, Wednesday, and Thursday, July 17-20, 6-9 p.m. 4 sessions. University Computing Center 123. \$200. *Enrollment limit:* 30.

**Introduction to Windows NT 4.0
Administration
CACs 304**

A technical hands-on course focusing on concepts necessary for installing and running Windows NT Workstation and Server in a simple small office environment. Topics include planning and installation, file systems and disks, application issues, printing, backups and performance tuning and optimization.

Prerequisites: CACS 303 Computer Operating Systems and CACS 323 Network Operating Systems or equivalent. **Required text:** *Inside Windows NT Server 4*, 2nd edition, Heywood.

Bob Schmidt, M.A.

Section 100: Tuesdays and Thursdays, July 25-August 3, 6-9 p.m. 4 sessions. University Computing Center 126. \$400. *Enrollment limit:* 16.

**Intermediate Windows NT 4.0
Administration
CACs 404**

Expand on the topics covered in the introduction course by learning what it takes to adapt them to a larger scale multi-server environment using Domains and Trusts. Also examine the Internet Information Server, Remote Access Service, and other network components. **Prerequisite:** CACS 304 Introduction to Windows NT 4.0 Administration or equivalent. **Required text:** *Inside Windows NT Server 4*, 2nd edition, Heywood.

Required text: *Inside Windows NT Server 4*, 2nd edition, Heywood.

Bob Schmidt, M.A.

Section 100: Tuesdays and Thursdays, August 8-17, 6-9 p.m. 4 sessions. University Computing Center 126. \$400. *Enrollment limit:* 16.



NetWare Administration**CACS 414**

In this course you will set up a NetWare server plus create and manage objects and implement network printing through NetWare Administrator. Novell Directory Services, security issues, and utilities will be discussed. **Prerequisite:** CACS 323 **Network Operating Systems** or equivalent.

Shayn Smith, Ph.D., CNE

Section 100: Mondays and Wednesdays, July 24-August 2, 6-9 p.m. 4 sessions. University Computing Center 124. \$200.

Enrollment limit: 13.

Advanced NetWare Administration**CACS 416**

In this course you will learn how to optimize performance on a NetWare server and troubleshoot common problems. We will also demonstrate NDS Manager and discuss topics such as remote access, ZENWorks, DNS and DHCP Services, and auditing. **Prerequisite:** CACS 414 **NetWare Administration** or equivalent.

Shayn Smith, Ph.D., CNE

Section 100: Mondays and Wednesdays, August 7-16, 6-9 p.m. 4 sessions. University Computing Center 124. \$200. *Enrollment limit: 13.*

UNIX System Administration**CACS 415**

This hands-on course examines in-depth the fundamental aspects of managing users, installing and troubleshooting software and hardware, and effective backup and security schemes. Advanced topics include an overview of network management as well as suggestions for effective system monitoring schemes, particular setup strategies and other "tricks of the trade." **Prerequisites:** CACS 211 **Introduction to UNIX** or equivalent and users level knowledge of file ownerships, directories, permissions, basic commands and editors.

Lynn Schaper, B.A.

Section 100: Tuesdays, July 11-August 8, 6-9 p.m. 5 sessions. University Computing Center 124.

\$435. *Enrollment limit: 13.*

Wide Area Networking Topics**CACS 424**

This course presents an overview of Wide Area Network technologies that are commonly used at the University of Colorado at Boulder as well as other businesses. The course will cover WAN standards, such as PPP, SLIP, frame relay and V.34 modem protocols with hands-on configuration of systems for access to CU-Boulder modem pools and Internet service providers. Windows 95 and Macintosh configurations will be discussed.

Prerequisite: CACS 323 **Network Operating Systems** or equivalent.

Instructor TBA

Section 100: Saturdays, July 22 and 29, 9 a.m.-2:30 p.m. 2 sessions. Humanities 125. \$185.

Enrollment limit: 16.

OPERATING SYSTEMS**Computer Operating Systems****CACS 303**

Emphasizes the components and architecture including memory management, virtual memory, I/O subsystems and kernel implementations. Operating systems such as Macintosh, DOS/Windows, and UNIX derivatives will be examined. **Prerequisite:** CACS 204 **Computer Systems Overview** or equivalent. **Required text:** *Crossing Platforms: A Macintosh/Windows Phrasebook*, Engst and Pogue.

Bill Wyman, M.A.

Section 100: Saturdays, July 8 and 15, 9 a.m.-4 p.m. 2 sessions. University Computing Center 123. \$200. *Enrollment limit: 30.*

Hands-On UNIX**CACS 312**

Learn the basics of the UNIX operating system for programming, Internet connectivity, and other daily tasks. The course covers UNIX fundamentals such as the file and directory structure, essential commands, editors and shells.

Advanced topics include customization of the user environment, basic shell programming and an overview of the different versions of UNIX available on the market today. **Prerequisite:** CACS 100 **Computer Literacy** or equivalent.

Bill Norton, B.A.

Section 100: Thursday, June 1 and Wednesdays, June 7-28, 6-9 p.m. 5 sessions. University Management Systems 001. \$345. *Enrollment limit: 22.*

Introduction to UNIX**CACS 211**

This is a course for anyone who needs to use UNIX, program in its environment, manage users, or obtain sufficient knowledge to evaluate it. Fundamentals are covered, including few advanced topics history, the importance of different versions, files, directories, permissions, essential commands, editors, the Bourne and C shells, I/O redirection, pipes, command substitution, environment variables, powerful features of the C shell and a look inside the UNIX kernel.

Prerequisite: CACS 100 **Computer Literacy** or equivalent.

Ed Zucker, M.S.

Section 100: Mondays and Wednesdays, June 5-26, 6-9 p.m. 7 sessions. Humanities 125. \$375. *Enrollment limit: 45.*

Jeannette Smith and Gary Schaefer study the text in Carol Meier's JAVA class. Jeannette is a software tester at Sybase and finds this class "very useful and convenient." As a technical support engineer for Sybase, Gary says, "I really need to be somewhat proficient in the JAVA language."



THE INTERNET

Internet Fundamentals

CACS 230

Learn what today's information SuperHighway, the Internet, offers. Topics include an overview of its history and technology, access providers and ways to join the Internet. Basic applications such as electronic mail, USENET news, finding and accessing information and the World Wide Web will be covered. Lecture includes information on both PC and Macintosh platforms. **Prerequisite:** CACS 100 Computer Literacy or equivalent.

Beth Sigren, B.S.

Section 101: Saturday, June 3, 9 a.m.-4 p.m.
1 session.

Section 102: Saturday, June 10, 9 a.m.-4 p.m.
1 session.

All Sections: University Computing Center 126.
\$140. *Enrollment limit:* 16.

Doing Business on the Internet

CACS 237

"E-commerce": Learn the fundamentals for promoting and marketing your business on-line. Topics include conceptualizing, planning, organizing and implementing a Web-based "store-front" distributed on the Internet. Case studies will be reviewed that demonstrate various strategies for successful management of security, payment, search listings, and software concerns as applied to marketing your product or service on the Web. **Prerequisite:** CACS 230 Internet Fundamentals or equivalent.

Jeff Forrest, M.A.

Section 100: Tuesdays, June 13-27, 6-9 p.m. 3 sessions. University Management Systems 001. \$180.
Enrollment limit: 22.

Internet Applications

CACS 331

There is more to the Internet than Web sites! In this class, you will access and search FTP sites, transfer files to a host computer using FTP and log on to a host computer with telnet. Learn more about your Web browser: how to set preferences, download and install plug-ins, organize bookmarks and copy images. Also, sign up for free Web space and build your own Web page using free software. **Prerequisite:** CACS 230 Internet Fundamentals or equivalent.

Ginny Figlar, M.A.

Section 101: Saturdays, June 3-10, 9 a.m.-2:30 p.m. 2 sessions. University Management Systems 001. *Enrollment limit:* 18.

Beth Sigren, B.S.

Section 102: Fridays, June 23-30, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 126.
Enrollment limit: 16.

Both Sections: \$180.

Introduction to Hypertext Mark-up Language (HTML): Formatting, Links, Lists and Tables

CACS 332

Learn how to create Web pages and Web sites. Topics include formatting tags, essential head tags, lists, links, images and tables. Coding techniques and tips for Web site design are also covered. **Prerequisites:** CAPC 203 Windows 95 Level I and CACS 331 Internet Applications or equivalent. Proficiency with PCs and the Windows 95 operating system is necessary.

Ginny Figlar, M.A.

Section 101: Tuesday and Thursdays, June 1-8, 6-9 p.m. 3 sessions. University Computing Center 124. *Enrollment limit:* 13.

Karis Vail Schmidt, B.A.

Section 102: Saturdays, June 3 and 10, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 124. *Enrollment limit:* 13.

Beth Sigren, B.S.

Section 103: Tuesday and Thursday, June 13 and 15, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 124. *Enrollment limit:* 13.

Ginny Figlar, M.A.

Section 104: Monday, Wednesday, and Friday, June 19-23, 6-9 p.m. 3 sessions. University Computing Center 124. *Enrollment limit:* 13.

Beth Sigren, B.S.

Section 105: Monday, Wednesday, and Friday, June 26-30, 6-9 p.m. 3 sessions. University Computing Center 124. *Enrollment limit:* 13.

Karis Vail Schmidt, B.A.

Section 106: Saturday, July 8, 9 a.m.-4 p.m. 1 session. University Management Systems 001. *Enrollment limit:* 18.

All Sections: \$185.



Intermediate Hypertext Mark-up Language (HTML): Meta Tags, Referencing and Frames
CACS 432

This course builds on the skills learned in CACS 332 Introduction to HTML. Learn to code more meta tags; absolute, relative and base references; and frames. Also learn about client pull and server push concepts. **Prerequisite:** CACS 332 Introduction to Hypertext Mark-up Language (HTML) or equivalent. You must be proficient with PCs and the Windows 95 operating system and able to implement all the skills covered in the Introduction HTML course with minimal assistance.

Karis Vail Schmidt, B.A.

Section 101: Tuesday and Thursday, June 6 and 8, 9 a.m.-12 p.m. 2 sessions. University Computing Center 126. *Enrollment limit: 16.*

Section 102: Tuesday and Thursday, June 6 and 8, 1-4 p.m. 2 sessions. University Computing Center 126. *Enrollment limit: 16.*

Beth Sigren, B.S.

Section 103: Monday and Wednesday, June 12 and 14, 6-9 p.m. 2 sessions. University Computing Center 126. *Enrollment limit: 16.*

Section 104: Saturday, June 17, 9 a.m.-4 p.m. 1 session. University Computing Center 126. *Enrollment limit: 16.*

Section 105: Saturday, June 24, 9 a.m.-4 p.m. 1 session. University Computing Center 126. *Enrollment limit: 16.*

Karis Vail Schmidt, B.A.

Section 106: Tuesday and Thursday, July 11 and 13, 6-9 p.m. 2 sessions. University Management Systems 001. *Enrollment limit: 16.*

All Sections: \$150.

Advanced Hypertext Mark-up Language (HTML)
CACS 532

This course builds on the skills learned in the Introduction and Intermediate HTML courses. Examine the "big picture" of Web site design, creation and advertising. Learn to code forms, styles and style sheets. **Prerequisite:** CACS 432 Intermediate Hypertext Mark-up Language (HTML) or equivalent. You must be proficient with PCs and the Windows operating system and able to implement all skills covered in the Introduction and Intermediate HTML courses to successfully complete this course.

Beth Sigren, B.S.

Section 101: Thursdays, June 1-8, 9 a.m.-2:30 p.m. 2 sessions. University Management Systems 001. *Enrollment limit: 16.*

Section 102: Wednesdays, June 14-21, 9 a.m.-2:30 p.m. 2 sessions. University Management Systems 001. *Enrollment limit: 16.*

Section 103: Monday, Wednesday, and Friday, July 31-August 4, 6-9 p.m. 3 sessions. University Computing Center 126. *Enrollment limit: 16.*

Section 104: Saturdays, August 5 and 12, 9 a.m.-2:30 p.m. 2 sessions. University Management Systems 001. *Enrollment limit: 16.*

All Sections: \$185.

Advanced Hypertext Mark-up Language (HTML) (4.0) Update
CACS 533

Learn about the new version of HTML: HTML 4.0. This fast-paced class covers new and revised HTML tags, attributes, and values as specified by the W3C. This class builds on the skills learned in all levels of the HTML courses. **Prerequisite:** CACS 532 Advanced Hypertext Mark-up Language (HTML) or equivalent. Students must be proficient with PCs and the Windows 95 operating system and able to implement the skills covered in all levels of the HTML courses with minimal assistance.

Beth Sigren, B.S.

Section 100: Tuesday, August 1, 9 a.m.-4 p.m. 1 session. University Management Systems 001. \$150. *Enrollment limit: 22.*

Teresa Rives is an engineering project manager taking JAVA to "stay current technically." She says "it's a really good way to learn the latest and greatest fairly easily." Because she works in Boulder she says the class is "pretty convenient in terms of location and time" and adds that the program "has a really good reputation."



THE INTERNET-cont.**Design Techniques for Web Sites
CACs 334**

Learn basic design principles and apply them to Web page design. Targeting audience, defining your goal and flow-charting will also be discussed. Using Adobe Photoshop, discover ways to create enticing graphics for your pages that are interesting and also manageable. Other topics include today's technological realities, typography and color theory. **Prerequisite:** CACS 331 **Internet Applications** or equivalent.

Becky Woulfe, B.F.A.

Section 101: Monday and Wednesday, June 12 and 14, 6-9 p.m. 2 sessions. University Computing Center 127. *Enrollment limit:* 8.

Section 102: Monday, June 19, 9 a.m.-4 p.m. 1 session. University Computing Center 127. *Enrollment limit:* 8.

Section 103: Saturday, July 15, 9 a.m.-4 p.m. 1 session. University Computing Center 127. *Enrollment limit:* 8.

Beth Sigren, B.S.

Section 104: Monday and Wednesday, July 24 and 26, 9 a.m.-12 p.m. 2 sessions. University Computing Center 124. *Enrollment limit:* 13.

Becky Woulfe, B.F.A.

Section 105: Saturday, August 5, 9 a.m.-4 p.m. 1 session. University Computing Center 124. *Enrollment limit:* 13.

All Sections: \$150.

**Using Macromedia DreamWeaver to
Create Web Sites
CACs 434**

This professional level HTML editor is a sophisticated tool for creating Web sites. Its powerful site management tools will be covered as well as discussion of layout techniques using tables and frames. Creating rollovers, image swaps, image maps, and much more will also be covered. If you haven't seen DreamWeaver in action, this class is a must. **Prerequisite:** CACS 432 **Intermediate HTML** or equivalent.

Becky Woulfe, B.F.A.

Section 100: Mondays, July 24 and 31, 9 a.m.-3:30 p.m. 2 sessions. University Management Systems 001. \$250. *Enrollment limit:* 18.

**Web Site Design with FrontPage 2000
CACs 233**

Learn to develop a Web presence with one of the most popular Web authoring and management tools available! In this class we will cover the basics of FrontPage (FP Explorer and Editor); creating and using Hyperlinks; creating navigational tools using the Web Wizard; beginning text and graphic use; importing files; and creating lists and tables. **Prerequisites:** CAPC 203 **Windows 95/CAPC 205 Windows 98** and CACS 230 **Internet Fundamentals** or equivalent.

Karis Vail Schmidt, B.A.

Section 100: Fridays, June 30 and July 7, 9 a.m.-2:30 p.m. 2 sessions. University Management Systems 001. \$250. *Enrollment limit:* 18.

**Introduction to JavaScript
CACs 336**

Learn how to apply JavaScript to enhance Web pages. Topics include an overview of JavaScript and how to include basic JavaScripts, such as rollovers, scrolling status bars, cycling banners, the current date and opening new browser windows into a web page. Hands-on exercises will be used to make your web pages up-to-date and impressive. **Prerequisite:** CACS 432 **Intermediate Hypertext Mark-up Language (HTML)** or equivalent.

William Busch

Section 101: Saturdays, June 17 and 24, 9 a.m.-2:30 p.m. 2 sessions. University Management Systems 001. *Enrollment limit:* 15.

Section 102: Monday and Wednesday, June 19 and 21, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 126. *Enrollment limit:* 15.

Section 103: Saturdays, July 15 and 22, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 126. *Enrollment limit:* 15.

All Sections: \$185.

**JavaScript Language
CACs 436**

Topics include programming techniques such as controlling program flow, defining and manipulating functions and variables. Hands-on exercises and practical applications include verifying forms, cookies, creating new pages dynamically and mathematical operations. **Prerequisites:** CACS 436 **Advanced HTML**, and CACS 336 **Introduction to JavaScript** or equivalent.

TBA

Section 101: Monday, Wednesday, and Friday, June 26-30, 9 a.m.-4 p.m. 3 sessions. University Computing Center 124. *Enrollment limit:* 13.

Section 102: Monday, Wednesday and Friday, July 10-14, 9 a.m.-4 p.m. 3 sessions. University Computing Center 126. *Enrollment limit:* 15.

Section 103: Saturdays, July 29-August 12, 9 a.m.-4 p.m. 3 sessions. University Computing Center 126. *Enrollment limit:* 15.

All Sections: \$260.



**Web Site Design Project
CACCS 600**

Required capstone course for the Certificate in Web Site Design. With minimal assistance and supervision, students will create a Web site to demonstrate their complete understanding of Web site design. This fast-paced class builds upon the skills learned in the courses required for the Certificate. Particular attention is given to images, tables, forms, frames, style sheets and JavaScript scripts. Homework is regularly assigned and must be completed as directed for successful completion of this course and the Certificate. **Prerequisite:** Students must have satisfactorily completed all the required courses for the Web Site Design Certificate. CACS 533 Advanced HTML 4.0 Update is highly recommended.

Beth Sigren, B.S.

Section 101: Fridays, July 28-August 11, 9 a.m.-1 p.m., and August 18, 9 a.m.-12 p.m. 4 sessions.

Section 102: Tuesdays and Thursdays, August 1-15, 6-9 p.m. 5 sessions.

All Sections: University Management Systems 001. \$260. *Enrollment limit:* 15.

PROGRAMMING**Introduction to Programming
CACCS 240**

This is an excellent first course for students with minimal or no programming background who want to take Hands-On C++. Using an object-oriented approach, students will learn the logic patterns needed for structured programming in any language. Students will work with if statements, loops and modularized code and learn to write top-down elegant code. **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent. **Required text:** *Karel++*, Pattis.

Charry Stover, M.S.

Section 100: Monday, Tuesdays, Wednesday and Saturday, June 13, 17 and 20, 9 a.m.-4 p.m., June 14 and 19, 6-9 p.m. 5 sessions. University Computing Center 123. \$400. *Enrollment limit:* 24.

**Introduction to Hands-On C++
CACCS 241**

A gentle introduction to C++ programming for those who have some background in object-oriented structured programming. This partially self-paced course covers basic I/O, conditionals, loops and an introduction to functions and pointers. Those who are relatively new to programming should have some facility writing simple C++ code by the end of this class. Those with a strong programming background should have the coding of simple C++ programs "wired" and find the pursuit of the more arcane aspects of this language a simpler task. **Prerequisite:** CACS 240 **Introduction to Programming** or equivalent. **Required text:** *C++ How to Program*, Deitel & Deitel.

Charry Stover, M.S.

Section 100: Monday, Tuesdays, Wednesday, and Saturday, July 11, 15 and 18, 9 a.m.-4 p.m., July 12 and 17, 6-9 p.m. 5 sessions. University Management Systems 001. \$400. *Enrollment limit:* 10.

**Intermediate Hands-On C++
CACCS 341**

This course will cover pointers, arrays, strings, structures and file handling. It is hands-on and partially self-paced. Students should be able to write a C program with functions before taking this class. **Prerequisite:** CACS 241 **Introduction to Hands-On C++** or equivalent. **Required text:** *C++ How to Program*, Deitel & Deitel.

Susan Ramirez, B.S.

Section 100: Saturdays, July 22 and 29, 9 a.m.-4 p.m. 2 sessions. University Management Systems 001. \$235. *Enrollment limit:* 10.

**Introduction to Application
Programming
CACCS 242**

A more intensive first programming course covering the techniques used in designing common algorithms to solve practical problems. Topics include flow of control, functions with parameter passing, data structures, abstract data types, objects, classes, arrays and file I/O. The course combines a lecture and self-paced laboratory format with hands-on programming using Turbo C++. No programming experience is required. **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent. **Recommended text:** *Problem Solving With C++*, Savitch.

Tom Harrold, Ed.D.

Section 100: Mondays and Thursdays, June 5-29, 6-9 p.m. 8 sessions. University Management Systems 001. \$400. *Enrollment limit:* 22.

Scott Steigerwald is taking JAVA "because of my job." As a programmer and web developer, he felt that stronger JAVA skills would enhance his capabilities. He says, "I've read some books. I did an online tutorial, but I needed hands-on experience, personal contact. This class is convenient and really not expensive." Scott is a consultant for Parsons Brinkerhoff, working with a telecomm firm to help them build their network.



**FIVE WAYS TO
BEGINNING
SEE PAGE 52
MAY 8
REGISTER**

PROGRAMMING-cont.**Introduction to Hands-On Visual Basic Programming
CACCS 245**

Visual Basic is a programming language that allows both beginning and experienced programmers to create custom Windows software without having to write out lines of code. The code is automatically generated as the standard Windows elements are inserted into the program by pointing and clicking with the mouse. The "Visual" (graphical) nature of this software makes it possible to create custom Windows programs relatively quickly and easily. **Prerequisite:** CAPC 303 Windows 95 Level II or equivalent.

David Nelson, B.S.

Section 100: Mondays and Wednesdays, June 5-26 (skip June 12 and 14), 6-9 p.m. 5 sessions. University Computing Center 126. \$360. *Enrollment limit:* 13.

**Intermediate Hands-On Visual Basic Programming
CACCS 350**

Explore topics designed to expose an intermediate programmer to a wide range of Visual Basic features. All major elements of the language are covered and concepts of an object-oriented, event-driven application are introduced. Implement a graphical interface that includes pull down and pop up menus; use a wide range of the Visual Basic language elements; code effective event procedures; interact with mouse events; and use a variety of standard and custom Visual Basic controls. Understand the range of applications that are possible. **Prerequisite:** CACCS 245 Introduction to Hands-On Visual Basic Programming or equivalent.

Steve Kaminski, M.S.E.E.

Section 100: Mondays, July 17-August 7, 9 a.m.-2:30 p.m. 4 sessions. University Computing Center 126. \$375. *Enrollment limit:* 13.

**Object-Oriented Design Patterns
CACCS 345**

Designers of object-oriented software have compiled many common architectural solutions to common problems, known as "design patterns". A pattern captures a recurring micro-architecture described in terms of how objects interact to perform a computation. Learning these patterns helps programmers evaluate, communicate, review and implement software designs more effectively. The patterns form a catalog of reusable architectural mechanisms (not a body of reusable source code). This one-day lecture class will explain the design pattern concepts, terminology and benefits and will present a number of fundamental patterns. **Prerequisite:** familiarity programming with objects or an Introduction to Object-Oriented Programming class such as CACCS 244 Introduction to Object-Oriented Programming in C++ or CACCS 247 Introduction to Object-Oriented Programming Using Java or equivalent. **Recommended text:** *Object-Oriented Design Patterns*, Gamma, et al.

George Watson

Section 100: Saturday, July 29, 9 a.m.-4 p.m. 1 session. University Computing Center 123. \$150. *Enrollment limit:* 75.

**Object-Oriented Analysis and Design
CACCS 445**

This workshop combines lecture and student participation to give you a firm grounding in the fundamental precepts of object-oriented analysis and design. This course will be useful for anyone wondering "how to find the Objects". Upon completion, you will have an excellent foundation to get the most out of C++ and Java or other object-oriented languages. **Prerequisite:** CACCS 244 Introduction to Object-Oriented Programming in C++ or CACCS 247 Introduction to Object-Oriented Programming Using Java or equivalent. Students should be comfortable programming with objects.

George Watson

Section 100: Saturdays, July 15 and 22, 9 a.m.-4 p.m. 2 sessions. Humanities 186. \$445. *Enrollment limit:* 15.

**Introduction to Object-Oriented Programming Using Java
CACCS 247**

This course introduces object-oriented programming to programmers familiar with procedural programming but not object-oriented concepts. Focus is on the essential concepts underlying O-O programming (data abstraction, inheritance and polymorphism) and how these are supported in Java (classes and objects, methods, dynamic method binding). We study the java.util package's data structures and collection classes. We also introduce GUI and applet programming. The format is lecture with lab assignments to be completed between classes. **Prerequisite:** CACCS 342 Intermediate Application Programming or intermediate level experience with any procedural programming language. Basic programming concepts will not be covered.

Recommended text: *Just Java*, Peter van der Linden.

Carol J. Meier, M.S.

Section 100: Mondays and Wednesdays, June 12-July 12 (skip July 3 and 5), 6-9 p.m. 8 sessions. Humanities 135. \$450. *Enrollment limit:* 50.



**FIVE WAYS TO
BEGINNING
SEE PAGE 52
MAY 8
REGISTER**

**Intermediate Java Programming
CACAS 347**

This in-depth look at the Java programming language begins with an overview of the Java language, then covers the basics in depth and progresses to inheritance, packages and interfaces and exceptions. Details of the type system, compilation model and the dynamic character of the execution model are emphasized. Students will acquire production Java programming skills. Use of standard Java library packages is illustrated throughout the course. Programming exercises are provided for pursuit between classes. **Prerequisite:** CACS 247 **Introduction to Object-Oriented Programming Using Java** or experience with object-oriented programming, including inheritance and polymorphism is required. Those with no object-oriented programming experience should start with CACS 247. **Recommended text:** *The Java Programming Language*, Arnold & Gosling.

Dave Rodenbaugh, B.A.

Section 100: Mondays and Wednesdays, July 17-August 9, 6-9 p.m. 8 sessions. Humanities 135. \$450. **Enrollment limit:** 50.

**JavaBeans
CACAS 349**

This course provides an overview of the JavaBeans component model. When JavaBeans components are used in a GUI builder or IDE tool, they can be connected together to create complex applications with little or no programming. We will cover: What is a bean? Downloading and Installing the BDK, Naming rules and conventions, Packaging your bean, Using the beanbox, Properties, Events, Serializing and Restoring your bean, Property editors, Downloadable beans, Customizers, Beans and Threads and Relationship with other component technologies (ActiveX, Corba). **Prerequisites:** CACS 347 **Intermediate Java Programming** or experience with the Abstract Windowing Toolkit (AWT) and new Java 1.1 features.

Greg Holling, B.S.

Section 100: Saturday, June 24, 9 a.m.-4 p.m. 1 session. University Computing Center 123. \$150. **Enrollment limit:** 75.

**2D and 3D Graphics with Java
CACAS 449**

We'll use the Java programming language to explore 2D and 3D graphics concepts, and to draw some cool pictures. We'll create simple and complex graphics, using both applets and applications, and discuss optimizing your graphics for use on the Internet. We'll also discuss strengths and weaknesses of the Java graphics model. **Prerequisite:** CACS 348 **GUI Programming in Java** or equivalent.

Greg Holling, B.S.

Section 100: Saturday, August 12, 9 a.m.-4 p.m. 1 session. University Computing Center 123. \$150. **Enrollment limit:** 75.

**Java Servlets
CACAS 248**

Servlets are a Java-based tool for communicating with web browsers. They are faster and more secure than CGI, and more portable and stable than many of the competing technologies. In this one-day course we will cover the following: What is a servlet? HTTP/HTML and their relationship to servlets; the servlet life cycle; multimedia content; session tracking and logging; Security; database connectivity and JDBC; communicating with applets; complementary technologies such as RMI, EJB, Java Server Pages (JSP); and competing technologies such as COM/DCOM/ActiveX, Active Server Pages (ASP). **Prerequisite:** CACS 247 **Introduction to Object-Oriented Programming Using Java** or equivalent. Some experience with HTML and/or JavaScript will also be helpful, but is not required.

Greg Holling, B.S.

Section 100: Saturday, July 22, 9 a.m.-4 p.m. 1 session. Economics 117. \$150. **Enrollment limit:** 22.

**Perl for Programmers
CACAS 250**

Perl has become the standard for CGI (Common Gateway Interface) programming on the Web. However, its use goes beyond CGI and is indispensable to systems administrators, programmers, and computer users alike. Statements, variables and arrays, operators, I/O, control structures, tests and conditions, subroutines, regular expressions and the basics of CGI will be covered. This course will be more in-depth than an introduction to Perl, but will not cover modules and objects. It is not intended to teach general programming concepts; therefore, students should know another programming language (i.e. C, C++, Cobol, or UNIX shell scripting).

Prerequisite: CACS 240 **Introduction to Programming** or equivalent.

Joyce Evans, B.A. and Lynn Schaper, B.A.

Section 100: Thursdays, July 13-August 10, 6-9 p.m. 5 sessions. University Computing Center 124. \$400. **Enrollment limit:** 13.

**XML (Extensible Mark-up Language)
CACAS 330**

Extensible Mark-up Language (XML) is a W3C standard for encoding self-describing data. It is designed to ease the interchange of diverse types of data across a variety of platforms and applications, including the WWW. This course presents a detailed introduction to XML and its related alphabet soup: DTD (for specifying document types), DOM (for object tree construction) and SAX (for event-based parsing), XSL (for stylesheets), Xlink (for links) and Xpointer (for pointers). The presentation will be technical, suitable for application programmers. Lab exercises cover the use of an XML validator and using the DOM and SAX parsers to extract XML content using Java programs. **Prerequisites:** CACS 247 **Introduction to Object-Oriented Programming Using Java**, knowledge of programming (preferably in Java), or equivalent. Detailed knowledge of SGML and HTML are not required.

Brian De Camp, B.S.E.E.

Section 100: Tuesdays and Thursdays, July 18-27, 6-9 p.m. 4 sessions. University Management Systems 001. \$375. **Enrollment limit:** 22.



THE PC AND MACINTOSH SYSTEMS

(All courses on the PC and Macintosh platforms will be listed together in this section.)

Windows 95 Level I CAPC 203

If you are entirely new to the Windows environment, this class will help you explore the many features of this friendly user interface. Learn how to locate, access and organize files, associate files with programs, and open, close and switch between applications. Other features examined include multitasking, properties, plug and play and multimedia. **Prerequisite:** CACS 100 Computer Literacy or equivalent.

Lisa Kelly, B.A.

Section 101: Saturday, June 24, 9 a.m.-4 p.m.
1 session. University Computing Center 124.
Enrollment limit: 13.

Section 102: Tuesday, July 11, 9 a.m.-4 p.m. 1 session. University Computing Center 124.
Enrollment limit: 13.

All Sections: \$135.

Windows 95 Level II CAPC 303

This course builds on the skills learned in Windows 95 Level I. Topics include customizing Windows 95; downloading, installing, and uninstalling software; and using system tools (Microsoft Backup, ScanDisk, and Disk Defragmenter). Also learn about the Windows Registry. **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent. **Recommended text:** *Windows 95 Secrets*, Livingston and Straub.

Chris Mattson, B.S.

Section 101: Thursday, July 13, 9 a.m.-4 p.m.
1 session. University Computing Center 126.
Enrollment limit: 16.

Pat Melton, B.A.

Section 102: Saturday, July 22, 9 a.m.-4 p.m.
1 session. University Computing Center 124.
Enrollment limit: 13.

All Sections: \$135.

Windows 98 Level I CAPC 205

If you are entirely new to Windows or have upgraded from Windows 95 to Windows 98, this class will compare enhancements that make Windows 98 a stronger operating environment. Learn how to locate, access and organize files, associate files with programs and open, close and switch between applications. Other features examined include multitasking, properties, and what's new in 98. **Prerequisite:** CACS 100 Computer Literacy or equivalent.

Lisa Kelly, B.A.

Section 100: Tuesday and Thursday, June 27 and 29, 6-9 p.m. 2 sessions. University Computing Center 126. \$135. *Enrollment limit:* 16.

Introduction to the Macintosh CAMC 100

Meet the friendly system that is a powerful productivity tool. Learn practical business options, system management, and basic graphics with hands-on practice. As time permits, we will demonstrate other more advanced applications for business and personal use. Obtain the confidence and expertise required for other Macintosh courses. **Prerequisite:** CACS 100 Computer Literacy or equivalent.

Rick Hoyt, B.S.

Section 100: Saturday, June 3, 9 a.m.-4 p.m.
1 session. University Computing Center 127.
\$135. *Enrollment limit:* 8.

OFFICE PACKAGES

Word Processing

Word 97 (8.0) Level I CAPC 213

Learn to create a simple document: printing, selecting, moving, copying and deleting text, changing fonts and point size and the bold, italics and underline features. Other features include inserting special characters, creating bulleted and numbered paragraphs, changing margins, setting tabs, using spell check and the help system. Explore the integrated features including extended filenames, desktop shortcuts, enhanced auto correct, Spell It and Find Fast. **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent.

Jeff Schatz, B.A.

Section 100: Monday and Wednesday, July 10 and 12, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 124. \$170.
Enrollment limit: 13.

Word for Macintosh (Office 98) Level I CAMC 211

Tap the full power of flexible, efficient word processing through mastery of Word, the leading Macintosh software package. Learn basics that enable you to produce practical business documents including editing, text/graphic interfaces, and use of key features. **Prerequisite:** CAMC 100 Introduction to the Macintosh or equivalent.

Issy Kilbride

Section 100: Tuesday and Thursday, June 27 and 29, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 127. \$170. *Enrollment limit:* 8.



**Word 97 (8.0) Level II
CAPC 313**

Create professional looking documents by learning the difference between page layout and normal mode. Learn headers and footers, page numbering, and tables. Use the mail, envelope and label merge and sort functions. Work with toolbars and choose from over 30 professionally created templates. **Prerequisite:** CAPC 213 Word 97 (8.0) Level I or equivalent.

Chris Mattson, B.S.

Section 100: Wednesday, July 26, 9 a.m.-4 p.m. 1 session. University Computing Center 126. \$135. *Enrollment limit:* 16.

Spreadsheets**Excel 97 (8.0) Level I
CAPC 234**

Learn basic spreadsheet design and construction, file management, formulas, functions, worksheet editing, formatting and printing. Explore the integrated features of this version including extended filenames, easier number formatting, and enhanced drag and drop. **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent.

Jeff Schatz, B.A.

Section 101: Friday, July 21, 9 a.m.-4 p.m. 1 session.

Section 102: Friday, July 28, 9 a.m.-4 p.m. 1 session.

All Sections: University Computing Center 124. \$135. *Enrollment limit:* 13.

**Excel 97 (8.0) Level II
CAPC 334**

Use the search and replace function, the date function, hiding columns and protecting cells, using absolute referencing and ranges. Explore the wealth of graphic features! Learn about integrated features such as desktop shortcuts, and templates for data tracking, expense tracking, and financial planning. **Prerequisite:** CAPC 234 Excel 97 (8.0) Level I or equivalent.

Chris Mattson, B.S.

Section 100: Saturday, July 29, 9 a.m.-4 p.m. 1 session. University Computing Center 124. \$135. *Enrollment limit:* 13.

**Excel 97 (8.0) Level III
CAPC 434**

Use the database capabilities of sort, filter, advanced filter and subtotals. Use Pivot tables and learn to write and edit macros to automate repetitive tasks. As time allows, popular functions such as IF, LOOKUP, ROUND and others will be covered. **Prerequisite:** CAPC 334 Excel 97 (8.0) Level II or equivalent.

Chris Mattson, B.S.

Section 100: Friday, August 4, 9 a.m.-4 p.m. 1 session. University Computing Center 124. \$135. *Enrollment limit:* 13.

Presentations**PowerPoint 97 (8.0)
CAPC 221**

Learn to create, edit and print exciting presentations! Enhance various slides with ClipArt drawings. Create bar or pie graphs to represent your numeric data and bullet and text charts with snazzy fonts and other attributes. Create sleek organizational charts, work with different color schemes, use the "Pick a Look" Wizard and more! **Prerequisite:** CAPC 213 Word 97 (8.0) Level I or equivalent.

Pat Melton, B.A.

Section 100: Monday and Wednesday, July 31 and August 2, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 124. \$170.

Enrollment limit: 13.

**PowerPoint for Macintosh (Office 98)
CAMC 221**

Learn to create, edit and print exciting presentations! Enhance various slides with ClipArt drawings. Create bar or pie graphs to represent your numeric data and bullet and text charts with snazzy fonts and other attributes. Create sleek organizational charts, work with different color schemes, use the "Pick a Look" Wizard and more! **Prerequisite:** CAMC 211 Word for Macintosh (Office 98) Level I or equivalent.

Chris Mattson, B.S.

Section 100: Monday and Wednesday, July 10 and 12, 9 a.m.-2:30 p.m. 2 sessions. University Computing Center 127. \$170.

Enrollment limit: 8.

DATABASES**Access 97 (8.0) Level I
CAPC 255**

Create and edit databases, manipulate data elements, and create summary reports in a few easy-to-learn steps. Build on the principles of good data management to enter, organize, access and report virtually unlimited amounts of information. Explore the integrated features including extended filenames, desktop shortcuts, intelligent tables, and improved form and report wizards.

Prerequisite: CAPC 203 Windows 95 Level I or equivalent.

Chris Mattson, B.S.

Section 101: Wednesday and Friday, June 7 and 9, 9 a.m.-4 p.m. 2 sessions.

Issy Kilbride

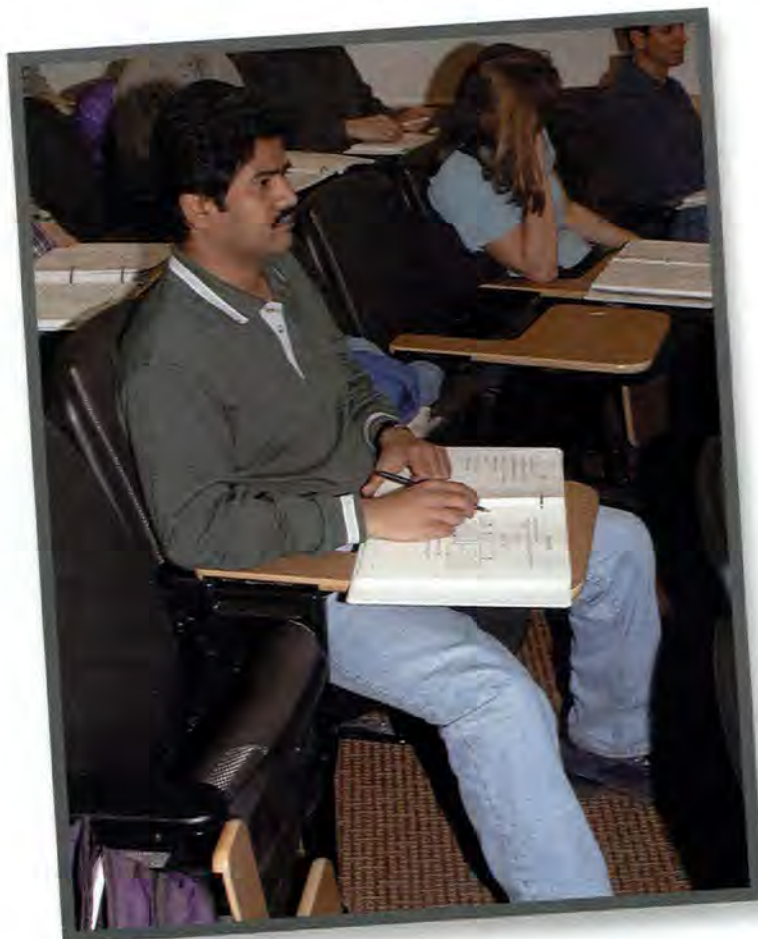
Section 102: Tuesday and Thursday, June 20 and 22, 9 a.m.-4 p.m. 2 sessions.

Chris Mattson, B.S.

Section 103: Monday and Wednesday, June 26 and 28, 9 a.m.-4 p.m. 2 sessions.

All Sections: University Computing Center 126. \$200. *Enrollment limit:* 16.

Vijay Bachupalli is a contract programmer who works from the Boulder area for American Information Technology Corp. in Cedar Rapids, Iowa. He's taking JAVA because he's getting into web site design and "I want to upgrade my knowledge."



DATABASES-cont.**Access 97 (8.0) Level II
CAPC 355**

Use macros in database design as well as enhanced query form and report design. Learn to create forms and reports that are customized for your personal and business needs. **Prerequisite:** CAPC 255 Access 97 (8.0) Level I or equivalent. Chris Mattson, B.S.

Section 101: Wednesday, July 19, 9 a.m.-4 p.m. 1 session.

Section 102: Wednesday, August 2, 9 a.m.-4 p.m. 1 session.

All Sections: University Computing Center 126. \$150. *Enrollment limit:* 16.

**Database Design Concepts
CAPC 357**

Learn insights into the processes of planning a database. The class introduces the concepts of "Normalization" and the five normal forms. Emphasis is placed on the use of indexing and keys to relate tables of data together into a balanced system that can be used for data input and maintenance. Access for Windows and Excel for Windows will be the application software for lab exercises. **Prerequisites:** CAPC 255 Access 97 (8.0) Level I or equivalent and a good working knowledge of the Windows 95 interface. A basic understanding of Excel for Windows is recommended.

Chris Mattson, B.S.

Section 100: Tuesday and Thursday, August 8 and 10, 9 a.m.-4 p.m. 2 sessions. University Computing Center 126. \$200. *Enrollment limit:* 16.

**Relational Database Concepts and SQL
Programming
CAPC 358**

This course provides an introduction to relational databases and the Structured Query Language (SQL). These topics will be explored using a simulated college registration database. Students in the course will assume the role of data analysts asked to provide college administrators with management information. Considerable attention will be placed on the construction, testing, debugging, and simplification of SQL programs. The course also examines selected topics in the design and development of relational databases, as background for a better understanding of why SQL functions the way that it does. Important note: This course emphasizes database use rather than database administration. **Prerequisite:** CAPC 255 Access 97 Level I or previous experience with databases.

Gary Lewis, Ed.D.

Section 100: Mondays and Wednesdays, July 24-August 9, 6-9 p.m. 6 sessions. University Management Systems 001. \$250.

Enrollment limit: 22.

Cheryl Catron takes computer applications classes through Continuing Education "to enhance my skill set for work. She says it's a great way to build the hands-on skills that clients and employers look for. New to the area, she's doing temp work in database design, so these courses are directly beneficial.

**COMPUTER GRAPHICS****Windows Computer Art
CAPC 280**

This course is an overview of the various Windows based graphic programs. This course will cover drawing programs in Windows and Microsoft Works. It will include an overview of illustration applications such as Adobe Illustrator and CoreDRAW! **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent.

Jerry Reynolds, M.S.E.E.

Section 100: Monday and Wednesday, June 12 and 14, 9 a.m.-12 p.m. 2 sessions. University Computing Center 124. \$145.

Enrollment limit: 13.

**Macintosh Computer Art
CAMC 280**

Spray cans, paint brushes and buckets of paint appear and disappear. And no mess to clean up when you're done! Discover electronic graphic design with object-oriented and bit-mapped design capabilities. With training in scanning and laser printing plus instruction in aesthetics of electronic imaging, you'll be ready to make your own camera-ready images. **Prerequisite:** CAMC 100 Introduction to the Macintosh or equivalent.

Barry Ratliff, M.F.A.

Section 101: Monday and Wednesday, June 5 and 7, 6-9 p.m. 2 sessions.

Section 102: Saturday, June 10, 9 a.m.-4 p.m. 1 session.

All Sections: University Computing Center 127. \$145. *Enrollment limit:* 8.

**Photoshop for Windows 95 (5.5) Level I
CAPC 282**

Learn to use the premier photographic editing application. Learn basic scanning techniques and how best to capture your photos. The basic skills of photo editing are taught in this course. Special attention will be given to Web site requirements. **Prerequisite:** CAPC 280 Windows Computer Art Level I or equivalent.

Jerry Reynolds, M.S.E.E.

Section 101: Tuesday and Thursday, June 13 and 15, 9 a.m.-4 p.m. 2 sessions.

Section 102: Tuesday and Thursday, June 27 and 29, 9 a.m.-4 p.m. 2 sessions.

Section 103: Tuesday and Thursday, July 18 and 20, 9 a.m.-4 p.m. 2 sessions.

All Sections: University Computing Center 126. \$200. *Enrollment limit:* 16.

MULTIMEDIA-cont.**Multimedia Solutions
CAMC 293**

This class introduces the types of equipment and technical considerations used in multimedia productions. It will focus on current types of equipment such as scanners, printers, digital cameras, and computers. The latest add-on boards to enhance productions and other peripheral devices are also covered. There will be hands-on experience with graphic animation authoring software. **Prerequisite:** CAMC 280 Macintosh Computer Art, CAPC 280 Windows Computer Art, or equivalent.

William Busch

Section 101: Saturdays, June 17 and 24, 9 a.m.-4 p.m. 2 sessions. University Computing Center 127. \$200. *Enrollment limit:* 8.

Section 102: Tuesdays and Thursdays, June 20-29, 6-9 p.m. 4 sessions. University Computing Center 127. \$200. *Enrollment limit:* 8.

**Multimedia Authoring
CAMC 294**

Explore the interactive process of program design, authoring, and delivery techniques. It will introduce CD-ROM technology techniques that can be accomplished using the software packaged in Macromedia Director Studio 6. The programs introduced are Extreme 3D, ResEdit, Sound Studio, and Deck 2, all of which are bundled with Macromedia Studio. **Prerequisite:** CAMC 291 Macromedia Director (6) Level I or equivalent.

William Busch

Section 100: Wednesdays, July 19-August 9, 6-9 p.m. 4 sessions. University Computing Center 127. \$200. *Enrollment limit:* 8.

COMPUTER AIDED DESIGN**AutoCAD 2000 Concepts
CAPC 161**

This stand-alone course will give you a quick basic look at AutoCAD 2000. It is intended for anyone interested in design or drafting. Topics will include software and hardware purchase considerations and the concepts of AutoCAD drafting and design. **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent.

Michael George, BEnvd, BArch

Section 100: Saturday, June 17, 9 a.m.-4 p.m. 1 session. University Computing Center 124. \$145. *Enrollment limit:* 10.

**AutoCAD 2000 Level I
CAPC 261**

Focus on the 2D drafting features of AutoCAD with an emphasis on setting up new drawings including units, limits, scaling, layers, basic drawing construction and editing techniques and the production of hardcopy. You will also learn how to use template drawings and blocks to complete new projects with much less effort! **Prerequisite:** CAPC 203 Windows 95 Level I or equivalent. Some understanding of drafting concepts/techniques is helpful. **Required text:** *AutoCAD 2000, No Experience Required*, David Frey.

David Kingsley

Section 100: Tuesdays and Thursdays, June 13-29, 6-9 p.m. 6 sessions. University Computing Center 124. \$450. *Enrollment limit:* 10.

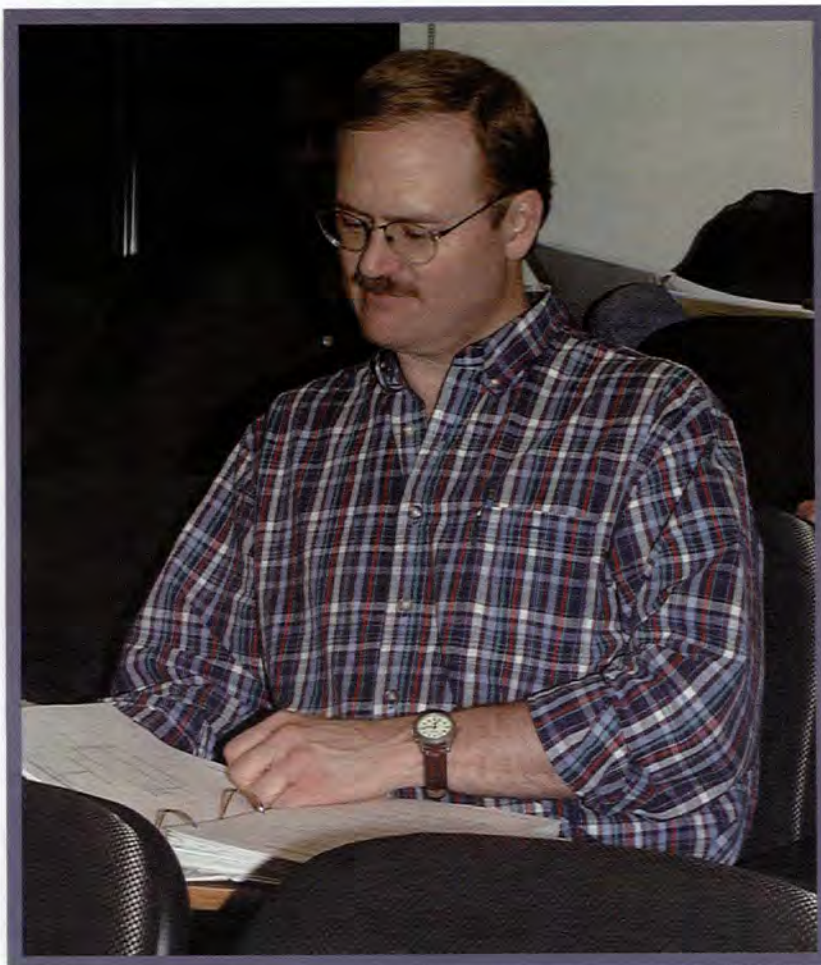
**Upgrade your Skills to AutoCAD 2000!
CAPC 260**

Learn to use the extensive list of new features in AutoCAD 2000. Plotting and converting existing drawings to AutoCAD 2000 will be covered, as well as the Design Center and new Internet capabilities. **Prerequisites:** Experience with AutoCAD 13 or 14 for Windows or equivalent.

David Kingsley

Section 100: Saturdays, July 8-15, 9 a.m.-4 p.m. 2 sessions. University Computing Center 124. \$325. *Enrollment limit:* 10.

Steve Matheson is taking the JAVA class because "I have a project at work that begs for an object-oriented language solution, and there are not that many places that offer training in JAVA." His background is in hardware and he does some work with software in his day-to-day work at IC Palmchip Corporation. Steve adds, "I like to do new things."



ARE YOU CONSIDERING A CAREER IN REAL ESTATE?

SEEKING ADVANCEMENT in your current real estate-related occupation? Interested in learning about the real estate and appraisal industry? If so, check us out. Our courses are open to everyone.

KEY PROGRAM FEATURES:

- ❖ a fully accredited curriculum of over 40 courses including all of the required pre-license and license renewal courses for the Colorado real estate and appraisal professions,

- ❖ a top-notch faculty who work in the profession and who practice what they teach,
- ❖ a statewide mandate to serve the entire state of Colorado,
- ❖ a “no fear” registration policy which guarantees you a full refund if you are unable to attend the course you signed up for,
- ❖ a system of early registration (“early bird”) discounts which saves you between 5-20% off the regular course fee.

REAL ESTATE REQUIREMENTS

Colorado real estate license law requires that a candidate successfully complete a total of 168 classroom hours, pass the real estate broker’s examination, and submit the appropriate licensing application to the Colorado Real Estate Commission. The six courses which fulfill the classroom requirements – NCRE 007 (48 hours), NCRE 020 (48 hours), NCRE 022 (8 hours), NCRE 029 (24 hours), NCRE 032 (32 hours), and NCRE 034 (8 hours) – are described below.

For more information about these requirements, the state exam, and/or the application process, call the Colorado Real Estate Commission at 303-894-2166.

COURSES

NCRE 007 Real Estate Law and Practice

Designed to teach you the practice of real estate and prepare you for the uniform portion of the real estate broker’s examination, this comprehensive survey of the real estate field is also useful to anyone who desires a basic knowledge of real estate. Topics include real property interests, government controls, deeds, contracts, finance and appraisal, as well as fundamental concepts and vocabulary. 48 hours

MORE COURSES ON NEXT PAGE

Paul Postovit has been working with computers for 20 years as a database administrator. He still likes the field, but finds the day-to-day aspect of it too mundane and, at the same time, too pressured. So he’s enrolled in a full load of courses, aggressively working on the web site design certificate and the programming certificate. What sounds good? Working from home with time to feed the dog, take a mid-day run.



NCRE 020 Colorado Contracts and Regulations

This practical course introduces you to Colorado's license law, regulations, and standard contracts, and prepares you for the state portion of the real estate broker's examination. We will analyze the standard listing contract, sales contracts, the extension agreement, and the counter-proposal. Our approach emphasizes thoroughly understanding each clause of a contract and properly completing each type of agreement. 48 hours

NCRE 022 Record Keeping and Trust Accounts

In this one-day, 8-hour course you will learn the proper record keeping procedures required by the Real Estate Commission to maintain and account for funds belonging to others. Topics include legal requirements, special areas of concern, and termination of the brokerage relationship.

NCRE 029 Real Estate Closings

You will learn to properly close a real estate transaction, including understanding your responsibilities as a broker, accounting for all funds received and disbursed, and becoming familiar with all related legal documents. You will be introduced to the 6-column worksheet and you will work through at least eight sample closings. 24 hours

NCRE 032 Practical Applications

After learning about real estate principles, regulations, policies, and procedures, this is the course where you learn the realities of working in the profession. It gives you "how to" information on such topics as entering the field, developing your market, establishing a brokerage relationship, showing a property, preparing and presenting an offer, and closing a transaction. 32 hours

NCRE 034 Current Legal Issues

In this one-day, 8-hour course, you will participate in a workshop where you will be applying selected, current real estate statutes and regulations, and discussing important legal issues, developments, and practices.

CURRENT BROKERS:

WE ALSO OFFER LICENSE UPGRADE AND LICENSE RENEWAL COURSES.

APPRAISAL REQUIREMENTS

Colorado has four classes of appraisers: Registered, Licensed, Certified Residential and Certified General. A Registered Appraiser is an apprentice-level appraiser who may do mortgage work under the direct supervision of a licensed or certified appraiser (who must approve and sign the work). Candidates must successfully complete at least 75 hours of appraisal education and training, including 15 hours of ethics and standards of practice, pass the Level A licensing exam, and submit a licensing application. The three courses which fulfill the classroom requirements are NCRE 200 (48 hours), NCRE 202 (16 hours), and NCRE 204 (32 hours).

Please contact the Colorado Board of Real Estate Appraisers at 303-894-2166 for additional information and clarification.

COURSES

NCRE 200 Registered Appraiser: Basic Appraisal Principles and Procedures

This course is the first of our three-course series designed to meet the basic educational requirements for the Registered Appraiser. It covers 48 hours of appraisal fundamentals and prepares the applicant for the state exam.

NCRE 202 Standards and Ethics

This course is designed to meet the 15-hour requirement of standards and ethics for the state and federal law, and is the second of our three-course Registered Appraiser series. Using the case method, students will study the 10 Uniform Standards of Professional Appraisal Practice as promulgated by the Appraisal Foundation.

NCRE 204 Basic Appraisal Applications: Residential Case Study

This is the third of our three courses leading to the Registered Appraiser license. It requires you to work through the complete appraisal process for a residential property that is currently on the market, and includes a field trip to the property you will be appraising. Topics to be covered (and practiced) include, but are not limited to, inspection techniques, measuring, sales confirmations, comparable analysis, using the three approaches to value, and preparing narrative addenda. 32 hours

CURRENT APPRAISERS:

WE ALSO OFFER LICENSE UPGRADE AND LICENSE RENEWAL COURSES.

REQUEST A REAL ESTATE AND APPRAISAL CATALOG.

For additional information, course dates, locations, registration, or to be added to our mailing list, contact us at one of the following numbers:

Metro Denver/Boulder 303-492-5148
National toll-free 800-331-2801
FAX 303-492-3962

Or Visit the Website:
www.colorado.edu/conted/RealEstate/

OUR MISSION:
The Real Estate and Appraisal Program (REAP) in the Division of Continuing Education at the University of Colorado at Boulder exists to serve the Colorado real estate profession.
We offer you the most comprehensive curriculum of pre-licensing and license renewal courses in the state of Colorado, including a variety of elective continuing education courses.

SPECIAL PROGRAMS

SPECIALIZED PROGRAMS MEET THE NEEDS of international students and members of the area's high-tech business community.

INTERNATIONAL ENGLISH CENTER

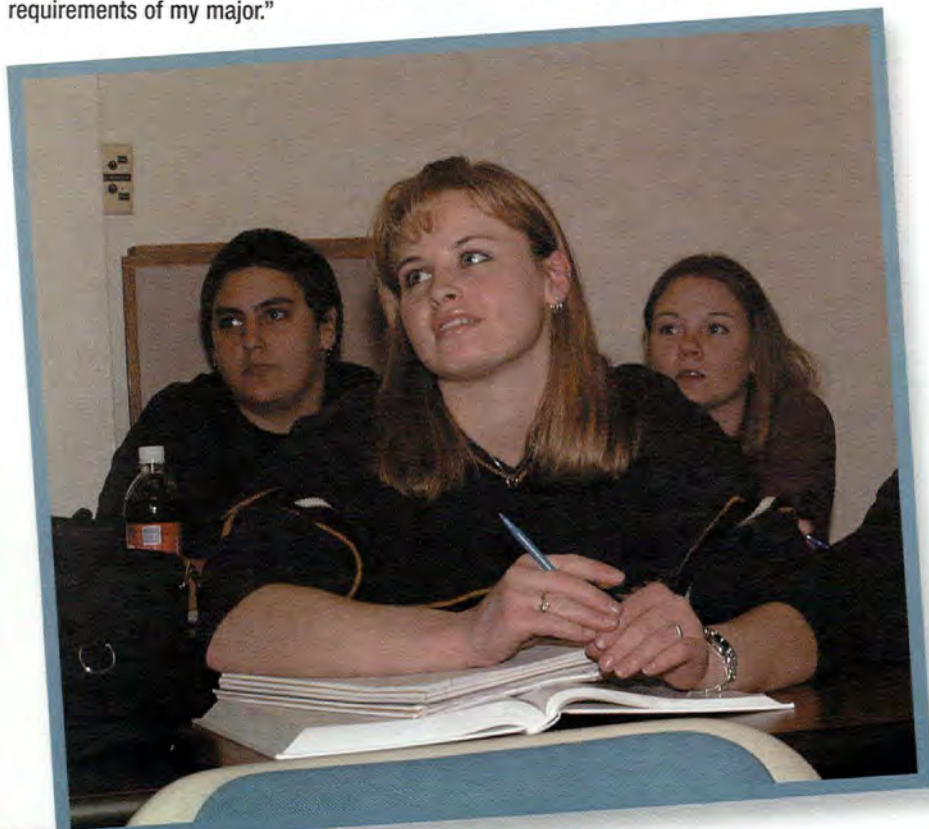
In addition to its intensive, full-time program for international students, the International English Center (IEC) provides evening classes in English as a second language for community residents or interested visitors from other countries. Meeting on Mondays and Wednesdays at a cost of \$280 (text included) for seven weeks, the classes are offered at three different proficiency levels - beginning, intermediate and advanced. Courses in practical writing and pronunciation are offered on Tuesdays and Thursdays for \$280 for seven weeks. For registration information, visit the IEC at 1030 13th Street or call 303-492-5547. Web: www.colorado.edu/iec Email: ieccu@colorado.edu

INTERLOCKEN CENTER

The University of Colorado's Interlocken Center is where the university meets the high-tech pavement, offering world-class faculty, real-world expertise, and premier research facilities to organizations and business professionals. The CU Interlocken Center helps you access the knowledge you need to advance your career. Make the most of your limited schedule with convenient Interlocken classrooms, real-time netcast sessions, on-line study discussion rooms, and results-based curricula.

The Interlocken Center is located at 555 Eldorado Boulevard, Suite 100. Call 303-735-3276 to receive a schedule of courses or visit the web site at www.cu.edu/Interlocken

Angela Dato is thinking of changing her major to Psychology and so Abnormal Psychology sounded interesting. She says the course is "very informative and the professor is excellent." She says that Continuing Education classes "have helped me achieve my goals in school because they offer such a wide range of classes. It's allowed me to take classes that fulfill core requirements and requirements of my major."





University of Colorado at Boulder Main Campus

University Buildings

1. Armory (D-4)
2. Balch Fieldhouse (E-7)
3. Benson Earth Sciences Building (F-9)
4. Business (H-10)
5. Carlson Gymnasium (E-7)
6. Center for Astrophysics and Space Astronomy (L-4)
7. Clare Small Arts and Sciences (D-6)
8. College Inn Conference Center (B-5)
9. Communication Disorders and Speech Science (I-11)
10. Computing Center (J-3)
11. Continuing Education (D-2)
12. Cooperative Institute for Research in Environmental Sciences (CIRES) (F-5)
13. Coors Events/Conference Center (I-12)
14. Cottage No. 1 (F-3)
15. Cristol Chemistry (G-5)
16. Dal Ward Athletic Center (D-8)
17. Denison Laboratory (G-4)
- * Duane Physical Laboratories (F-7). See Duane Physics and Astrophysics, Gamow Tower, Laboratory for Atmospheric and Space Physics, and Joint Institute for Laboratory Astrophysics.
18. Duane Physics and Astrophysics (F-7)
19. Economics (F-3)
20. Education (G-4)
21. Ekeley Sciences (F-5)
22. Engineering Center (F/G-10/11)
23. Environmental Design (G-7)
24. Euclid Avenue Autopark (G-6)
25. Family Housing Children's Center- Main Offices (A-9)
26. Family Housing Children's Center- Colorado Court (L-2)
27. Fiske Planetarium and Science Center (J-10)
28. Fleming Law (K-10)
29. Folsom Stadium (E-8)
30. Gamow Tower (F-7)
31. Geology (G-3)
32. Grounds and Service Center (D-9)
33. Guggenheim Geography (F-3)
34. Hale Science (E-3)
35. Health Physics Laboratory (D-9)
36. Hellem's Arts and Sciences/Mary Rippon Theatre (G-4)
37. Henderson Museum, University of Colorado Museum of Natural History (G-4)
38. Housing System Maintenance Center (K-3)
39. Housing System Service Center (J-3)
40. Humanities Building (E-5)
41. Hunter Science (F-6)
42. Imig Music (H-7)
43. Institute for Behavioral Genetics (K-1)
44. Institute of Behavioral Science (IBS) No. 1 (D-2)
45. IBS No. 2 (C-2)
46. IBS No. 3 (D-2)
47. IBS No. 4 (D-2)
48. IBS No. 5 (D-4)
49. IBS No. 6 (C-2)
50. Integrated Teaching and Learning Laboratory. See Engineering Center (G-11)
51. International English Center (G-2)
52. Joint Institute for Laboratory Astrophysics (G-7)
53. Ketchum Arts and Sciences (F-6)
54. Koenig Alumni Center (E-2)
55. Laboratory for Atmospheric and Space Physics (LASP) (F-7)
56. LASP Space Technology Center (L-3)
57. Lesser House (F-11)
- * Life Sciences Laboratories Complex (E-7). See Muenzinger Psychology, Porter Biosciences, and Ramaley Biology.
58. Macky Auditorium (D-4)
59. Mathematics Building (F-10)
60. MCDB expansion (E-7)
61. McKenna Languages (E-4)
62. Muenzinger Psychology (E-7)
63. Norlin Library (E-6)
64. Nuclear Physics Laboratory (K-2)
65. Old Main (E-4)
66. Page Foundation Center (D-3)
67. Police and Parking Services (G-12)
68. Porter Biosciences (E-7)
69. Power House (F-6)
70. Ramaley Biology (E-6)
71. Regent Administrative Center (I-8)
72. Regent Drive Autopark (G-12)
73. Research Laboratory No. 1 (J-1)
74. Research Laboratory No. 2-WICHE (J-1)
75. Research Laboratory No. 3 (J-2)
76. Research Laboratory No. 4 (K-1)
77. Research Laboratory No. 6 (Marine Street Science Center) (K-2)
78. Research Park Greenhouse (K-1)
79. Sibell Wolle Fine Arts (G-6)
80. Sommers-Bausch Observatory (I-11)
81. Stadium Offices (E-8)
82. Student Recreation Center (D-6/7)
83. Telecommunications Building (G-6)
84. Temporary Building No. 1 (D-6)
85. Transportation Center (J-2)
86. University Administrative Center and Annex (I-7)
87. University Club (H-6)
- * University of Colorado Museum of Natural History. See Henderson Building (#37; G-4)
88. University Memorial Center (UMC) (G-5)
89. University Theatre (including Charlotte York Irey Studios) (F-4)
90. US West Research Park (L-4)
91. Wardenburg Student Health Center (H-7)
92. Willard Administrative Center-North Wing (H-8)
93. Woodbury Arts and Sciences (E-5)

University Housing

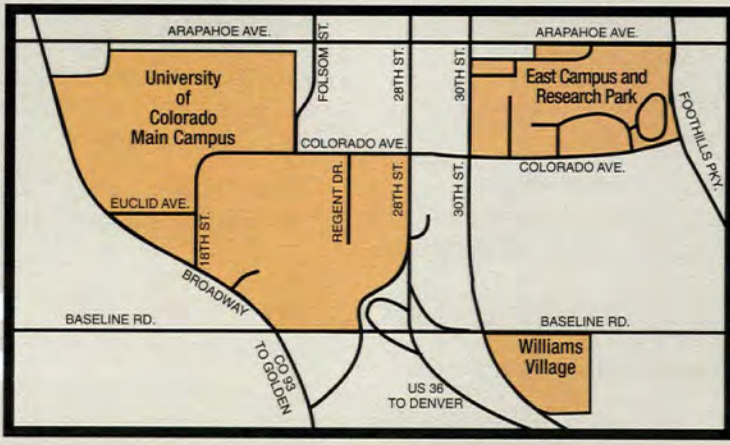
94. Aden Hall (G-9)
95. Andrews Hall-Kittredge Complex (J-11)
96. Arnett Hall-Kittredge Complex (J-12)
97. Athens Court (B/C-6/7)
98. Athens North Court (B-6)
99. Baker Hall (G-7)
100. Brackett Hall (G-9)
101. Buckingham Hall-Kittredge Complex (K-12)
102. Cheyenne Arapaho Hall (H-7)
103. Cockerell Hall (G-10)
104. Colorado Court (L-1)
105. Crosman Hall (G-10)
106. Darley Commons- Williams Village (L-6)
107. Darley Towers-Williams Village (K-5)
108. Faculty-Staff Court (C-5/6)
109. Farrand Hall (H-9)
110. Hallett Hall (H-9)
111. Kittredge Commons- Kittredge Complex (J-10)
- * Kittredge Complex. See Kittredge Commons, and Andrews, Arnett, Buckingham, Kittredge West, and Smith Halls.
112. Kittredge West Hall- Kittredge Complex (J-10)
113. Libby Hall (G-8)
114. Marine Court (B-7)
115. Newton Court (B/C-9/10)
116. Reed Hall (H-10)
117. Sewell Hall (D-5)
118. Smiley Court (L-1)
119. Smith Hall-Kittredge Complex (K-11)
120. Stearns Towers- Williams Village (K-6)
121. Willard Hall-South Wing (H-8)
- * Williams Village. See Darley Commons, Darley Towers, And Stearns Towers.

During any special event, Continuing Education students shall present their registration receipt to obtain parking at no extra charge (Parking Regulation III-D-6a).

Continuing Education students may also purchase parking permits from Parking Services for an additional fee.

University meters are enforced between 7:00 a.m. and 5:00 p.m. seven days a week, including Saturdays and Sundays.

Based on map produced by Student Affairs Communications.



BEGINNING MAY 8, YOU CAN...

- 1. REGISTER BY MAIL.** A postage-paid envelope is located in this catalog. Registration forms are on page 53 for credit, page 55 for noncredit and certificate courses.
- 2. FAX YOUR REGISTRATION.** Fast and easy. Day or night to 303-492-3962. Send page 53 for credit courses. Send page 55 for noncredit and certificate courses.
- 3. IN PERSON.** Come to the Continuing Education Office, 1505 University Avenue, between 7:30 a.m. and 5:30 p.m. Monday through Thursday (7:30 a.m. to 5 p.m. Fridays).
- 4. BY PHONE FOR NONCREDIT AND CERTIFICATE COURSES USING VISA, MASTERCARD, AND DISCOVER.** Complete the registration form (page 55) and have your credit card information handy. Then call 303-492-5148 or 800-331-2801.
- 5. USE CU CONNECT OR THE WEB FOR BOULDER EVENING COURSES.** See page 5 for more information.

Costs vary. Tuition is listed at the end of each course description. You may pay by MasterCard, VISA, Discover, cash, or check.

CREDIT PROGRAMS You can earn academic credit at every level, high school through graduate school. Credit programs include:

- Boulder Evening Credit Classes**
- Independent Learning Programs**
- ACCESS and High School Concurrent Programs**
- Center for Advanced Training in Engineering and Computer Science (CATECS)**

LEARNING FOR LEARNING'S SAKE: PERSONAL ENRICHMENT COURSES The broad range of noncredit courses offered at convenient evening and weekend hours, means no tests, no grades, and no prerequisites. Yet non-credit courses, encompassing both personal and professional interests, are taught by highly qualified instructors. Enjoy non-competitive learning with others who share your interests.

PROFESSIONAL ENHANCEMENT: CERTIFICATE PROGRAMS To polish skills or acquire new ones, enhance a career or explore another field, Continuing Education offers a full spectrum of programs.

- Computer Applications**
- Entrepreneurship**
- Management Development**
- Network Administration**
- Programming**
- Web Site Design**

PROFESSIONAL DEVELOPMENT PROGRAMS for working professionals to build skills and enhance your understanding of business today.

- Real Estate and Appraisal Program**
- International English Center**

WHERE ARE COURSES GIVEN? Course locations are given at the end of most course descriptions. Many campus parking lots offer \$1.25 parking after 5 p.m. and on Saturdays. Some are free evenings and weekends. The Campus Map gives both building and parking lot locations. To skip parking altogether, take the RTD bus to campus.

CHANGE YOUR MIND? Please let us know. If you withdraw before a course begins, you may receive a full refund. Refer to each program description for refund policies after a course starts.

STUDENT PRIVACY You may elect to have directory information withheld about yourself which includes requesting transcripts over the phone. To do this, please visit our office or call to receive the form.

SEVERE WEATHER Classes are held when scheduled. The Chancellor closes the campus only because of extreme weather conditions. Closings are announced on local radio stations. Or call 303-735-5000 for course closing information.

OTHER QUESTIONS? PROBLEMS? SPECIAL NEEDS? Disabled individuals should feel free to call our registration staff (TTY 303-492-8905) for special needs and arrangements. We'll gladly assist you.

BOOKS AND SUPPLIES required for courses are available at the CU Bookstore in the basement of the University Memorial Center on campus.

Call us at 303-492-5148 or 1-800-331-2801 if you need help or additional information.



The University of Colorado at Boulder does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. The University takes affirmative action to increase ethnic, cultural, and gender diversity; to employ qualified disabled individuals; and to provide equal opportunity to all students and employees.

University of Colorado Catalog (USPS 651-060) is published 8X a year (January/February, March/April, May, May/June, August, 3X in December), by the University of Colorado, 3100 Marine Street, Campus Box 584, Boulder CO 80309-0584. Volume 2000, No. 5. Periodicals Postage Paid at Boulder, Colorado. POSTMASTER: Send address changes to University of Colorado Catalog, Division of Continuing Education, University of Colorado at Boulder, Campus Box 178, Boulder, CO 80309-0178.

The Department of Equal Opportunity is responsible for educational and employment opportunity, implementation of affirmative action programs, and coordination of Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1973, the Vietnam Era Veteran's Readjustment Act of 1974, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990. For further information about these provisions, or about issues of equity, discrimination, or fairness, write Garnett K. Tatum, Director, Department of Equal Opportunity, Willard Hall, Room 209, Campus Box 144, University of Colorado at Boulder, Boulder, CO 80309-0144, or call 303-492-6706.

This publication was printed and mailed using funds generated solely by Continuing Education programs. Continuing Education regrets any printing errors, but accepts no liability for them.

Design/Illustration: Ed Huston
Art Direction: Alana Shaw
Photography: Benko Photographics
Printing: AB Hirschfeld Press

CREDIT REGISTRATION FORM

UNIVERSITY OF COLORADO
DIVISION OF CONTINUING EDUCATION

PROGRAM / TERM

Last Name	First Name	Middle Name	Former or Maiden Name	Suffix
-----------	------------	-------------	-----------------------	--------

Mailing address _____
 No. and Street, Apt. No. _____ City _____ State _____ Zip Code + 4 _____

E-mail address _____
 Home Phone _____ Work Phone _____

BIRTHDATE

Month/Day/Year	Age
----------------	-----

SEX:
 Male
 Female

ETHNICITY:
 American Indian or Alaskan Native
 Asian or Pacific Islander
 Black
 Caucasian/White
 Hispanic
 I do not wish to provide this information

RESIDENCY:
 Colorado
 Other State
 Abbr. _____

MILITARY SERVICE:
 Non-veteran
 Veteran
 Active Duty
 Dates _____ to _____

SOCIAL SECURITY NUMBER:

--	--	--

FORMER CU STUDENT NUMBER:

--

CITIZENSHIP:
 C=U.S. Citizen
 P=Non-U.S. Citizen/permanent status
 -List alien registr. No. _____
 T=Non-U.S. Citizen-Country _____
 -List Type of Temporary Visa _____

1. Do you have a high school diploma or a G.E.D. Certificate? No (Submit HS Concurrent Form) Yes
 High School Name/City/State _____ Graduation Date _____
2. Have you ever enrolled for credit course(s) at any campus of the University of Colorado?
 No Yes Campus _____ Term _____ Year _____ of most recent attendance
 Degree Student or Nondegree Student
3. Are you currently on suspension from any Campus/School of CU? No Yes School _____
4. Do you owe a debt to any University of Colorado campus? No Yes
5. Do you have a college degree? No Yes Highest Degree _____ Date Awarded _____
 College Name/City/State _____
6. Have you ever been convicted of a felony? (other than traffic violation) No Yes (Attach statement)

SELECTIVE SERVICE REGISTRATION CERTIFICATION:
 I certify that I am registered with the Selective Service
 I am not required to register with the Selective Service because:
 I am a female.
 I am in the U.S. Armed Forces on active duty.
 I have not yet reached my 18th birthday.
 I am age 26, or older, as of the date of the first day of class.
 I am a non-immigrant alien lawfully admitted in the U.S.

Dept. Abbr.	Course No.	Cr. Hrs.	Sect. No.	Title(s) of course(s) for which you are enrolling	Location

COMPLETE THIS SECTION IF YOU HAVE NOT ATTENDED ANY UNIVERSITY OF COLORADO CAMPUS WITHIN THE LAST 12 MONTHS AND ARE CLAIMING IN-STATE TUITION CLASSIFICATION.

Students already classified as nonresidents must submit a separate "Petition for In-State Tuition" in order to change their tuition classification.

FAILURE TO ANSWER EACH QUESTION MAY RESULT IN YOUR BEING CLASSIFIED AS A NONRESIDENT.

	YOU	CHECK ONE: <input type="checkbox"/> PARENT <input type="checkbox"/> GUARDIAN <input type="checkbox"/> SPOUSE
Dates of continuous physical presence in Colorado (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
Dates of employment in Colorado (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
List exact years for which Colorado income taxes have been filed	_____	_____
Dates of extended absences from Colorado of more than two months within the past two years (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
Dates of active duty military service, if applicable (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
Dates stationed in Colorado (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
Date of your marriage, if applicable (mo./day/yr.)	____/____/____ to _____	_____ to _____
Date current Colorado driver's license, if applicable (mo./day/yr.)	____/____/____ to _____	____/____/____ to _____
Issue date of previous Colorado license, if applicable (mo./day/yr.)	____/____/____ to _____	____/____/____ to _____
List exact years of Colorado motor vehicle registration	_____	_____
Date of Colorado voter registration (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
Dates of ownership of any Colorado residential property (mo./day/yr.)	____/____/____ to ____/____/____	____/____/____ to ____/____/____
Are your parents separated or divorced?	Yes _____ No _____	_____

I hereby certify that to the best of my knowledge the information furnished on this application is true and complete without evasion or misrepresentation. I understand that if found to be otherwise, it is sufficient cause for rejection or dismissal.

Student's Signature _____ Date _____

REGISTRATION FOR CERTIFICATE AND NONCREDIT COURSES

PLEASE PRINT

S.S. No. # _____

For identification purposes, if you wish to claim continuing education tax credits, your social security number must be provided.

Former Student Number _____

Birthdate _____
Month/Day/Year

Mr. Ms. _____
Last First Middle Initial Maiden Name

Mailing Address _____ Home Telephone _____

City _____ State _____ Zip _____

Business Name _____

Business Address _____ Office Telephone _____

City _____ State _____ Zip _____

E-mail address _____

Have you ever enrolled for credit or noncredit course(s) at any campus of the University of Colorado? No Yes

Campus _____ Term _____ Year _____ of most recent attendance.

Have you ever been convicted of a felony (other than a traffic violation)? No Yes (attach statement)

Course No.	Section No.	Course Title	Tuition
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Attach additional sheet if needed

Total Enclosed _____

Please register me for the course(s) listed above.

Signature _____ Date _____

TUITION PAYMENT

Please send a check, payable to University of Colorado, to:
Division of Continuing Education
Campus Box 178
University of Colorado at Boulder
Boulder, CO 80309-0178
If using MasterCard, VISA, Discover
enclose the following information.

Charge: VISA MasterCard Discover (check one)

_____/_____/_____/_____

Expiration Date _____/_____

Print Cardholder's name, as it appears on the charge card.

SELECTIVE SERVICE REGISTRATION CERTIFICATION:

I certify that I am registered with the Selective Service

I am not required to register with the Selective Service because:

I am a female.

I am in the U.S. Armed Forces on active duty.

I have not yet reached my 18th birthday.

I am age 26, or older, as of the date of the first day of class.

I am a non-immigrant alien lawfully admitted in the U.S.

Note that credit card enrollments can be made by phone (see Registration Information).

INDEX

A

ACCESS Program	17
Access (database software)	43-44
Accounting	27
Acting	25
Aerospace Engineering	16
Anthropology	11
Appraisal courses	48
Astronomy	24
AutoCAD	46

B

Boulder Evening Credit Program	3-10
Budgeting	27
Business courses	26
Business Plans	27
Business Writing	27

C

C/C++ Programming	39
Campus Map	50-51
Cartooning	21
CATECS	16
Certificate Programs	
Computer Applications	30
Entrepreneurship	26
Management Development	26
Network Administration	30
Programming	31
Web Site Design	30
Colorado Shakespeare Festival	25
Communication	8, 11, 27
Composting	24
Computer Aided Design	46
Computer courses	33-46
Computer Graphics	44
Computer Science	11
Correspondence study	11-15
Credit courses	3-17
CU Connect registration	5

D

Databases	43-44
Distance Learning	11-15
Drawing	21
DreamWeaver	38

E

Economics	8, 11
Education	11
Engineering	16
English	8, 12
English as a Second Language	49
Entrepreneurism	27
Entrepreneurship Certificate	26
Excel	43
Extensible Mark-up Language (XML)	41

F

Financial Planning	23
Fine Arts	12, 21
Foreign Languages	10, 22-23
French	22
FrontPage	38

G

Gardening	24
Geography	8, 12
Geology	12, 24
German	22
GRE preparation	25

H

Herb Gardening	24
High School Concurrent Program	17
High School correspondence courses	15
High School Summer Scholars	17
History	9, 12, 23
Horticulture	24
HTML	36-37

I

Illustrator	45
Independent Learning	11-15
Interlocken Center	49
International English Center	49
Internet	36-39
Investments and Personal Finance	23
Italian	22

J

Japanese	22
Java Programming	40-41
JavaScript	38
Journalism	13

K

Kinesiology	9, 13
-------------	-------

L

Literature	8
LSAT Preparation	25

M

Macintosh courses	42-46
Macromedia Director	45
Management Development	26
Mathematics	9, 13
Multimedia	45-46
Music	13

N

Network Administration Certificate	30
Network courses	34-35
Nutrition	9, 13

O

Object-Oriented Design	40
On-line courses	11-15
Operating Systems courses	35
Organic Gardening	24

P

Parking	50-51
PC courses	42-46
Perl Programming	41
Personal Enrichment	19-25
Philosophy	9, 13
Photography	21
Photoshop	44-45
Physiology	9, 13
Political Science	9, 13
PowerPoint	43
Programming Certificate	31
Programming courses	39-41
Psychology	10, 14

R

Real Estate Education	14, 47-48
Refunds	
Boulder Evening	4
Business	26
Computer Applications	29
Personal Enrichment	19
Registration Information	52
Relational Databases	44

S

Science (noncredit)	24
Shakespeare	25
Sociology	10, 14
Spanish	10, 22-23
Spreadsheets	43
SQL Programming	44
Summer Scholars	17
Summer Session	17

T

Telecommunications	16
Test Preparation	25
Theatre	25

U

University Writing Program	10, 14
UNIX	35

V

Visual Basic Programming	40
--------------------------	----

W

Water Media	21
Web Based courses	11-14
Web Registration (Boulder Evening)	5
Web Site Design Certificate	30
Windows	42
Windows NT	34
Word Processing	42-43
Writing	8, 10, 25, 27

X

XML (Extensible Mark-up Language)	41
-----------------------------------	----

Colorado

University of Colorado at Boulder

Division of Continuing Education

1505 University Avenue

Campus Box 178

Boulder, Colorado 80309-0178

www.colorado.edu/conted

Instruction offered as part of the Statewide Extended Studies Program.

CONTINUING EDUCATION CONTINUING SOLUTIONS

The CU Division of Continuing Education works in close partnership with the Boulder campus to provide flexible, creative and practical solutions for a broad range of learners in the extended community we serve.

EXPLORE, PARTICIPATE AND ENJOY.