

S U M M E R

DESIGNERS

Branch Out

University of Colorado at Boulder
Continuing Education
Schedule of Courses, Seminars
and Workshops

N. 401



Enchanted Mesa is not quite off the beaten track for economics teacher Phil Graves who often shares an outdoor run with his dog, Winston.

Where Are Courses Given?

Course locations are given at the end of each course description. Many campus parking lots offer 50¢ parking after 5 p.m. and on Saturdays. Some are free evenings and weekends. The Campus Map gives both building and parking lot. To skip parking altogether, take the RTD bus to campus.

Credit Programs

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

Boulder Evening Credit Classes

For university courses at convenient evening hours.

Independent Study Programs

Independent study by correspondence and individualized instruction lets you learn at home.

Meeker '89

Combine summer learning with a spectacular Rocky Mountain Location.

Professional Enhancement: Certificate Programs

To polish your skills or acquire new ones, enhance your current career or explore another field, Continuing Education offers a full spectrum of programs. Most classes offer Continuing Education Units (CEUs), the national standard for recording university-level noncredit course participation.

Or earn an Achievement Certificate in:

- Commercial Design
- Computer Applications and Computer Graphics
- Management Development

Learning For Learning's Sake: Noncredit Courses

The broad range of noncredit courses, offered at convenient evening and weekend hours, mean no tests, no grades, and no prerequisites. Yet noncredit courses, encompassing both personal and your professional interests, are taught by highly qualified instructors. Enjoy non-competitive learning with others who share your interests.

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.

Other Questions?

Call us at 492-5148 or 1-800-332-5839 if you need help or additional information. You can reach us between 8:30 a.m. and 5:30 p.m. Monday through Thursdays or 5 p.m. on Fridays.

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Boulder Evening Credit Classes

Tap the Tree of Knowledge Boulder Evening Credit Classes

The Division of Continuing Education offers a special way for you to make the most of your time, whatever your working schedule. If there's no time for classes during the day, you can still make the most of your evenings.

You can earn full undergraduate University credit in classes with top-notch instructors. You join a diverse group of people united by their interest in personal and professional development.

You can then get started working toward the degree of your choice. Please note that each school or college will apply only a certain number of credit hours — usually 12 — toward a degree. Once you reach the maximum, the next step is applying for admission as a degree student. If you are thinking about applying to CU, please purchase a current catalogue for admission requirements.

Eligibility: You need no previous college experience — just a high school diploma or a GED. Persons on University of Colorado financial stops or academic suspension from the College of Engineering and Applied Science, the College of Environmental Design, or the College of Business may not enroll.

Residency: Whether you are a resident or non-resident, you may take up to 3 semester hours per term or session for \$60 per credit hour. Residency makes a difference only when you are signing up for 4 or more credit hours.

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 to document where you've lived for the past year.

Under 21? If you're not 22 years old by the first day of classes, you are assumed to have the same legal residence as your parents. If your parents aren't Colorado residents, you may establish your own Colorado residency by petitioning the University for status as an emancipated minor.

If you believe your initial classification is incorrect, please feel free to discuss your status with the Classification Coordinator at 492-5148.

Tuition: Resident tuition is \$60 per credit hour. Some courses requiring special equipment or materials may be slightly higher.

If you're not a Colorado resident and want to register for 4 or more credit hours, you'll be charged non-resident tuition. Please refer to Survival Tip on page 5 for more information.

Privileges: Total library services are yours once you enroll at no additional charge. As a Boulder Evening Credit student, you are also eligible for

- Membership in the Recreation Center (\$40 a semester)
 - Wardenberg Student Health Services (\$60 a semester)
 - Hospitalization plan (\$140 a semester)
 - Photo IDs (\$7 cash, checks with guarantee card, Visa, MasterCard)
- Estimated Summer 1989 Student Fees

If you'd like to sign up for any of these additional student benefits, simply take your registration receipt to the appropriate office.

Counseling Services: Free academic counseling is available to you if you are considering enrolling in a course. For planning your degree program, deciding on a major, considering seeking a degree at all, exploring your options, or charting an academic course, feel free to call 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 Room 2, (492-5091) or in Room 165 of the UMC. The Colorado Commission on Higher Education also provides some tuition assistance to eligible students and these applications are also available from the Office of Financial Aid.

Veteran Benefits: As an eligible veteran or dependent, you may enroll in evening classes and apply credit toward a degree. If you have questions about your eligibility and benefits, contact the Veteran's Affairs Office, Room 165, University Memorial Center, or call 492-7322.

To Enroll: Advance registration is necessary — by mail or in person at the Division of Continuing Education, 1221 University Avenue. See the instructions inside the front cover of this catalog.

To Drop: To drop a credit course and to ensure that you receive any tuition refund due you, come to the Division of Continuing Education, 1221 University Avenue, and complete a drop voucher. If you don't officially withdraw from a course, you may receive a grade of "F" for that class.

Pass/Fail Option: This option is not available for Boulder Evening credit courses.

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 beginning June 5.

Credit Classes Calendar-Dates You Should Know

Boulder Evening Credit Classes

Monday, May 1	First day of registration at the Division of Continuing Education, 1221 University Avenue, 9-6 Monday through Thursday; 9-5 Friday.
Monday, June 5	Classes begin. FACULTY/STAFF registration for Boulder Evening classes on space available basis. 50% discount. Active PAF employment verification copy required.
Friday June 16	LAST DAY TO REGISTER. Withdrawals from classes after this date will appear as a "W" on student's academic record.
Monday, June 19	Instructor's signature required to drop classes.*
Monday, July 3	Petition required to drop classes.
Tuesday, July 4	Holiday — No classes.
Tuesday, August 1	Classes end.
<i>*This signature indicates you were doing passing work when you dropped the course.</i>	

Refund Schedule for Credit Classes

100% through June 16
60% June 19 through June 30
40% July 3 through July 17
NONE THEREAFTER

Important Note

Intensive credit classes that do not meet the full eight weeks will have different deadlines. Please call 492-5148 for specific information.

Survival Tips

Tuition charges for credit courses offered by the Division of Continuing Education are determined by **program** and by the **residency** status of the student.

Residents of Colorado are assessed tuition based on the price per semester hour and the number of semester hours for which they register. Tuition is based on the cost cited in the most recent program publication.

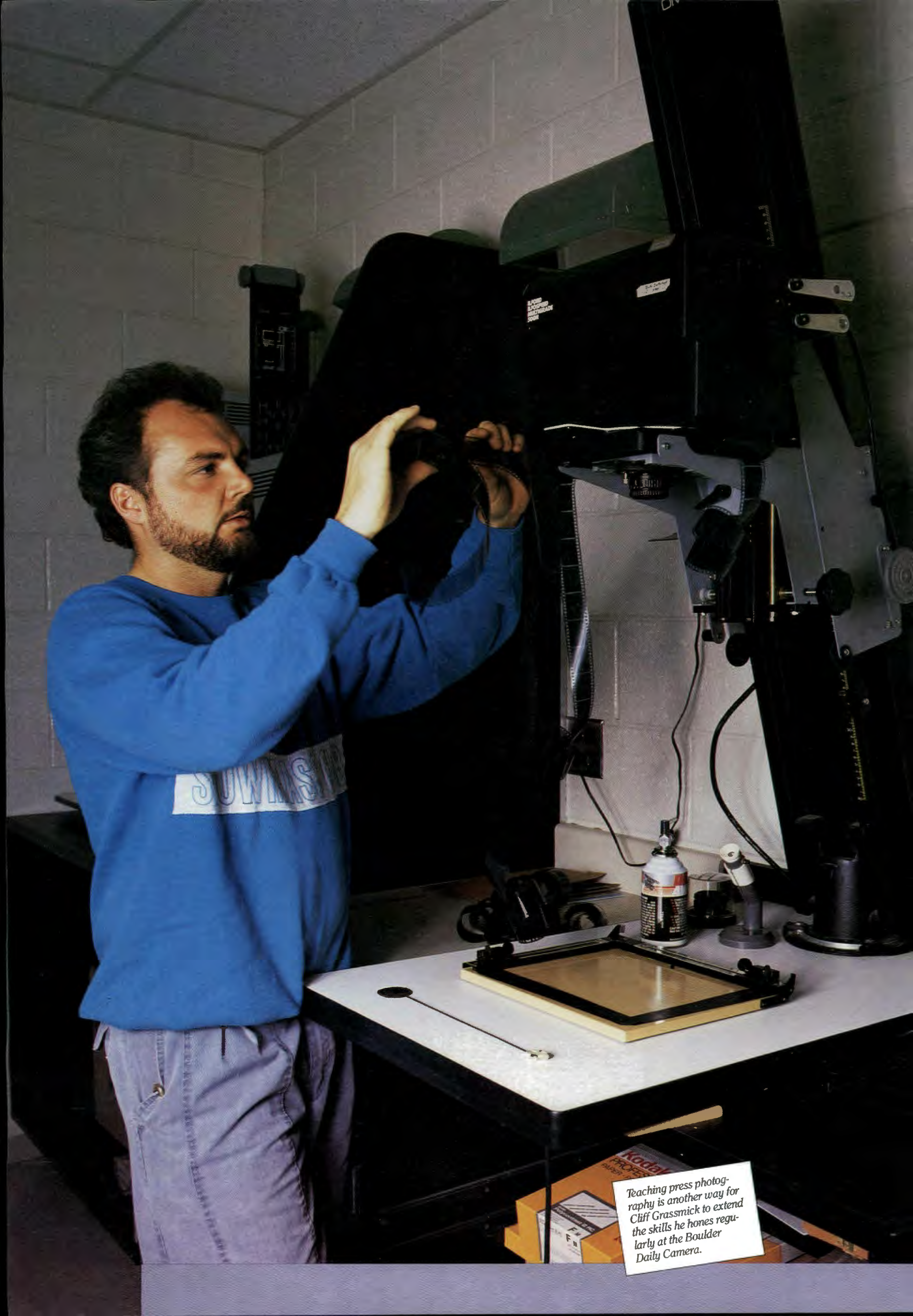
Non-Residents of Colorado are assessed tuition based on the price per semester hour and the number of semester hours for which they register. Non-residents may register for up to three (3) semester hours at the resident tuition rate cited in the most recent program publication. Non-residents registering for four (4) or more semester hours of credit courses offered by the Division of Continuing Education, regardless of program, are assessed non-resident tuition for all courses at the rate established by the Board of Regents for that term or session.

Important Exception: Tuition for **INDEPENDENT STUDY VIA CORRESPONDENCE** is assessed at the rate cited in the catalog of The Colorado Consortium for Independent Study in effect at the time of registration. This assessment is not affected by considerations of residency.

The Board of Regents reserves the right to change tuition without prior notice.

All tuition and refund determinations are subject to audit.





Teaching press photography is another way for Cliff Grassmick to extend the skills he hones regularly at the Boulder Daily Camera.

Full Term Classes by Starting Date, Summer 1989

Boulder Evening Credit Classes

Dept.	Course No. & Hours	Section	Time	Location	Course Title
Monday and Wednesday Evening Courses, Begin June 5 and End July 26 (8 weeks)					
COMM	1020-3	300	6-8:30 p.m.	Hellems 241	Introduction to Communication
COMM	2200-3	300	6-8:30 p.m.	Education 136	Public Speaking
ECON	2010-3	300	5:30-8 p.m.	ECCR 2-06	Principles of Microeconomics
ENGL	1191-3	300	6:30-9 p.m.	Hellems 245	Introduction to Creative Writing
ENGL	3152-3	300	5:30-8 p.m.	ECCR 1-26	Report Writing
ENGL	3682-3	300	5:30-8 p.m.	Education 143	Twentieth-Century American Literature
GEOG	1001-4	300	7-9:30 p.m. (M) 5-9:30 p.m. (W)	Guggenheim 201	Environmental Systems: Climate and Vegetation
KINE	3420-3	300	6:30-9 p.m.	Ekeley E1B20	Nutrition and Health
MATH	1010-3	300	6:30-9 p.m.	ECCR 1-46	College Algebra
PHIL	1000-3	300	6-8:30 p.m.	Hellems 229	Introduction to Philosophy
PSYC	1001-3	300	6:30-9 p.m.	Biosciences E417	General Psychology
PSYC	4456-3	300	6-8:30 p.m.	Biosciences E432	Psychology of Personality
Tuesday and Thursday Evening Courses, Begin June 6 and End August 1 (8 weeks)					
COMM	2030-3	300	6-8:30 p.m.	Hellems 241	Interpersonal Communication
ECON	2020-3	300	5:30-8 p.m.	ECCR 2-06	Principles of Macroeconomics
ENGL	1200-3	300	5:30-8 p.m.	ECCR 1-26	Introduction to Fiction
ENGL	2051-3	300	6:30-9 p.m.	Hellems 245	Introductory Fiction Workshop
GEOG	1011-4	300	7-9:30 p.m. (T) 5-9:30 p.m. (Th)	Guggenheim 201	Environmental Systems: Landforms and Soils
MATH	1020-2	300	6-7:45 p.m.	ECCR 0-38	College Trigonometry
PHIL	1100-3	300	6-8:30 p.m.	Hellems 229	Ethics
PSYC	4303-3	300	6-8:30 p.m.	Biosciences E432	Abnormal Psychology
Monday, Tuesday and Wednesday Evening Courses, Begins July 5 and Ends August 1 (4 weeks)					
FILM	3563-3	100	5-9 p.m.	Norlin AV Room	Producing the Feature Film

Communication

Communication 1020-3 Introduction to Communication

Presents an introduction to concepts and related skills that define communication in a variety of face-to-face contexts. Topics include models of communication, meaning, content/relationships, formal gathering, intimacy, and group programs. Optional for majors; open to nonmajors. When combined with COMM 1240, 2030 or 2150, satisfies first year social sciences requirement.

Section 300:
Mondays and Wednesdays,
6-8:30 p.m., Hellems 241. \$180.

Communication 2030-3 Interpersonal Communication

Emphasizes personal aspects of communication. Choice making, choice attribution, risk taking, personal knowledge, creativity, and alternative kinds of interpersonal relationships are central topics. Increased self-awareness, understanding of interpersonal relationships, and improvement of interpersonal skills are dominant goals. When combined with COMM 1020, 1240 or 2150, satisfies first year social sciences requirement.

Section 300:
Tuesdays and Thursdays,
6-8:30 p.m., Hellems 241. \$180.

Communication 2200-3 Public Speaking

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

Section 300:
Mondays and Wednesdays,
6-8:30 p.m., Education 136. \$180.

Economics

* Economics 2010-3 Principles of Microeconomics

The operation of the price system as a major organizer of the economy. Elementary theory, problems, and public policy of competition, monopoly, distribution of income, and international economic relations. When combined with ECON 2020, satisfies first year social sciences requirement. ECON 2010 and 2020 can be taken in either order.

Section 300:
Mondays and Wednesdays,
5:30-8:00 p.m.,
Engineering Center CR 2-06. \$180.

* Economics 2020-3 Principles of Macroeconomics

An overview of the economy examining the flow of income and GNP as well as the factors determining the level of employment, income, money, credit, and prices. When combined with ECON 2010, satisfies first year social sciences requirement. ECON 2020 and 2010 can be taken in either order.

Section 300:
Tuesdays and Thursdays, 5:30-8 p.m.,
Engineering Center CR 2-06. \$180.

Survival Tips

Disenrollment Policy

When students fail to meet their entire tuition obligations, official notification of disenrollment will be mailed by the Division of Continuing Education to the student's local address of record.

Sorry, No Deferred Payment Plan is Available.



Boulder Evening Credit Classes

English

English 1191-3 Introduction to Creative Writing

An introduction to the techniques of fiction and poetry. Student work is scrutinized by the instructor and discussed in a workshop atmosphere by other students.

Section 300:
Mondays and Wednesdays, 6:30-9 p.m.,
Hellem 245. \$180.

English 1200-3 Introduction to Fiction

Introduction to the novel, novella, and short story, including works from the nineteenth and twentieth centuries, as well as contemporary authors. Focus will be on reading, class discussions, and the development of basic critical approaches to fiction. Authors will include European, Latin American, and Russian writers in addition to American.

Section 300:
Tuesdays and Thursdays, 5:30-8 p.m.,
Engineering Center CR 1-26. \$180.

English 2051-3 Introductory Fiction Workshop

This course is a basic introduction to fiction writing techniques. Its workshop format makes it useful to both beginning and advanced writers. Students will write stories and discuss them in class. Instruction will also include topics such as getting and developing fresh story ideas, preparing manuscripts, and seeking publication. Students will read a variety of stories and theoretical works designed to help them develop their own sense of what makes good fiction. This course may be taken up to three times for credit.

Section 300:
Tuesdays and Thursdays, 6:30-9 p.m.,
Hellem 245. \$180.

English 3152-3 Report Writing

Report Writing is a practical course which emphasizes on-the-job report writing. Topics will cover the writing process, writing to specific audiences, organizing content and preparing effective business letters, including resumes. Course requirements include weekly practical exercises with the emphasis on the student writing and evaluating sample reports as well as researching a final paper. The format of the class, a combination of lecture, discussion and evaluation, will sharpen the student's ability to write with ease and clarity.

Section 300:
Mondays and Wednesdays, 5:30-8 p.m.,
Engineering Center CR 1-26. \$180.

English 3682-3 Twentieth-Century American Literature

Reading course in American novelists, poets, and dramatists of the 20th century. Primarily for non-majors.

Section 300:
Mondays and Wednesdays,
5:30-8 p.m.,
Education 143. \$180.

Film

Film Studies 3563-3 Producing the Feature Film

Designed to give the student a behind-the-scenes look at the way production in the entertainment industry is structured and how it works. The class will: 1) survey the production process from development to distribution; 2) focus on the crucial role that script plays in the production process; 3) "pitch a story" to studio executives. The class will also focus on: 1) various contract negotiations and the budget process; 2) job functions, qualifications, and opportunities in the entertainment industry; 3) relationships between producer, director, the writer, analysis of selected films for production value, story structure and budget considerations. Screenings may include *Hannah and Her Sisters*, *Top Gun*, *Ruthless People*, and other current films.

Section 100:
July 5-August 1, Mondays, Tuesdays
and Wednesdays, 5-9 p.m.,
Norlin Audiovisual Room. \$188.

Geography

* Geography 1001-4 Environmental Systems: Climate and Vegetation

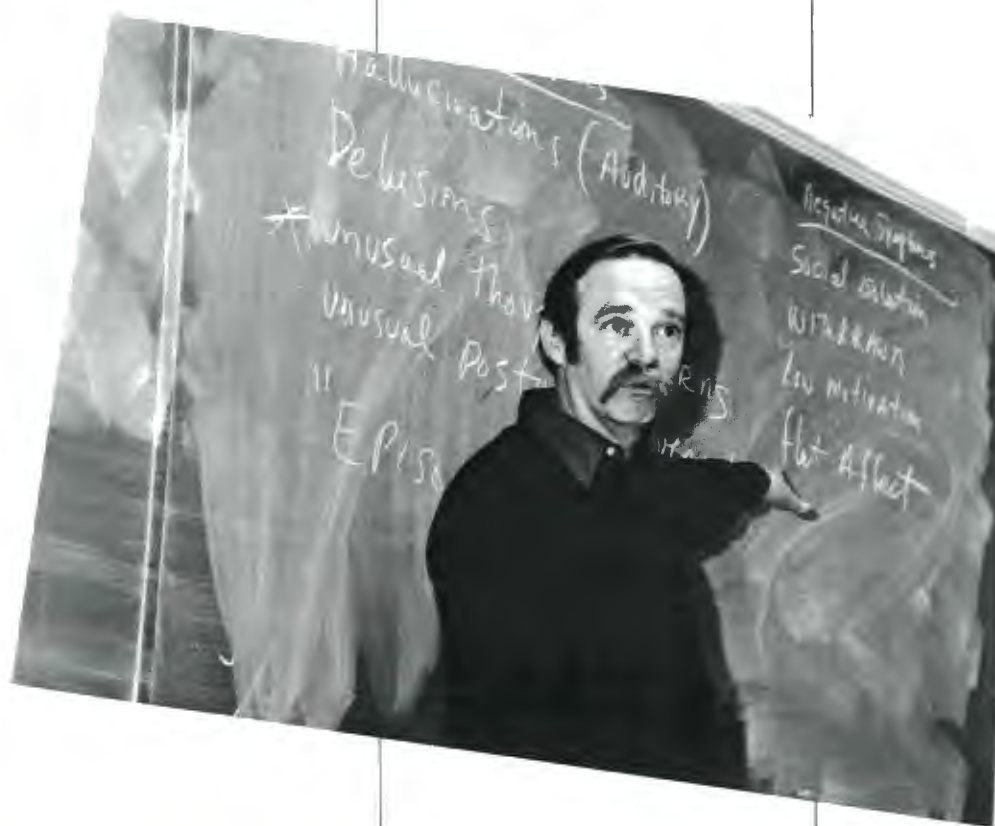
A general introduction to the atmospheric environment of the Earth; the elements and controls of climate and their implications to hydrology, vegetation, and soils. When combined with GEOG 1011, satisfies first year natural sciences requirement.

Section 300:
Lecture: Mondays and Wednesdays,
7-9:30 p.m.
Lab: Wednesdays, 5-7 p.m.,
Guggenheim 201. \$240.

Survival Tips

Important Information for Arts and Sciences Students
Students enrolling on the Boulder Campus for the first time in Summer 1988 and who have never attended college before should contact the Arts and Sciences Dean's Office for a list of General Education Requirements. Continuing and transfer students who graduated from high school before 1988 should consult the current college list for General Education Requirements.

Not Attending Classes Does
Not Mean You Have Withdrawn.



*** Geography 1011-4
Environmental Systems:
Landforms and Soils**

An introductory survey primarily concerned with two essential aspects of the natural environment — landforms and soils. Major emphasis is directed to the genesis, distribution, and utility of surface features in a variety of learning situations, including lectures, labs, and field trips. GEOG 1011 carries only 2 credits if student has earned credit in GEOL 1010 or 1030. When combined with GEOG 1001, satisfies first year natural sciences requirement.

Section 300:
Lecture: Tuesdays and Thursdays,
7-9:30 p.m.,
Lab: Thursdays, 5-7 p.m.,
Guggenheim 201. \$240.

Kinesiology

**Kinesiology 3420-3
Nutrition and Health**

The basic principles of nutrition and their relationship to health. Students may not receive credit for both KINE 3420 and PSYC 2062.

Section 300:
Mondays and Wednesdays, 6:30-9 p.m.,
Ekeley EIB20. \$180.

Mathematics

**Mathematics 1010-3
College Algebra**

Simplifying algebraic expressions, factoring linear and quadratic equations, inequalities, exponentials, logarithms, functions and graphs, complex numbers, binomial theorem. Prerequisite, one year high school algebra. Persons whose high school algebra was completed over three years ago should be prepared to spend additional time in review. (See MATH 0990 also.) No credit for students with credit in MATH 1100. MATH 1010 and 1020 are equivalent to MATH 1100.

Section 300:
Mondays and Wednesdays,
6:30-9:00 p.m., Engineering Center
CR 1-46. \$180.

**Mathematics 1020-2
College Trigonometry**

Trigonometric functions, identities, solutions of triangles, addition of multiple angle formulas, inverse trigonometric functions, laws of sines and cosines. Prerequisites, 1½ years high school algebra and 1 year high school geometry or MATH 1010. No credit for students with credit in MATH 1100. MATH 1010 and 1020 are equivalent to MATH 1100.

Section 300:
Tuesdays and Thursdays,
6:00-7:45 p.m., Engineering Center
CR 0-38. \$120.

* For students who graduated from high school after May, 1988 this course will partially satisfy core curriculum requirements. Please see an advisor

Philosophy

*** Philosophy 1000-3
Introduction to Philosophy**

An introduction to the fundamental questions of philosophy through a study of the ideas of several major philosophers. Short papers are required. When combined with PHIL 1100, 1300, 1600, 1400, 1700, 1750 or 1440, satisfies first year humanities requirement. When combined with PHIL 1200, 2200, or 2390, satisfies first year social sciences requirement. If PHIL 1000 is used for the humanities requirement, it cannot be used for the social sciences requirement.

Section 300:
Mondays and Wednesdays, 6-8:30 p.m.,
Hellems 229. \$188.

*** Philosophy 1100-3
Ethics**

Introductory study of major philosophies on the nature of the good for humanity, principles of evaluation, and moral choice. When combined with PHIL 1000, satisfies first year humanities requirement.

Section 300:
Tuesdays and Thursdays,
6-8:30 p.m., Hellems 229. \$180.

Psychology

**Psychology 1001-3
General Psychology**

General one-semester survey of major topics in psychology, including sensory and perceptual processes, human development, personality, frustration and conflict, learning and memory, and the biological basis of behavior. When combined with PSYC 2303, 2456 or 2643, satisfies first year social sciences requirement. When combined with PSYC 2042 or 2052, satisfies first year natural sciences requirement. If PSYC 1001 is used for the social sciences requirement, it cannot be used for natural sciences requirement.

Section 300:
Mondays and Wednesdays,
6:30-9:00 p.m.,
Biosciences E417. \$180.

**Psychology 4303-3
Abnormal Psychology**

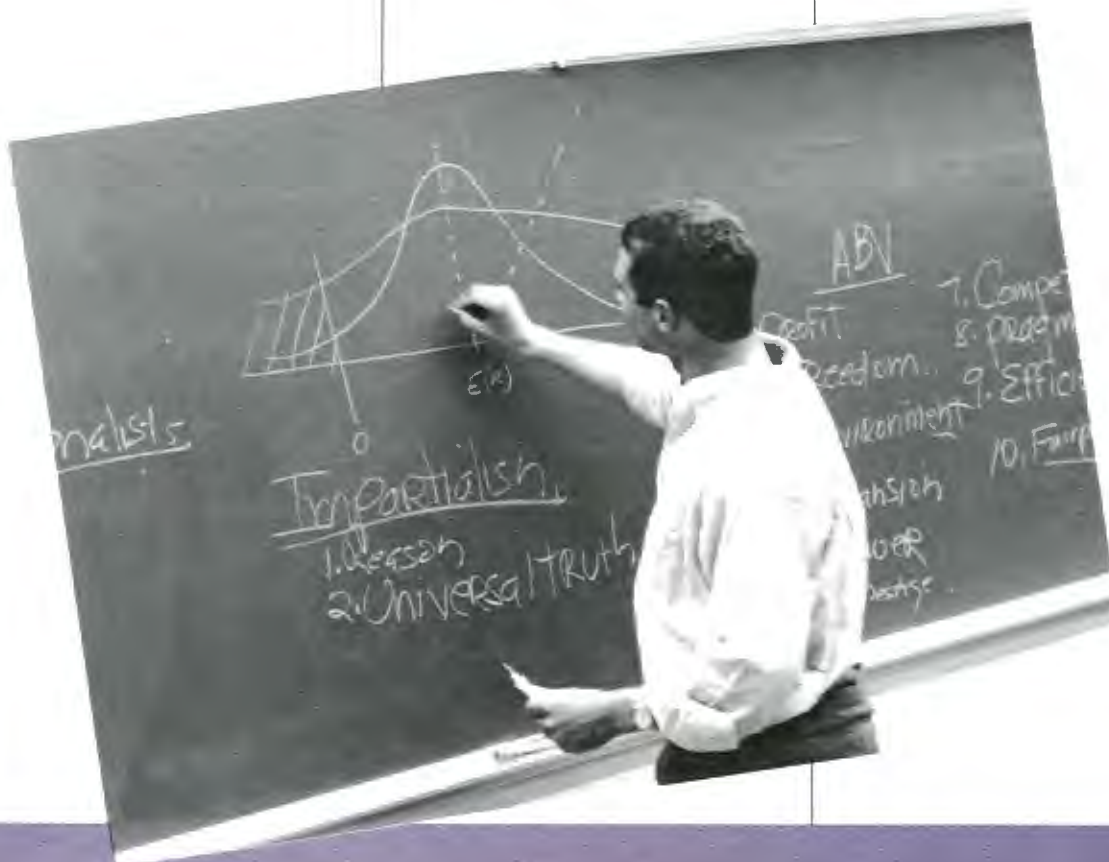
This course is designed to familiarize the student with the major applied aspects of abnormal behavior. The focus is on the diagnosis and treatment of contemporary abnormal behaviors. The course will be presented in a case study methodology. Students will be expected to become familiar with contemporary research and practices in clinical/counseling psychology. This course does not presume previous field or course work in the clinical area. Not open for credit to those who have credit for PSYC 4313. Prerequisite, PSYC 1001.

Section 300:
Tuesdays and Thursdays, 6-8:30 p.m.,
Biosciences E432. \$180.

**Psychology 4456-3
Psychology of Personality**

The psychological study of the structure, organization and development of the person as a whole. Analysis of major theories, methods and research dealing with personality, including topics such as emotion, motivation, temperament, inner experience, identity and the self, personality change, and the influence of the sociocultural context. Prerequisite, 12 hours of psychology or consent of instructor.

Section 300:
Mondays and Wednesdays, 6-8:30 p.m.,
Biosciences E432. \$180.



Boulder Evening Credit Classes

Once you register, you are obligated for the full amount of tuition you are assessed. Tuition is listed at the end of each course description.

Ground Your Professional Growth Management Development

This Certificate Program has been designed to develop management skills for persons who aspire to management positions or who wish to increase their expertise in any area of management. There are no prerequisites for any course, and any person interested may enroll. You need not be working toward certification. Any course enrollment immediately registers you in the Certificate Program. In the competitive market, the people most likely to succeed are those with a thorough knowledge of a wide range of management areas. This program develops expertise in the basic and most useful areas of management. New courses are added regularly; several are offered more than once a year.

Course offerings cover task-related skills and important management concepts. Enrollees may select from the courses which best meet their needs. Each course is designed to consider a key aspect of the management process. Faculty are experts recruited from universities and from private businesses or consulting firms. They are chosen for their special expertise in the subject area and their proven teaching skills. Courses are not overly technical or purely theoretical; all subject matter is presented in a format which participants can relate directly to their professions.

Professional Development Program Certificates are awarded for attendance at any of the courses. This attendance certification is determined by the course instructor. Continuing Education Units are awarded for course attendance. One Continuing Education Unit (CEU) represents 10 hours of university or college-level course participation, and is a nationally recognized standard. The number of CEUs awarded in a course is listed with the course description, and follows this 10:1 ratio.

The completed **Management Certificate of Achievement** is awarded upon successful completion of courses equal to 10 CEUs or 100 hours of instruction. A complete transcript of program participation is maintained, and available without fee upon request.

The Management Development courses are conducted continuously and need not be completed with the herein described courses. A permanent record of participation is kept, and a transcript of courses taken is available free of charge at any time. Students may continue the certification process at their own pace, and may enroll in any number of courses depending on professional goals.

Course tuitions are listed at the end of each course description. Please note that refunds are given only before the start of a course, none after. Locations are listed at the end of each course.

All questions concerning the program, including your current status toward earning the Achievement Certificate, may be answered by calling the Division of Continuing Education at 492-5148 (or call outside the Denver Metro dialing area, 1-800-332-5839).

Management Development Courses by Starting Date

Date	Number	Section	Course	Faculty
Tuesday, June 6	MDCP 402	10B	Art of Persuasion	Don Marcotte
Thursday, June 8	MDCP 452	10B	Technical Writing	Mike Gannon
Saturday, June 10	MDCP 403	10B	Basic Skills for the New Supervisor	Charles Rice
Saturday, June 24	MDCP 407	10B	Understanding Individual Differences	Charles Rice
Tuesday, July 11	MDCP 406	10B	Effective Public Speaking and Presentation Techniques	Don Marcotte
Wednesday, July 12	MDCP 418	10B	Time Management	Dora Johnson
Saturday, July 15	MDCP 404	10B	Building Productive Work Teams	Charles Rice

Management Development Certificate Program

Management Development

MDCP 402 The Art of Persuasion

Although the exercise of persuasion can yield either positive or negative results, this course will focus on the positive aspects of persuasion. The participants will be introduced to persuasion techniques that will help them achieve positive goals in their everyday dealings with others in social and business situations. The course content is comprised of both lecture and student role play.

Don Marcotte, M.B.A. in Management, Instructor with Small Business Association, and Past area Governor for Toastmasters International.

Section 10B:
Tuesdays, June 6-27,
6:30-9 p.m. 4 sessions. 1 CEU.
Business 354. \$75.

MDCP 403 Basic Skills for the New Supervisor

This workshop is designed for individuals new to management or developing skills to prepare for a management position. Information will be provided about:

- Basic principles of supervision
- Leadership skills and team building
- Effective communication
- Problem solving and handling conflict
- Employee development and discipline
- Motivation techniques

Chuck Rice, M.B.A., Management, University of Denver. President of IMPOD — a management consulting firm. Instructor at CU-Denver.

Section 10B:
Saturdays, June 10 and 17,
8 a.m.-1 p.m. 2 sessions. 1 CEU.
Business 354. \$75.

MDCP 404 Building Productive Work Teams

This intensive workshop is aimed at making functional work teams more effective, productive, and creative. Specific concepts, procedures, and strategies will be presented in real time with real issues, problems and concerns that the participants share in a workshop/seminar setting. Proven principles and concepts from business management, the behavior sciences, and disciplined problem solving will form the foundation for this program. The dominant thrust of this teambuild-

ing workshop is to increase the flow of useful information throughout the organization to achieve business goals.

Chuck Rice, M.B.A., Management, University of Denver; President of IMPOD — a management consulting firm. Instructor at CU Denver.

Section 10B:
Saturdays, July 15 and 22,
8 a.m.-1 p.m. 2 sessions. 1 CEU.
Business 354. \$75.

MDCP 406 Effective Public Speaking and Presentation Techniques

Effective oral communication makes it possible for us to achieve greater personal goals than we could otherwise imagine. This course is designed for anyone wishing to improve his or her verbal communication skills. It will help the participant develop the ability to confidently and effectively present ideas and opinions in any business, social, or interpersonal setting. The course format is lecture and lab. The goal is to give each participant at least one presentation opportunity each course period.

Donald O. Marcotte, M.B.A. in Management. Past area governor for Toastmasters International. Instructor with Small Business Association.

Section 10B:
Tuesdays, July 11-August 1
6:30-9 p.m. 4 sessions. 1 CEU.
Business 354. \$75.

MDCP 452 Technical Writing Seminar

With information becoming the major product of our economy, there is a continuous need to upgrade your skills for presenting technical data in concise, easily understood language. Applications include reports, proposals, manuals, trade journals, articles, audiovisual and instructional material, catalogs, and much more. Step-by-step learning modules (supplied) begin with the basics, and proceed into advanced techniques. Topics include organization, research, logic, interviewing, writing/editing, as well as manuscript production and electronic-assisted writing.

Mike Gannon, M.B.A.
Section 10B:
Thursdays, June 8-29,
6:30-9:30 p.m. 4 sessions.
1 CEU. Business 354. \$75.

MDCP 418 Time Management

This workshop examines you and your style of managing "in time" and gives you practical techniques to have enough time. The session helps you with outside (linear) techniques based on your time management profile (11 different aspects checked). Also, inside (non-linear) activities are included such as using color, sound, humor, cycles, choice and images to manage your work within your time. This time management workshop is different than any you have attended or heard about because it focuses on managing "in time" through both inside (non-linear or creative) and outside time management. This activity-oriented session will assist you to better manage in time — in fact you will be using the techniques before you ever leave the room. Tuition includes Time Management Assessment Instrument.

Dora B. Johnson, Ed.D., President, The Baldwin Center, a team leadership training firm.

Section 10B:
Wednesdays, July 12-26,
6:30-9:30 p.m. 3 sessions.
.9 CEUs. Business 354. \$67.

MDCP 407 Understanding Individual Differences

This course will provide participants with practical strategies for communicating more effectively, selecting individuals for synergistic work teams, resolving conflicts, and managing the human resource more effectively through a deeper understanding of individual differences. Managers, supervisors, and sales personnel will gain powerful insights into human personality that will allow them to relate more productively to a wide range of individual differences.

Chuck A. Rice, M.B.A., Management, University of Denver; President of IMPOD — a management consulting firm. instructor at CU-Denver.

Section 10B:
Saturday, June 24, 8 a.m.-5 p.m.
1 session. .8 CEUs. Business 354. \$60.





Let New Skills Take Root Computer Applications

Personal computers and increasingly automated offices have dramatically changed the way we do business. Today, computer literacy is nearly as vital as the ability to read. Understanding how computers can work for you will give you timely skills for today's marketplace while preparing you to cope with tomorrow's world as well.

Becoming familiar with computers opens new avenues in your personal as well as your professional development. You can instantly access a world of information. There's a new level of creativity to be found with computerized graphics and computer-aided design. And adventures in connections with personal telecommunications and local area networks. You can get to know word processing, explore new ways to manage data or apply the computing power to financial questions — your own, or your organization's.

These user-friendly courses won't turn you into a programmer — although you'll have a chance to learn the basics. The goal is to help you become an up-to-the-minute computer user with practical skills to help you keep pace with the information age.

Here's your opportunity to learn this new technology in a supportive environment. Your turn to ask the questions you've been wondering about. Your chance to gain hands-on experience and hone the skills you need to gain computer confidence. Whether it's becoming comfortable with a PC or moving to the leading edge of information technology, you decide how far you want to take this program.

Clyde Getty aims to excel, whether he's practicing aerial jumps for the U.S. Freestyle Ski team, developing specialized computer systems with his Boulder-based company, or introducing students to database management.

Certificate in Computer Applications

Participating in the Certificate in Computer Applications program doesn't require a special application or commitment. You may take courses at any time and a record of your participation is maintained and available to you at any time. You may earn a Certificate in Computer Applications in roughly three or four semesters, but you needn't complete it in any given length of time. The requirements are straightforward:

A. Four core required courses:

1. Computer Literacy*
2. Concepts of Data Processing and Information Technology**
3. Introduction to Computer Applications Systems
4. Software Operations and Maintenance

*Computer Literacy, the introductory course, is designed to be completed first, although you may take it at the same time as another course. If you have a substantial background with computers, you may omit it. Simply submit a written request to the Division of Continuing Education, if you plan on achieving the Certificate.

** Offered Fall, 1989.

B. Two different courses in programming. Programming languages offered include BASIC, Pascal and C. Others are added to keep pace with industry standards.

C. Two elective application courses chosen from the full range of computer topics. Any course not listed above and not a specific programming language qualifies as an elective.

Computer Graphics, Computer Aided Design, Desktop Publishing

These courses will give you hands-on experience with important design systems and up-to-date graphics technology. Classroom labs are equipped with IBM/PC/AT microcomputers, with plotters and printers, or with fully configured Apple Macintosh SE and II systems, so you can make the best use of your course time.

For detailed descriptions of all computer graphics and desktop publishing courses, see page 20 in this catalogue.

All graphics courses fill elective requirements for the Certificate in Computer Applications.

Essential Information

Registration is limited by the number of computers available, so early registration is advised. Enrollment is on a first-come, first-served basis.



This symbol means you might need to share a computer with another student for a particular course. Most courses provide one computer per student.

Details on access to computers outside of regular class time and the hours of software checkout or hard disk access are given at class.

No courses are conducted Independence Day, July 4, but may be conducted July 3. Confirm your schedule in class.

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, none later.

Location

The classroom location is given at the end of each course description.

Questions?

If you have any questions about this program, please call the Division of Continuing Education at 492-5148, or outside the Denver Metro area, 1-800-332-5839.

Computer Applications

Computer Application Courses by Starting Date

Date	Number	Section	Course	Faculty
Monday, June 5	CCA 330	101	Beginning Using Lotus 1-2-3	Nancy VanWechel
Tuesday, June 6	CCA 320	100	Introduction to C Programming	Carol J. Meier
Tuesday, June 6	CCA 378	101	Beginning Microsoft Word on the Macintosh	Steven A. Johnson
Thursday, June 8	CCA 370	100	Database Management: Applying dBase III+/IV	Clyde Getty
Thursday, June 8	CCA 300	100	BASIC Programming	Tom Swanson
Saturday, June 10	CCA 200	101	Using MS-DOS	Peggy Purvis
Saturday, June 10	CCA 215	101	Introduction to HyperCard	Greg McArthur
Monday, June 12	CCA 105	101	Introduction to the Macintosh	Scott Dixon
Monday, June 12	CCA 120	101	Introduction to the IBM and Compatible Personal Computers	Valerie Parker
Tuesday, June 13	CCA 120	102	Introduction to the IBM and Compatible Personal Computers	Valerie Parker
Tuesday, June 13	CCA 380	101	Beginning WordPerfect Word Processing	Peggy Purvis
Tuesday, June 13	CCA 340	100	*Computer Application Systems Overview	Liz Anthony
Wednesday, June 14	CCA 360	100	Introduction to UNIX	Carol J. Meier
Wednesday, June 14	CCA 375	100	Beginning Microsoft Word on the IBM PC	Yvonne Kristy
Wednesday, June 14	CCA 100	100	*Computer Literacy	Bob Carlisle
Thursday, June 15	CCA 350	100	*Software Operations and Maintenance	Pat Felz
Saturday, June 17	CCA 330	102	Beginning Using Lotus 1-2-3	Nancy VanWechel
Monday, June 19	CCA 235	100	Introduction to SAS — Statistical Analysis System	Otis Pratt
Saturday, July 1	CCA 200	102	Using MS-DOS	Nancy VanWechel
Saturday, July 1	CCA 380	102	Beginning WordPerfect Word Processing	Peggy Purvis
Wednesday, July 5	CCA 376	100	Intermediate Microsoft Word on the IBM PC	Yvonne Kristy
Saturday, July 8	CCA 330	103	Beginning Using Lotus 1-2-3	Nancy VanWechel
Monday, July 10	CCA 330	104	Beginning Using Lotus 1-2-3	Nancy VanWechel
Tuesday, July 11	CCA 120	103	Introduction to the IBM and Compatible Personal Computers	Valerie Parker
Tuesday, July 11	CCA 105	102	Introduction to the Macintosh	Scott Dixon
Tuesday, July 11	CCA 380	103	Beginning WordPerfect Word Processing	Peggy Purvis
Wednesday, July 12	CCA 336	100	Excel Spreadsheet on the Macintosh	J. Burke Taft
Thursday, July 13	CCA 378	102	Beginning Microsoft Word on the Macintosh	Steven A. Johnson
Thursday, July 13	CCA 372	100	Advanced dBase III+/IV Applications	Clyde Getty
Wednesday, July 19	CCA 331	100	Introduction to Local Area Networks	Larry G. Lankford
Saturday, July 22	CCA 215	102	Introduction to HyperCard	Greg McArthur
Saturday, July 22	CCA 200	103	Using MS-DOS	Peggy Purvis
Saturday, July 29	CCA 332	101	Intermediate Lotus 1-2-3	Nancy VanWechel
Tuesday, August 1	CCA 382	101	Intermediate WordPerfect	Peggy Purvis
Thursday, August 3	CCA 373	100	dBase III+/IV for Programming	Clyde Getty
Saturday, August 5	CCA 382	102	Intermediate WordPerfect	Peggy Purvis
Monday, August 7	CCA 332	102	Intermediate Lotus 1-2-3	Nancy VanWechel
Tuesday, August 8	CCA 203	100	Advanced DOS	Nancy VanWechel
Wednesday, August 9	CCA 380	104	Beginning WordPerfect Word Processing	Peggy Purvis
Thursday, August 10	CCA 381	100	Advanced Microsoft Word on the Macintosh	Steven A. Johnson
Saturday, August 12	CCA 204	100	Using OS/2	Larry G. Lankford
Saturday, August 12	CCA 217	100	Advanced HyperCard	Greg McArthur
Monday, August 14	CCA 325	100	Intermediate C Programming	Carol J. Meier
Saturday, August 19	CCA 334	100	Advanced Lotus 1-2-3	Nancy VanWechel
Saturday, August 19	CCA 384	100	Advanced WordPerfect	Peggy Purvis
Monday, August 21	CCA 364	100	Intermediate Unix	Carol J. Meier

Computer Graphics Courses by Starting Date

Wednesday, May 17	CCG 356	101	Macintosh Computer Art	Barry Ratliff
Tuesday, June 6	CAD 311	101	Beginning Computer Aided Design	David Clafin
Wednesday, June 7	CAD 311	102	Beginning Computer Aided Design	Sharon Blender
Thursday, June 8	CCG 371	101	Introduction to Aldus PageMaker on the Macintosh	Viki Mann
Thursday, June 8	CAD 322	101	Computer Aided Design: Level I	Dan Myers
Monday, June 12	CAD 320	100	AutoCAD Upgrades	Philip M. Kreiker
Monday, June 12	CCG 351	101	Computer Graphics Art I	Pat Lehman
Saturday, June 17	CCG 371	102	Introduction to Aldus PageMaker on the Macintosh	Juliana Packer
Saturday, June 17	CCG 377	101	Desktop Publishing for the IBM PC	Bruce Frehner
Tuesday, June 20	CAD 322	102	Computer Aided Design: Level I	David Clafin
Wednesday, June 21	CAD 322	103	Computer Aided Design: Level I	Sharon Blender
Wednesday, June 21	CAD 322	104	Computer Aided Design: Level I	Philip M. Kreiker
Saturday, July 8	CCG 372	100	Advanced Desktop Publishing on the Macintosh	Juliana Packer
Saturday, July 15	CCG 351	102	Computer Graphics Art I	Pat Lehman
Thursday, July 20	CAD 333	101	Computer Aided Design: Level II	Dan Myers
Saturday, July 22	CCG 377	102	Introduction to Desktop Publishing for the IBM PC	Bruce Frehner
Monday, July 24	CCG 361	100	Computer Graphics Art: Level II	Pat Lehman
Monday, July 24	CCG 356	102	Macintosh Computer Art	David Secunda
Thursday, July 27	CAD 333	102	Computer Aided Design: Level II	Philip M. Kreiker
Saturday, July 29	CCG 373	100	Quark XPress Desktop Publishing	Tim Meehan
Wednesday, August 2	CAD 333	103	Computer Aided Design: Level II	Sharon Blender
Saturday, August 5	CCG 386	100	Advanced Desktop Publishing for the IBM PC	Bruce Frehner
Saturday, August 19	CCG 357	100	Advanced Macintosh Computer Art	T.B.A.
Thursday, August 24	CAD 345	100	Computer Aided Design: Level III Customizing AutoCAD	Philip M. Kreiker

* =required certificate courses

Skill Level Guide

A Guide to Computer Applications Recommended Courses' Skill Levels

All courses are marked with a skill level designation. It is recommended that you be at least at that skill level to take the course. This will optimize your learning. If you have questions about a course level, please call the Division of Continuing Education at 492-5148.

Beginner

No previous computer experience necessary — course assumes little or no computer knowledge.

Novice

Elementary computer knowledge; taken **Computer Literacy** or some introductory courses.

Intermediate

Computer Literacy background plus recent involvement in programming/software applications.

Specialized

Intermediate skills but seeking specific applications procedures as in systems, documentation, or management.

Advanced

Current MIS involvement, comfortable with most popular software applications, basic programming skills.

Getting Started

CCA 100 Computer Literacy



This course focuses on exactly what computers are and how they work, as well as their various uses and limitations. Sessions include a description of software available for today's computers, understanding computer jargon, how computers influence our changing society, and active demonstrations of applied computer technology. Time will be made available for hands-on experience, learning some simple programming skills using different computer systems, and a wide variety of popular computer applications. Beginner

Bob Carlisle, M.A.

Section 100:

Wednesday, June 14, 6:30-8:30 p.m. plus lab sessions. Please indicate lab section preference (10A or 10B) at registration:

Lab Section 10A:

Wednesdays, June 21-August 2, 6-8 p.m.

Lab Section 10B:

Wednesdays, June 21-August 2, 8-10 p.m.

8 sessions, 1.6 CEUs. University Computing Center 123. Note — locations change after the first class session; and some sections are divided within the allotted time for greater computer access; please contact Continuing Education if you are unable to attend the first class session. \$90.

CCA 105

Introduction to the Macintosh

This hands-on class is designed to introduce you to the Macintosh system and its use as a productive tool. Topics include system management, graphics applications, and practical yet extensive business options. This comprehensive course provides a great overview of the friendly yet sophisticated Macintosh system, for the beginner or the user who wants full utility from the Macintosh. Some time will be dedicated at the end of the course to demonstrate advanced business and personal applications.

Beginner

Scott Dixon, M.A.

Section 101:

Mondays, June 12-July 17

Section 102:

Tuesdays, July 11-August 8.

Both Sections: 6:30-9:30 p.m. 5 sessions, 1.5 CEUs. Fine Arts CIB53. \$80.

CCA 120

Introduction to the IBM and Compatible Personal Computers



This intensive course covers important computer vocabulary, architecture, and configurations of IBM microcomputer systems. Special emphasis is placed on the IBM PC, including hands-on familiarization, user commands, and DOS functions. Introduction to uses of BASIC as a programming language and simple software programs are included. This course is conducted on IBM and IBM compatible microcomputers and enrollment is strictly limited. This course is intended for those who have recently purchased, or will soon use on the job, IBM-PC hardware and are new to computing. Course will also provide a fundamental overview of new Personal System 2 (PS/2) hardware and Operating System 2 (OS/2) software features.

Beginner

Valerie Parker, M.Ed.

Section 101:

Mondays, June 12-26, 6:30-9:30 p.m.

Section 102:

Tuesdays, June 13-27, 6:30-9:30 p.m.

Section 103:

Tuesdays, July 11-25, 6:30-9:30 p.m.

All sections: 3 sessions, .9 CEUs.

Ramaley Biology NIB68. \$60.

Programming

CCA 300

BASIC Programming

BASIC (Beginners All-purpose Symbolic Instruction Code) is perhaps the easiest language to learn for programming a computer. Most computers are capable of working with BASIC. Students will start at the very beginning and work up to using searching and sorting methods, developing useful data structures, and applying general programming skills. Hands-on experience will be emphasized. The text, *BASIC: Fundamentals and Styles*, by Quasney and Maniotes, is available at the University Book Center, UMC 10. Novice

Tom Swanson, M.A.

Section 100:

Thursdays, June 8-August 10,

6:30-9 p.m.

10 sessions, 2.5 CEUs.

Ramaley Biology NIB31. \$140.

CCA 320

Introduction to C Programming

This course will teach programmers the fundamentals of C programming. We will cover data types, control structures, functions and parameter passing, program structure, separate compilation, the preprocessor, arrays, strings, pointers and structures. Hands-on exercises will be supplemented by lectures, discussions, and demonstrations. Some programming experience is required as C is not a beginner's language. Fluency in almost any language is adequate, although ALGOL, Pascal, or a similar language is preferable. This seminar is designed for those who wish to cover large amounts of information in a condensed, fast-paced format. Especially helpful for programmers, software engineers, or anyone developing applications with portability in mind. Recommended text is *The C Programming Language*, by Kernighan and Ritchie, available at the University Book Center, UMC 10. Intermediate

Carol J. Meier, M.S.

Section 100:

Tuesdays, June 6-July 25.

Ramaley Biology NIB23. 6:30-9:30 p.m.

7 sessions, 2.1 CEUs. \$195.



Computer Applications

Programming - con't.

CCA 325 Intermediate C Programming

This course is designed to follow Introduction to C Programming. We will continue to explore pointers and structures. We will discover the standard C library (I/O, string manipulations, and dynamic memory management), learn how to handle command line arguments and the environment, harness the power of the preprocessor, and look at advanced data structures like bit fields, enumerations and unions. Style, readability, performance and portability will be emphasized throughout the course. Some experience with C is required as we will only briefly review its basic features. Anyone having difficulty understanding specific topics in C (pointers, structures, command line arguments...) will find it an effective way to master these areas. Recommended text is *The C Programming Language*, by Kernighan and Ritchie, available at the University Book Center, UMC 10. Specialized Carol J. Meier, M.S.
Section 100:
Monday-Friday, August 14-18,
8:30 a.m.-12:30 p.m.
5 sessions, 2.1 CEUs.
Ramaley Biology N1B23. \$195.

Systems

CCA 340 Computer Application Systems Overview

A comprehensive review of current computer information systems, including hardware, software, applications for business development and information management on an industry-wide scale, the office automation marketplace, and your practical, professional involvement in computer applications.

Intermediate

Liz Anthony, B.S.
Section 100:
Tuesdays, June 13-August 8, 7-9:30 p.m.
8 sessions, 2 CEUs.
University Computing Center 123. \$145.

CCA 350 Software Operations and Maintenance



This class will discuss the aspects of systems that need to be developed in order to effectively support efficient computer operations. Topics include: systems analysis, configuration options, software selection, data conversion, support contracts, software design, training, installation, file maintenance, documentation, error identification, and logging systems. Course includes lab time. Students will come away with effective tools to monitor and organize computer systems.

Pat Felz, M.A.
Section 100:
Thursdays, June 15-August 3,
6:30-9 p.m. 8 sessions, 2 CEUs.
University Computing Center 123. \$135.

CCA 200 Using MS-DOS

This course is designed to give students a working knowledge of DOS commands to aid in file management and organization for the beginner to intermediate user. The 3 major areas of study in this one-day session are: review of simple DOS file maintenance commands, fixed disk commands and simple batch files. Discussion will also include edlin, autoexec.bat, config.sys, backups, menu screens, virtual disks and formatting rules. Please bring a double-sided/double-density 5 1/4 inch diskette to class so that you can keep your example files.

Intermediate

Section 101:
Peggy Purvis.
Saturday, June 10.
University Computing Center 114.
Section 102:
Nancy VanWechel.
Saturday, July 1
University Computing Center 114.
Section 103:
Peggy Purvis.
Saturday, July 22. Macky 3D.
All sections: 9 a.m.-5 p.m.
One all-day session, .7 CEUs. \$70.

CCA 203 Advanced DOS

This course is structured in three sections:

- creating your own commands
- taking control of your system
- creating "smart" commands

The first two sections encompass I/O redirection, pipes, and filter commands that allow customizing DOS. The last section gives control over the way DOS carries out commands you build into a batch file. These commands allow you to develop other powerful commands tailored to your specific needs. Prerequisite is Using DOS: Intermediate course or comparable skill level.

Intermediate

Nancy VanWechel, M.B.A.
Section 100:
Tuesdays, August 8-22, 6:30-9 p.m.
3 sessions, .7 CEUs.
University Computing Center 142. \$70

CCA 204 Using OS/2

If you have already purchased OS/2, this one-day course will give you the knowledge needed to begin using OS/2 effectively. If you haven't yet decided to purchase OS/2, this course will describe the benefits that OS/2 offers to personal computer users. Content: The background, reasons for and benefits of OS/2, installing and using OS/2, major features, migration considerations, advantages, OS/2 commands, differences in the Microsoft and IBM versions, multitasking, threads, overview of Presentation manager and LAN manager.

Intermediate

Larry G. Lankford, M.S.
Section 100:
Saturday, August 12, 9 a.m.-5 p.m.
One all-day session, .7 CEUs.
University Computing Center 142. \$70.

CCA 360 Introduction to UNIX

This course is designed to give students a comfortable working knowledge of the UNIX operating system. Topics include the file system structure, editing, basic and common commands, conventions, and shell features no one should be without! Both Berkeley and AT&T UNIX will be presented. The format combines lecture, demonstration, hands-on exercises, discussion and fun! Intended for people with 0 to 6 months UNIX experience; whether just curious about UNIX, deciding whether to use it, or already beginning to use it.

Intermediate

Carol J. Meier, M.S. and
Geoff Thompson, M.S.
Section 100:
Wednesdays, June 14-July 26,
6:30-9:30 p.m. 7 sessions, 2.1 CEUs.
Ramaley Biology N1B23. \$195.



CCA 364
Intermediate UNIX

This course will pick up where Introduction to UNIX leaves off. We will continue with more advanced shell features and many more amazing commands. Several sessions will be spent on shell programming with plenty of examples. Both Bourne and C shells will be discussed. About half of the course will be hands-on. If you've ever needed to write a shell script but weren't sure how to start, or didn't know if an appropriate command already existed, you will find this a valuable course! Specialized

Carol J. Meier, M.S. and
Geoff Thompson, M.S.
Section 100:
Monday-Friday, August 21-25,
8:30 a.m.-12:30 p.m.
5 sessions, 2.1 CEUs.
Ramaley Biology N1B23. \$195.

CCA 331
Introduction to Local Area Networks (LANs)

This class is intended to give a thorough understanding of the value and practical possibilities of Local Area Networks. An in-depth survey of the characteristics of the major LANs available today and LAN methods and standards will be included. The class is targeted at those who are considering installing a LAN or those who simply need to develop a familiarity with this rapidly growing method of interconnecting Personal Computers. Course includes lab sessions. Intermediate

Larry G. Lankford, M.S.
Section 100:
Wednesdays, July 19-August 16,
6:30-9 p.m. 5 sessions, 1.3 CEUs.
University Computing Center 123. \$125.

Software Applications

CCA 215
Introduction to HyperCard

HyperCard has added a new dimension to Macintosh computing. New ways to employ HyperCard are being discovered regularly in this innovative application. This one-day course starts with an overview of HyperCard, then proceeds to assist you in developing a custom "stack." Topics include making cards, using Hypertalk, HyperCard tools, creating fields and buttons, and linkages (card-to-card; card-to-stack; stack-to-stack). The course is of special interest to any Macintosh user. Please bring to class a Macintosh-compatible 3.5 inch diskette.

Greg McArthur, Ph.D.
Section 101:
Saturday, June 10
Section 102:
Saturday, July 22
Both Sections: 9 a.m.-4 p.m.
One all-day session, .7 CEUs.
Fine Arts C1B53. \$55.

CCA 217
Advanced HyperCard

Developing custom information handling and creating powerful, time-saving data management short-cuts are key topics in this advanced one-day course. Also included are stackware development, scripting in HyperCard, and addressing specialized data base needs. Please bring to class a Macintosh-compatible 3.5 inch diskette. Intermediate

Greg McArthur, Ph.D.
Section 100:
Saturday, August 12, 9 a.m.-4 p.m.
One all-day session, .7 CEUs.
Fine Arts C1B53. \$60.

CCA 370
**Database Management:
Applying dBase III+/IV**

With today's wealth of available information, there is an overwhelming need to organize and retrieve data for decision making. dBase IV is a powerful and productive data management systems specifically intended for this use. Participants in this class learn the concept of a database, the many different ways of organizing, accessing, and reporting information, and the way to develop applications for specific needs. Topics include special applications of dBase III+ and previous versions as they relate to Ver. IV. Bring to class two double-sided/double-density 5 1/4 inch diskettes, available at all computer supply stores. Intermediate

Clyde Getty, B.S.
Section 100:
Thursdays, June 8-July 6,
6:30-9:30 p.m. 5 sessions, 1.5 CEUs.
University Computing Center 114. \$140.

CCA 372
**Advanced dBase III+/IV
Applications**

This course is designed around the more advanced features of the powerful dBase III+ and dBase IV software. Participants must have some programming background, as well as familiarity with programming in dBase, or have taken Database Management: Applying dBase IV (CCA 370). Topics include multiple files, using functions, total system design, and, time permitting, automatic command file generation and other advanced features. Bring to class a double-sided/double-density 5 1/4 inch diskette. Intermediate

Clyde Getty, B.S.
Section 100:
Thursdays, July 13-27, 6:30-9:30 p.m.
3 sessions, .9 CEUs.
University Computing Center 114. \$90.

Computer Applications



Computer Applications

Software Applications - con't.

CCA 373 dBase III+ /IV for Programming

This course gives the opportunity to use the powerful dBase III+ and dBase IV software for special custom applications. Emphasis is on dBase IV, but dBase III+ users will be accommodated. Course is recommended for the experienced dBase user. Some programming experience is recommended, as well as familiarity with dBase commands. Topics include upgrades for dBase III+ to dBase IV programming. Bring to class a double-sided/double-density 5¼ inch diskette. Specialized Clyde Getty, B.S.

Section 100:
Thursdays, August 3-17, 6:30-9:30 p.m.
3 sessions, .9 CEUs.
University Computing Center 114. \$90.

CCA 330 Beginning Using Lotus 1-2-3

This introductory course covers spreadsheet, database, graphics, and printing applications. It is designed to maximize the use of your time by knowing how to use Lotus well. Practical guidelines are established concerning: moving within the spreadsheet, principles of designing and copying spreadsheets, graphics generation and simple database construction. Concepts introduced and used in the class are: ranges, painting, pointing, and relative and absolute referencing. The first day covers spreadsheet generation while giving the student a basic knowledge of the 1-2-3 commands and an introduction to various modeling techniques and practices. The second day covers a review of spreadsheet skills and techniques, databases, graphics, and printing. During the course, students are asked to generate and complete exercises in all functions. As a result of the course, the student will have a thorough understanding of the power of 1-2-3 and be able to build and print spreadsheets. Manuals are provided. Bring to class a double-sided/double-density 5¼ inch diskette. Class size is strictly limited. Novice

Nancy VanWechel, B.S., M.B.A.
Section 101:
Mondays, June 5-26, 6:30-9:30 p.m.
4 sessions.
Section 102:
Saturdays, June 17 and 24, 9 a.m.-4 p.m.
2 all-day sessions.
Section 103:
Saturdays, July 8 and 15, 9 a.m.-4 p.m.
2 all-day sessions.
Section 104:
Mondays, July 10-31, 6:30-9:30 p.m.
4 sessions.
All sections: University Computing Center 114. 1.2 CEUs. \$120.

CCA 332 Intermediate Lotus 1-2-3

This course is intended for those who have a working knowledge of spreadsheet (and/or completed Beginning Using Lotus 1-2-3, CCA 330) and want to master more advanced applications and techniques. This one-day, hands-on course focuses on file and database manipulation, multiple file design and use, special version 2.0 macro techniques, as well as other file and data handling concepts. Other special updates include: ranges; data parse; and advanced file, worksheet and database commands. Each student generates and completes exercises of all functions. Manuals are provided. Bring to class a DOS formatted 5¼ inch double-sided/double-density diskette. Class size is strictly limited. Intermediate

Nancy VanWechel, M.B.A.
Section 101:
Saturday, July 29, 9 a.m.-4:30 p.m.
One all-day session.
University Computing Center 142.
Section 102:
Mondays, August 7 and 14, 6:30-10 p.m.
2 sessions. University Computing Center 114.
Both Sections: .7 CEUs. \$70.

CCA 334 Advanced Lotus 1-2-3

Three major data functions important to the experienced Lotus 1-2-3 user in practical applications will be covered in this one day advanced seminar:

- data matrices
- data regression
- data tables

Various "at" (@) functions will also be covered in detail, as well as looping between macros. A review section will focus on principles and practices of combining files, data and file import/export, and combine options. Intermediate

Nancy VanWechel, M.B.A.
Section 100:
Saturday, August 19, 9 a.m.-4:30 p.m.
One all-day session. .7 CEUs.
University Computing Center 114. \$70.

CCA 336 Excel Spreadsheet on the Macintosh

This course introduces you to Excel as a productivity tool for the Macintosh. Some time will be spent reviewing the use of the Macintosh system. Basics of spreadsheet design will be covered, including creating, editing, formatting and printing a worksheet. Use of formulas and functions, the database, charting and graphing and macros will also be covered. We will also cover "using Excel with other software." Emphasis will be placed on the special unique features that make Excel both powerful and easy to use. Please bring to class a Macintosh-compatible 3.5 inch diskette. Novice

J. Burke Taft, M.Ed.
Section 100:
Wednesdays, July 12-August 2,
6:30-9:30 p.m. 4 sessions, 1.2 CEUs.
Fine Arts CIB53. \$105.

CCA 235 Introduction to SAS — Statistical Analysis System

Knowledge of SAS can be a very valuable business or research tool. This course is an introduction to SAS, including SAS language and such topics as processing data into SAS data sets, manipulating data, SAS procedures for analyzing data, and SAS procedures for rearranging, displaying and summarizing data. Intermediate

Otis Pratt, M.S.
Section 100:
Mondays, June 19-July 24, 7-9 pm.
5 sessions, 1 CEU.
University Computing Center 123. \$75.



CCA 375 Beginning Microsoft Word on the IBM PC

This class will teach the fundamentals of word processing through learning the very powerful word processing package, Microsoft Word. We will cover the basics of word processing such as editing and filing documents, cursor movement, deleting, simple formatting, using the help system, special effects, and printing; everything you would need to know to create a simple document or letter. Typing skills are very helpful. Bring one double-sided/double-density 5 1/4 inch diskette to class. Novice

Yvonne Kristy, M.S.W.
Section 100:
Wednesdays, June 14-28, 6:30-9:30 p.m.
3 sessions, .9 CEUs.
University Computing Center 114. \$90.

CCA 376 Intermediate Microsoft Word on the IBM PC

This class is a continuation of the Beginning Microsoft Word Class or for people who are familiar with the basics of Microsoft Word. The class covers formatting, using windows, creating headers and footers, footnotes, using the glossary, changing defaults, file manipulation, searching and replacing, hyphenating, and checking spelling. Bring one double-sided/double-density 5 1/4 inch diskette to class. Intermediate

Yvonne Kristy, M.S.W.
Section 100:
Wednesdays, July 5 and 12,
6:30-9:30 p.m. 2 sessions, .6 CEUs.
University Computing Center 114. \$70.

CCA 378 Beginning Microsoft Word on the Macintosh

Microsoft Word is the leading word processing software package for the Apple Macintosh computer. The full power of flexible, efficient word processing is brought out in this course. Skills covered include: producing practical business documents, the basics of word processing, popular Word features, editing, and text/graphic interfaces. Please bring to class a Macintosh-compatible 3.5 inch diskette. Novice

Steven A. Johnson, B.S.
Section 101:
Mondays, June 6-27
Section 102:
Thursdays, July 13-August 3
Both Sections: 6:30-9:30 p.m.
4 sessions. 1.2 CEUs.
Fine Arts C1B53. \$95.

CCA 381 Advanced Microsoft Word on the Macintosh

This class is primarily for those who have completed the Beginning Microsoft Word course, or who already have the important basic familiarity with the program. The course will cover most of the advanced features of Word, with special emphasis on time-saving skills, formatting, style sheets, producing professional looking text, and laser print management. Please bring to class a Macintosh-compatible 3.5 inch diskette. Intermediate

Steven A. Johnson, B.S.
Section 100:
Thursdays, August 10 and 17,
6:30-9:30 p.m. 2 sessions.
.6 CEUs. Fine Arts C1B53. \$70.

CCA 380 Beginning WordPerfect Word Processing

This introductory class is designed for the beginner to learn to use the WordPerfect software as a word processor to prepare simple documents. No previous word processing experience is required for this course as some generic word processing techniques will be discussed, but previous DOS experience and adequate typing skills are recommended. Each student will create and save files, retrieve and make changes, reset margins and tabs, copy and cut blocks, check spelling, use the thesaurus and print documents. Please bring a 5 1/4 inch formatted floppy diskette to class so that you may keep your example work. Text available is *Learning WordPerfect 5.0* by Annette J. Thomason, available at the University Book Center. Novice

Section 101:
Peggy Purvis.
Tuesdays, June 13-27, 6:30-9:30 p.m.
University Computing Center 114.
3 sessions.

Section 102:
Peggy Purvis
Saturdays, July 1 and 8, 9:30 a.m.-3 p.m.
University Computing Center 142.
2 sessions.

Section 103:
Peggy Purvis.
Tuesdays, July 11-25, 6:30-9:30 p.m.
University Computing Center 114.
3 sessions.

Section 104:
Peggy Purvis
Wednesdays, August 9-23,
6:30-9:30 p.m. University Computing
Center 114 .3 sessions.
All Sections: .9 CEUs. \$90.

CCA 382 Intermediate WordPerfect

This class is intended for those who have a beginning knowledge of WordPerfect or have completed the Beginning WordPerfect course and want to investigate the more complicated features. During this session we will cover each option of the formatting menus (headers, footers, page layouts, page numbers and print styles), the Font key, the printer control screen, typing in columns, search and replace, automatic outlining and paragraph numbering, file management, setting defaults and colors, letter merge, drawing lines, typing equations and using dual documents. Please bring a 5 1/4 inch formatted floppy diskette to class so that you may keep your example work. Intermediate

Peggy Purvis
Section 101:
Tuesdays, August 1-15,
6:30-9:30 p.m. 3 sessions.

Section 102:
Saturdays, August 5 and 12,
9:30 a.m.-3 p.m. 2 sessions.
University Computing Center 114. \$90.



Computer Applications

Software Applications - con't.

CCA 384 Advanced WordPerfect

This is designed for the experienced WordPerfect user or for those who have completed the Beginning and Intermediate WordPerfect courses who are interested in the following advanced topics: automating repetitious tasks with macros, sorting and selecting like a database, footnotes, tables of contents and indexes, fonts and graphics, and style sheets. Example documents will be provided but please bring a 5 1/4 inch formatted floppy diskette to class if you choose to keep your class work.

Intermediate

Peggy Purvis.

Section 100:

Saturday, August 19, 9 a.m.-4 p.m.

One all-day session, .7 CEUs.

University Computing Center 114. \$70.

Computer Aided Design

CAD 311 Beginning Computer Aided Design

Once associated with extensive programming knowledge and large, expensive computer systems, Computer Aided Design (CAD) is now an affordable tool for anyone interested in drafting and design. This intensive, two-session course covers the basics of systems start-up and a review of potential microcomputer-based applications. Topics include:

- Overview of CAD Applications in Engineering, Design, Drafting, and Architecture
- Overview of AutoCAD Software
- Highlights of Upcoming CAD Level I and II courses
- The Impact and Future of CAD
- Hardware and Peripherals
- Managing CAD system issues

A technical background is not required, but some familiarity with microcomputers is helpful. This course is highly recommended for those who have no CAD background, but maintain a desire to learn more about this rapidly expanding field.

Who Should Attend: Especially helpful for those who wish to enroll in, or learn more about, upcoming courses in computer graphics or Computer Aided Design. Also for those who interface with CAD personnel, and need basic information, and have no CAD background.

Novice

Section 101:

David Clafin, M.Arch.

Tuesdays, June 6 and 13.

Section 102:

Sharon Blender, M.S.

Wednesdays, June 7 and 14.

Both Sections: 6:30-9:30 p.m.

2 sessions, .6 CEUs.

University Computing Center 142. \$60.

CAD 322

Computer Aided Design: Level I

Using AutoCAD software and the IBM Personal Computer AT, this intensive beginning course will cover the capabilities of microcomputer-based Computer Aided Design (CAD) in general and introduces AutoCAD in particular. Drawing set-up, creating and editing points, lines, circles, arcs, solids, traces and text, work with blocks, hatching, colors and layers will help students create, edit, and plot their individual drawings. Specific topics include:

Loading AutoCAD

- disk management
- file naming conventions
- main menu options

Drawing Editors

- x, y, z coordinate system, continuously updated
- root menus, flip screens, and help functions

New Drawing Set-Up

- special commands of LIMITS, GRID, AXIS, and SCALING

Text Specifications and Editing Commands

- fonts and text style specifications

MIRROR Commands

- dynamic dragging
- FILLETS and curve contours

Display Commands

- ZOOM, PAN, FILL, REGENAUTO, SNAP, BLOCK, ARRAY Commands
- Producing Hardcopy
- scale the annotation, not the drawing
- preparing the plotter
- pen number and speed assignments
- changing specifications

Layering

- creating new, and changing specified, layers
- specifying layer colors
- specifying line types and new LINETYPEs: LTSCALE
- utility commands

Putting it all together

Required text is *Applying AutoCAD*, by Terry T. Wohlers, available at the University Book Center, UMC 10.

Who Should Attend: Anyone involved, or who plans to be involved, in technical drawing or drafting. Especially helpful for architects, engineers, or designers who plan on upgrading their work, or need the skills of computerizing drawing/text manipulation. Also for those who want to get involved in the dynamic CAD field. There is virtually no limit to the kinds of drawing applications you can prepare using the skills covered in this course.

Novice

Section 101:

Dan Myers, M.S.

Thursdays, June 8-July 13,
6:30-9:30 p.m. 6 sessions.

Section 102:

David Clafin, M.Arch.

June 20-August 1, 6:30-9:30 p.m.
6 sessions.

Section 103:

Sharon Blender M.S.

Wednesdays, June 21-July 26,
6:30-9:30 p.m. 6 sessions.

Section 104:

Philip M. Kreiker, M.S.E.E.

Wednesday, Thursday, Friday, June 21,
22, 23, 9 a.m.-4 p.m.

Three all-day sessions.

All Sections: 1.8 CEUs.

University Computing Center 142. \$225.



CAD 333 Computer Aided Design: Level II

This course is for those seeking advanced drafting capabilities and expert instruction in furthering their CAD knowledge and skills. Semiautomatic dimensioning, object snap, all dimensioning commands, isoplanar snap-grids, 3-D, and free-hand sketching are all important components of this level II course. Course outline includes:

- Semiautomatic DIMensioning
- linear and angular dimensions
- dimensioning variables
- Object Snap and Aperture Commands
- Calculating specific characteristics of an entity or drawing
- 3-D drawings and prototype drawings
- Highly useful, but less frequently used commands
- compatibility with other software
- Isometric Drawing Aids
- ISOPLANE command
- control E to switch planes
- STATUS Utility
- purpose and components overview
- SKETCHing
- Attributes
- ATTDEF, CHANGE, ATTEDIT, ATTEXT
- wireframe construction and view-point selection
- advanced file management

Recommended prerequisites are Computer Aided Design: Level I, as previously listed or hands-on AutoCAD experience that equals the CAD: Level I course outline.

Who Should Attend: All those who want to extend their knowledge and skills in CAD beyond basic levels. Especially helpful for engineers, architects, and designers and those seeking to advance computer applications in their fields. The drafting and structure skills covered in this course are also easily transferred to a wide variety of other fields. Intermediate

Section 101:

Dan Myers, M.S.

Thursdays, July 20-August 17, 6:30-9:30 p.m. 5 sessions.

Section 102:

Philip M. Kreiker, M.S.E.E.

Thursday and Friday, July 27 and 28, 8 a.m.-4 p.m. 2 all-day sessions.

Section 103:

Sharon Blender, M.S.

Wednesday, August 2-30, 6:30-9:30 p.m. 5 sessions.

All Sections: 1.5 CEUs.

University Computing Center 142. \$185.

CAD 345 Computer Aided Design: Level III Customizing AutoCAD

This course is for professionals who are customizing a microcomputer-based CAD system to quickly accomplish routine tasks and easily make prescribed drafting/drawing modifications, specifically based on AutoCAD systems. In this class the keyboard is used mostly for editing text, while peripherals are used extensively. Generating slide shows and presentation-quality hard-copy are further aspects of this course. Emphasis is on tailoring your system, or a proposed system, for individualized applications. Course outline includes:

- Custom Libraries and Menus
- creating sets of shapes, symbols, and/or drawings, text
- MENU command
- Creating and Modifying Text Fonts
- compiling shape/font styles
- macros and custom menus
- Adding Commands to AutoCAD
- AutoLISP interface for Artificial Intelligence functions
- Creating SCRIPT files
- SCRIPT and RSCRIPT commands
- DELAY and RESUME commands
- Presentation-Quality Materials
- creative presentations and future options
- system variables

Recommended prerequisites are Computer Aided Design Level II or very extensive AutoCAD use.

Who Should Attend: Lead draftspersons, lead engineers, those with specifics or unique applications for CAD. Very helpful for nearly any advanced user seeking to get the greatest benefit from their AutoCAD based system. Specialized

Philip M. Kreiker, M.S.E.E.

Section 100:

Thursday and Friday, August 24 and 25, 8 a.m.-4 p.m.

Two all-day sessions, 1.5 CEUs.

University Computing Center 142. \$195

CAD 320 AutoCAD Upgrades

AutoCAD upgrades advance so quickly, users are often working without the latest version. This course will expose experienced users of AutoCAD to the new functionality of Release 10. All the new commands, and enhancements of old commands, will be covered. The first day of this two-day course emphasizes 2-D applications; the second day focuses on 3-D applications. Topics include:

Day 1

- linetype load
- binary DXF file
- viewports
- redrawall/regen
- CH prop
- new dimensioning variables
- Pedit

Day 2

- UCS/DDUCS
- UCS Icon
- Invisible 3-D face edges
- Plan View and UCS
- Dview, 3-D lines
- 3-D Poly, 3-D Mesh, Rule Surf, Tab Surf, Rev Surf, and Edge Surf commands for creating polygon meshes
- Pedit Extensions

Intermediate

Philip M. Kreiker, M.S.E.E.

Section 100:

Monday and Tuesday, June 12 and 13, 9 a.m.-4 p.m. Two all-day sessions, 1.3 CEUs.

University Computing Center 142. \$150.



Computer Applications

Computer Graphics Art

CCG 351 Computer Graphics Art I

This course is designed to prepare for the drawing board of the future, the computer. Computer Graphics Art I is for anyone involved in graphic art or design who wants to develop a hands-on, practical understanding of computer graphics. A comprehensive overview of the latest technical advances in the field of computer graphics will be coupled with in-class microcomputer applications, emphasizing the use of the computer as a creative tool. Topics include:

- True 3-Dimensional object rotation
- Creative use of Paint, Airbrush, and drawing tools
- Effective use of font manipulation
- Instant layout capabilities
- Collage, combine, rotate, reposition, and distort pictures

In-class projects include using the computer to design projects for portfolio development and we'll see some great slides and videos of outstanding new computer art. This course is recommended for those desiring computer graphic professional advancement, those involved in graphic presentations or design, eager to develop new skills, or explore microcomputer-based graphic capabilities. The course also counts as an elective credit for the Certificate in Commercial Design. Please bring one double-sided/double-density 5 1/4 inch diskette to the first class, available at all computer stores. Novice

Pat Lehman, M.F.A.

Section 101:
Mondays, June 12-July 17, 6:30-9:30 p.m.
5 sessions.

Section 102:
Saturdays, July 15 and 22, 9 a.m.-5 p.m.
Two all-day sessions.

Both Sections: 1.5 CEUs.
University Computing Center 142. \$125.

CCG 361 Computer Graphics Art: Level II

For those familiar with computer functions based on Computer Graphics Art I, this course advances to expanded professional graphics applications skills. Hands-on-time will be spent solving design problems of the computer artist. The course is primarily directed to the artist or designer seeking to include computer graphics into their career, but is helpful for anyone wishing to develop expertise in this dynamic field. Graphic artists, designers, art directors, illustrators and anyone else involved in the visual communication media will benefit. Topics to be covered will include:

- Object design and change in 3-D
- Making your own fill pattern
- Combining picture files
- Using grid as a tool
- Advanced illustration techniques
- Storyboard and layout techniques
- Production steps from start to finish

Hardcopy options are covered extensively. Slides and videos presenting video-paint systems used in TV production will be seen and animation and TV production skills will be covered, as well as interview preparation oriented toward successful interactions with prospective clients or employers. Course also counts as elective credit in Certificate of Commercial Design. Please bring a double-sided/double-density or high density 5 1/4 inch diskette to the first class. Intermediate

Pat Lehman, M.F.A.

Section 100:
Mondays, July 24-August 21,
6:30-9:30 p.m. 5 sessions. 1.5 CEUs.
University Computing Center 142. \$135.

CCG 356 Macintosh Computer Art

The Macintosh is fun, easy to use, versatile, and capable of producing professional quality graphics as well as fine art. Discover how to use the Macintosh as a creative tool. In this hands-on course, designed for those with little or no Macintosh graphics expertise, you'll use software programs such as SuperPaint and Adobe Illustrator, and learn how to produce inexpensive, camera-ready computer generated images. Plus you'll explore MacVision, for image processing, usable with a video camera, VCR, or television. Topics include scanner technology and graphics, laser printing, color separations, logotypes, and more. Most work is done on the Macintosh SE, with opportunities to work on the Macintosh II. Please bring to class a Macintosh-compatible 3.5 inch diskette to class. Novice

Section 101:
Barry Ratliff, MFA
Wednesdays, May 17-June 14.
Section 102:

David Secunda, M.Ed.
Mondays, July 24-August 21.
Both Sections: 6:30-9:30 p.m.
5 sessions, 1.5 CEUs.
Fine Arts C1B53. \$125.

CCG 357 Advanced Macintosh Computer Art

An introductory course in computer graphics for the Macintosh or a working knowledge of "Adobe Illustrator" and "SuperPaint" is a prerequisite for this course. Participants will have hands-on experience using both of these software packages as well as "Aldus Freehand." Class members will explore advanced techniques in the production of finished laser printed artwork. You will learn to import and manipulate digitized images from diverse sources: video, flatbed scanned, and computer generated to produce original images of professional quality. Each person will have their individual Macintosh SE and have access to a Mac II with color capabilities. Please bring a 3.5 inch Macintosh-compatible disk to the first class. Intermediate

Section 500: 100
Saturdays, August 19 and 26,
9 a.m.-4 p.m. Two all-day sessions.
1.5 CEUs. Fine Arts C1B53. \$125.



Desktop Publishing

CCG 371 Introduction to Aldus PageMaker on the Macintosh

If you are involved, or interested in, the areas of communication, graphic design, advertising, printing, publications, documentation, or writing of any kind, then desktop publishing will have an effect on your future. Now is the time to start developing your skills with PageMaker. Easy enough for the novice, yet comprehensive enough for the skilled designer, PageMaker streamlines design, layout, and production of any material, while putting the standard Macintosh interface to excellent utility. Hands-on time will be spent:

- getting to know PageMaker
- using the electronic drawing board
- creating formats and master pages
- placing text and graphics
- editing your documents
- creating your own masterpiece

Laser printing of finished products done in class. Please bring to class a Macintosh-compatible 3.5 inch diskette.

Novice

Section 101:

Viki Mann, B.A.

Thursdays, June 8-July 6, 6:30-9:30 p.m.
5 sessions.

Section 102:

Juliana Packer, B.F.A.

Saturdays, June 17 and 24, 9 a.m.-5 p.m.
2 all-day sessions.

Both Sections: 1.5 CEUs.

Fine Arts C1B53. \$135.

CCG 372 Advanced Desktop Publishing on the Macintosh

Take yourself beyond the basics with advanced desktop publishing. This course will help you develop and refine your desktop skills. If you are involved in desktop publishing and have the basics of Aldus PageMaker behind you, then this is the class to take. Topics include:

- formats for importing line art, scanned photos and graphics
- time saving touches
- PC file conversion
- graphics software review
- advanced graphic design concepts
- high quality text output

Output of finished projects done in class. Please bring to class a Macintosh-compatible 3.5 inch diskette.

Intermediate

Juliana Packer, B.F.A.

Section 100:

Saturdays, July 8 and 15, 9 a.m.-5 p.m.

2 all-day sessions, 1.5 CEUs.

Fine Arts C1B53. \$120.

CCG 373 Quark XPress Desktop Publishing

Quark's XPress is a highly capable, technically advanced, professional-level software system that combines the convenience of desktop publishing with the precision and accuracy of fine type-setting, all on the Apple Macintosh computer. XPress appears complex because of its advanced features, but can be learned very effectively in this two-day course. Focus is on learning to use the program productively, employing desktop publishing convenience with special XPress features. Also covered are the basics of Postscript, graphics, creative text handling, and advanced features. Course teaches a good working knowledge of how XPress compares to and interacts with other products like Adobe Illustrator, MacPaint, Aldus' Freehand and PageMaker.

Novice

Tim Meehan

Section 100:

Saturdays, July 29 and August 5.

9 a.m.-4:30 p.m.

2 sessions, 1.3 CEUs.

Fine Arts C1B53. \$135.

CCG 377 Introduction to Desktop Publishing for the IBM PC

Desktop Publishing has dramatically improved the quality of inexpensive, publishable material. This intensive workshop gives the basics of page layouts, creative formats, and type font styles. All work is done on a computer screen, for instant and dramatic results. Whether you publish a club newsletter, a restaurant menu, or a critical financial statement, this course can be of great value. Topics include justifying text for style, building art into the page construction, and scanner technology in graphics and text. This hands-on course employs Pagemaker software extensively, with interactive demonstrations of other software, like Ventura Publisher. Laser printing of finished projects done in class. Bring a 5¼ inch double-sided/double-density or high density diskette to class.

Novice

Bruce Frehner, M.A.

Section 101:

Saturdays, June 17 and 24.

University Computing Center 142.

Section 102:

Saturdays, July 22 and 29.

University Computing Center 114.

Both Sections: 9 a.m.-4:30 p.m.

2 all-day sessions. 1.5 CEUs. \$135.

CCG 386 Advanced Desktop Publishing for the IBM PC

Develop your skills and potential in printed media communications in this advanced seminar/workshop, designed for those with the basics behind them and remarkable publications ahead. Emphasis is on time-saving techniques and graphics that enhance your message. Topics include useful illustration/text merging, font design for total impact, personal and "off-the-shelf" clip art libraries, maintaining high standards of technical quality, a product overview from software to high-quality printers, using scanner technology in graphics and text for creative impact, and the over-all polished look of your work. Bring a 5¼ inch double-sided/double-density or high density diskette to class.

Intermediate

Bruce Frehner, M.A.

Section 100:

Saturdays, August 5 and 12,

9 a.m.-4:30 p.m.

2 all-day sessions, 1.4 CEUs.

University Computing Center 114. \$135.



Computer Applications

Enliven Your Creativity Commercial Design

Are you interested in the growing field of commercial design? Are you already involved in some aspect of illustration, art or publishing, and are you ready to expand your expertise? Whether you are a new or continuing student in the field, this series of weekend workshops leading to a Certificate in Commercial Design may be what you need for your professional development.

The Certificate in Commercial Design is a sequential program of short intensive courses presented in a compact format of workshops to accommodate the busy schedule that professionals share, and the needs of those interested in entering the field. Courses cover both the basics and the advanced developments in commercial art today. Careers in book design, advertising, cartooning, broadcasting, and a wide number of other areas will be explored during the program. Many of the courses pay particular attention to entry-level job opportunities, the construction and maintenance of professional portfolios, and the basics of job-hunting and preparing for interviews. Instructors are all "state-of-the-art," active professionals in touch with the latest changes in the commercial design field.

The Certificate requirements are threefold:

1. Successful completion of the four required courses:

- The Commercial Artist: Design, Layout and Paste-up
- Commercial Art II
- Professional Illustration Techniques
- The Artist Goes to Market

2. Successful completion of four elective courses. These optional courses consist of several that are offered on a regular basis and many others that are periodically introduced to accommodate updates and changing trends in commercial design.

3. Successful completion and professional review of your own fully developed portfolio, scheduled by appointment.

You need not formally apply for any program nor must you be seeking a certificate to enroll. Conversely, you need not stop participation in the courses once you have achieved certification. Many people take only a few courses to update certain skills and many others take several courses beyond requirements to advance their professional skills.

Continuing Education Units and performance certificates are awarded for each class. A Continuing Education Unit is the national standard for colleges and universities to record 10 hours of university-level noncredit course participation. CEUs are awarded for completion of each course generating a permanent record for you. A transcript copy is available upon request, without fee.

The course of study is scheduled so that participants may complete all requirements within three semesters. The four required courses are offered at least once a year, as well as several elective courses.

Course tuitions are listed at the end of each course description. Tuition varies depending on materials used, length of time, and other course-related expenses. **Please remember that in all certificate courses there are no refunds once the course has started; full refunds are granted if requested before that time.** Course enrollments are limited and advance registration is required. Please note that refunds are given only before the course starts, none later.

Bring to class a pencil, ruler, fineline pen, exacto knife, note paper, tracing paper, and bristol board (15" x 20" approx.). All other materials and a workbook are provided. While portfolios need not be brought to class, it is of great benefit if during the course attendees have some access to their portfolios or work examples.

Commercial Design Courses by Starting Date, Summer 1989

Commercial Design

Date	Number	Section	Course	Faculty
Saturday, June 24	CCD 285	100	The Mental Picture: Professional Cartooning	Eric Teitelbaum
Monday, June 26	CCD 240	100	Felt Tip Marker Rendering Techniques	Eric Teitelbaum
Saturday, July 8	CCD 210	100	*The Commercial Artist I	Roy Walden
Monday, July 10	CCD 310	100	*Commercial Art II	Roy Walden
Saturday, July 29	CCD 350	100	Air Brush Illustration Techniques	Van Valencia
Saturday, August 12	CCD 220	100	Professional Hand Lettering and Calligraphy	Jill O'Hara

* =required certificate courses

Commercial Art

CCD 240 Felt-Tip Marker Rendering Techniques

Before a concept can be commissioned by the client, art director or media buyer it must be effectively communicated by the artist in "final rough" stages. This all-important phase of graphic communication and presentation calls for versatility in felt marker rendering techniques. This in-depth two day workshop program will cover the how-to's of using the felt marker in a variety of visual applications including mock-ups for brochure design, advertising layouts for the small business client, poster and album cover design, book illustration and film/TV.

Topics include:

- understanding the importance of felt marker comp techniques as they relate to professional commercial design.
- appropriate materials in completing a variety of b&w assignments.
- knowledge of b&w application to effectively solve felt marker problems in color.
- both editorial and advertising finished assignments to given high-level graphic problems.

Workshop and drawing activities will include selecting and evaluating materials, gradation of tone, mass and illusion, negative space, mixing color and mixing mediums.

Eric Teitelbaum
Section 100:

Monday and Tuesday, June 26 and 27,
5:30-10 p.m. 2 sessions. .9 CEUs.
Geology 114. \$85.

CCD 210 The Commercial Artist I: Design, Layout, Paste-up

This course introduces important commercial art techniques to the beginner, stressing the "how-to's" of entering the commercial art/graphic design profession. It covers rough compositions, layout, type selection, camera-ready art production, obtaining the best materials for your best work, and basic illustration processes used by the artist in advertising agencies; book, magazine, and newspaper publishing departments, and in graphic design firms. Emphasis is placed on developing finished commercial art work, portfolio presentation, and client interviews.

Roy Walden
Section 100:

Saturday and Sunday, July 8 and 9,
9 a.m.-5 p.m. Two all-day sessions.
1.4 CEUs. Geology 114. \$115.

CCD 310 Commercial Art II

This course builds advanced skills in layout, design, paste-up, logo development, and corporate identity. Intensive workshop activities will focus on developing entire professional-level identity packages, including corporate collateral pieces. Discussions also cover understanding current printing processes and details for making valuable camera-ready art. It is recommended that Commercial Artist I be completed before enrollment in this course, or that students demonstrate more advanced commercial art skills.

Roy Walden
Section 100:

Monday, Tuesday, Wednesday,
July 10-12, 5:30 p.m.-10 p.m.
3 sessions, 1.4 CEUs.
Geology 114. \$115.

Calligraphy

CCD 220 Professional Hand Lettering and Calligraphy

Hand lettering/calligraphy is an important tool for the commercial artist advancing in the marketplace — cards, invitations, logo, trademark, and creative lettering assignments for corporate and editorial needs. This program includes commercial lettering principles — proportion, letter and word spacing, divisions of calligraphy style — editorial and advertising signage, point of purchase display, and sign painting. Also included is developing typography design for logos and trademarks relevant to the marketplace. Program includes workshop activities, lecture, and demonstration.

Jill Thayer O'Hara
Section 100:

Saturday and Sunday, August 12 and 13,
9 a.m.-5 p.m. 2 all-day sessions.
1.4 CEUs. Geology 114. \$115.

Illustration

CCD 90 Air Brush Illustration Techniques

Air brush is one of the most widely used and popular illustration media in commercial art today, especially in editorial and advertising formats. This intensive two-day program will treat the subject of air brush in its entirety, exploring the intricacies of color, texture, decoration, frisket papers, acrylic dyes, inks, mixed media, prisma, and an array of appropriate paper surfaces — hot/cold press, bristol boards, etc. Other current-day techniques will be covered.

Van Valencia
Section 100:

Saturday and Sunday, July 29 and 30,
9 a.m.-5 p.m. Two all-day sessions,
1.4 CEUs. Geology 114. \$115.

Cartooning

CCD 285 The Mental Picture: Professional Cartooning

Cartoon illustration skills can be a strong addition to any commercial artist's portfolio. This introductory course features a professional cartoonist sharing his skills and experience in the field. Topics include techniques, procedures, tools, and materials and their application to illustrating the verbal caption in magazine, book, and advertising illustration.

Eric Teitelbaum
Section 100:

Saturday and Sunday, June 24 and 25,
9 a.m.-5 p.m. Two all-day sessions,
1.4 CEUs. Geology 114. \$115.

Special Fun Summer Course For Young People...

CCD 100 Cartooning for Teens: An Art Workshop for Young People

Cartooning and humorous illustration have long held a wide fascination for children everywhere. This three-day workshop program will explore the world of cartooning and provide students with an in-depth experience in the techniques for creating a wide range of cartoon animals, people, and caricatures. Drawing activities will cover t-shirt art, posters, comic book cartoons and other special applications. Art lessons will be integrated with special music/drawing activities creating a fun-filled, three-day learning experience. Tuition includes drawing materials.

Eric Teitelbaum
Section 100:
Monday, Tuesday, Wednesday,
July 26-28, 9 a.m.-12:30 p.m.
3 sessions. Geology 114. \$50.





Branch Out in New Directions Noncredit Courses

What a wonderful way to fill your leisure time. Learning for learning's sake. A large variety of topics are introduced by instructors who really enjoy sharing their special interests.

Our non-credit courses meet evenings and weekends to accommodate your working schedule. If your reason behind taking a class is to learn a language like French, Italian, Japanese or Spanish we have the program for you. Perhaps you would like to learn to draw or watercolor, ballroom dance or jitterbug, or even take an astronomy course. Are you thinking of starting your own business? We offer a multitude of business courses where you can acquire the latest information.

By researching the Boulder adult community, we feel we offer you the highest quality courses in areas of professional and personal interest. Most classes have limited enrollment — early registration assures your place in class. We carefully choose courses to meet the interests expressed by most adults. Since we've been doing this for 75 years, we feel we have a good thing going.

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, none later.

Location: The classroom location is given at the end of each course description.

To register call 492-5148 or 1-800-332-5839.

Understanding the creative uses and symbolic meaning of gemstones provide the center of Jaqui Thier Cooper's teaching and her work as a designer.

Noncredit Courses by Starting Date, Summer 1989

Noncredit Courses

Date	Number	Section	Course	Faculty
Monday, June 5	NCFA 024	100	Introduction to Ceramics	David Wright
	NCFL 101	100	Beginning German	Ed Maier-Heym
	NCFL 202	100	Intermediate Conversational Spanish	Elizabeth Medina
	NCFA 001	100	Basic Photography	Lynn Lickteig
Tuesday, June 6	NCFL 102	100	Beginning Conversational Italian	Luigina Cerri
	NCFA 020	100	Introduction to Drawing	Rachael Amos
	NC D 100	100	Beginning Ballroom Dancing	Carl & Suzanne Gerleit
	NCFL 103	100	Beginning Conversational Spanish	Elizabeth Medina
	NC B 008	100	Accounting for Non-Accountants	Fred Moore
	NC L 023	100	Sport Nutrition	Peggy Phillips
	NC D 103	100	Beginning Jitterbug Dancing	Carl & Suzanne Gerleit
Wednesday, June 7	NCFL 201	100	Intermediate German	Daphne Guericke
	NCFA 006	100	Storytelling for Everyone	Kay Negash
	NC D 101	100	Beginning Western Dancing	Carl & Suzanne Gerleit
	NC W 002	100	Journal Keeping	Barbara Steiner
	NC D 200	100	Intermediate Ballroom Dancing	Carl and Suzanne Gerleit
	NC W 001	100	Creativity and Right Brain Activities for Writers	Barbara Steiner
Thursday, June 8	NCFA 021	100	Introduction to Watercolor	Rachael Amos
	NCFA 023	100	Beginning Basketry	Margaret Craven
Saturday, June 10	NCFA 022	100	Landscape Painting (Plien Air Oil Painting)	Marsha Wooley
	NC L 014	100	Psychology of Intimate Relationships	Neil Rosenthal
Monday, June 12	NCFL 100	100	Beginning Conversational French	Nadia Turk
Wednesday, June 14	NCSO 005	100	Xeriscape Landscaping: Low Water, Low Maintenance Landscapes for Colorado	Andrew Mead
Thursday, June 15	NCFA 002	100	Creative Photography Workshop	Don Oberbeck
	NC I 002	100	Investment Strategies	Mary Wright
Monday, July 10	NC B 007	100	Writing Business Plans	Donald Kaniecki
Tuesday, July 11	NC L 002	100	Eating As If Your Life Depended On It	Peggy Phillips
Thursday, July 13	NC I 001	100	Investing for Income	Arnold Hart
Saturday, July 15	NC W 012	100	The Children's Book: Illustrating and Getting Published	Sandy Fuller
	NC L 025	100	Handwriting Analysis: An Introduction	Carol Ford
Thursday, July 20	NC I 004	100	Stock Market Profits	Arnold Hart
Friday, July 28	NC T 490	100	Preparing for the Law School Admission Test (LSAT)	Kollie Elinoff

Business

NC B 008 Accounting for Non-Accountants

An introductory course in accounting for those who have had little or no previous training in this area. Emphasizes the recording, reporting, and analysis of accounting information from source of information and journalizing, through posting to ledgers, preparation of financial statements and the use of those statements to provide information for business decision-making. The objective is to help the student understand not only the accounting process, but the purpose and uses to which the results may be applied.

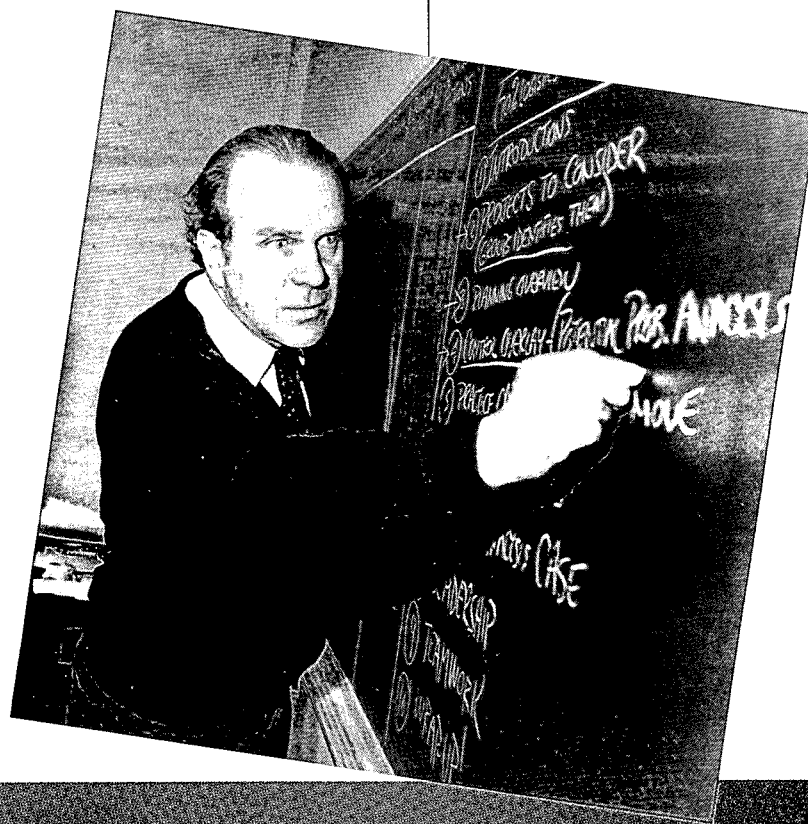
Fred Moore, M.B.E., Public Accountant.
Section 100:
Tuesdays, June 6-July 25
7-9 p.m. (no class July 4).
7 sessions. Duane Phys G116. \$53.

NC B 007 Writing Business Plans

The course will cover how to make financial, marketing, and operational plans to give you control over your business and set you on a course for maximum profits. We will cover sales and cost projections, cash flow, marketing research and facilities management. This course is designed for people writing a formal business plan for lender/investors as well as those who just want to know where they are headed.

Donald A. Kaniecki, C.P.A., M.B.A., has worked with people starting successful businesses for over 8 years.

Section 100:
Mondays, July 10-31,
6:00-8:30 p.m. 4 sessions.
Business 354. \$37.



Noncredit Courses

Dance

NCD 100 **Beginning Ballroom Dancing**

An introduction to the basics of Foxtrot, tango, polka, and waltz. The instruction will include the necessary turns and animations to provide every participant confidence on the ballroom dance floor.

Carl and Suzanne Gerleit, both former instructors for Fred Astaire Studios, have been teaching professionally for the past 10 years.

Section 100:
Tuesdays, June 6-27,
6:30-7:45 p.m.
4 sessions. Economics 13. \$24.

NCD 200 **Intermediate Ballroom Dancing**

An intermediate level class which will review the basic steps offered in the beginning course and add more eye-catching turns and moves.

Carl and Suzanne Gerleit, both former instructors for Fred Astaire Studios, have been teaching professionally for the past 10 years.

Section 100:
Wednesdays, June 7-28
6:30-7:45 p.m.
4 sessions. Economics 13. \$24.

NCD 103 **Beginning Jitterbug Dancing**

An introduction to the basic steps in back-beat jitterbug. The instruction will include the necessary turns and animations to provide every participant confidence on the dance floor.

Carl and Suzanne Gerleit, both former instructors for Fred Astaire Studios, have been teaching professionally for the past 10 years.

Section 100:
Tuesdays, June 6-27,
8:00-9:15 p.m.
4 sessions. Economics 13. \$24.

NCD 101 **Beginning Western Dancing**

Introduction to the basic steps in Texas 2-Step, Traveling Country Swing, Country Waltz, and various line dances (e.g. Cotton-eyed Joe and 10 Count Shuffle). Dancing is easy and fun. Sign up with or without a partner.

Carl and Suzanne Gerleit, both former instructors for Fred Astaire Studios, have been teaching professionally for the past 10 years.

Section 100:
Wednesdays, June 7-28
8:00-9:15 p.m.
4 sessions. Economics 13. \$24.

Fine Arts

NCFA 001 **Basic Photography**

This introductory course is designed for those who have a camera but don't really feel that they know how to use it. Through slides, lectures and question/answer sessions, students will learn about the mechanical functions of 35mm SLR cameras. We will discuss types of lenses and films, accessories, proper exposure (including night time and fireworks) and good composition and portraiture techniques. No labwork is involved. There will be one field trip. After this course, you should be able to use your camera confidently and take pictures of consistently good quality. Numerous handouts; optional text is Henry Horestein's *Black and White Photography*.

Lynn Lickteig, B.F.A. CU-Boulder, Photographer.

Section 100:
Mondays, June 5-July 31,
7-9 p.m. (no class July 3).
(Field Trip Saturday, July 15)
8 sessions.
Environmental Design 122. \$60.

NCFA 002 **Creative Photography Workshop**

An exploratory course for those with some experience to learn about the amazing new films like T.Max and Ektar, filters for special effects, telephoto and wide angle lens use, electronic flash, close up macro shots, professional tricks for fast, easy camera operation, and how to see photographic composition. An introduction to basic darkroom skills will include black and white print making, color enlargements from negatives and Cibachrome printing from color slides. Students will have 3 extra weeks in the darkrooms for practice, and will receive feedback on photographs produced. The course will include six 2-hour classroom periods; two

3-hour darkroom classes; and the 3 weeks darkroom time. The cost of the darkroom chemistry is included in the tuition, but students must supply their own camera, film and paper. Please bring your camera to the first class.

Don Oberbeck, professional photographer for 20 years, is owner of the Boulder Photo Center.

Section 100:
Thursdays, June 15-July 20
7:30-9:30 p.m.
6 sessions at Ketchum 235, 6 sessions at Boulder Photo Center to be arranged between June 22 and August 3. \$95.

NCFA 006 **Storytelling for Everyone**

Storytelling is experiencing a revival in the U.S. This course covers different kinds of stories, local history, fiction, myths, fairy tales and folktales. Learn how to become a better storyteller, which stories are good for you, techniques for preparation and performance.

Kay Negash, M.A. in Theatre, professional storyteller representing this five state area, she was the 1986 winner at the National Storytelling Festival in Jonesboro, Tenn.

Section 100:
Wednesdays, June 7-July 5
5:30-8:00 p.m. 5 sessions.
Hale 6. \$47.

NCFA 020 **Introduction to Drawing**

This course is for beginners with little or no drawing background. You will learn to be more creative, communicate meaning, and see more sensitively. And you will also get what people want from a drawing class — to make more realistic looking images. Various media (charcoal, conte' crayon, ink and pencil) will be used. Materials list will be provided at the first class. (Estimated cost \$15.)

Rachael Amos, M.F.A. University of Colorado at Boulder, has taught drawing at various colleges in Denver and Boulder.

Section 100:
Tuesdays, June 6-August 8
7-9 p.m. (no class July 4).
9 sessions. Fine Arts C153. \$60.



Noncredit Courses

NCFA 021 Introduction to Watercolor

This course is for beginners with little or no painting background. Watercolor is not limited, you can be expressive or exactly realistic. Learn the nature of the medium and begin making your images with it. Materials list will be provided at the first class. (Estimated cost \$25.)

Rachael Amos, M.F.A.
University of Colorado at Boulder, has taught watercolor in Denver and Germany.

Section 100:
Thursdays, June 8-August 3,
6:30-9 p.m. 9 sessions.
Fine Arts C153. \$60.

NCFA 022 Landscape Painting (Plen Air Oil Painting)

This course is designed for students with little or no background in oil painting. As an outdoor painting course, the focus will be to teach the artists to express themselves, to interpret aspects of nature, and to see the local landscape by sorting out the most interesting ways to translate the image into a fully resolved painting. Materials list will be provided at the first session. Weather permitting, classes will be held at a location decided at the first class.

Marsha Wooley, B.A.; M.F.A.
University of Pennsylvania, artist
and instructor.

Section 100:
Saturdays, June 10-July 29
8:30-11:30 a.m. (no class July 1).
8 sessions. Fine Arts C103. \$90.

NCFA 023 Beginning Basketry

In this course, the beginner will learn several different techniques for making simple but beautiful baskets out of round and flat reed. Have fun learning to make twined basket with a wrapped handle out of round reed, and an appalachian-style basket out of flat reed. Bring to class a dishpan or bucket, awl or ice pick, scissors or side cutters, towel, a few clothes pins (pinch type) and pencil. Tuition includes reed material.

Margaret Craven, local artist, and instructor with 20 years hard textile experience.

Section 100:
Thursdays, June 8-29, 6-8:30 p.m.
4 sessions. Fine Arts C175. \$42.

NCFA 024 Introduction to Ceramics

This course is designed to introduce students to working with functional pottery in clay. A variety of handbuilding techniques will be covered, including pinch, coil, and slab. An introduction to the wheel is also included. The class is an intensive, four week, fun, investigation in using clay. Additional studio time out of class will be made available. Clay is included in the tuition fee and a material list will be provided at first class.

David Wright, B.F.A.
Instructor at University of Colorado
at Boulder, Artist.

Section 100:
Mondays and Wednesdays, June 5-28,
6:30-9:30 p.m. 8 sessions.
Fine Arts C1B30 (Basement). \$97.

Foreign Languages

NCFL 100 Beginning Conversational French

This course is for anyone interested in learning the French language and culture. We will be studying essential verbs and vocabulary and enough grammar to comprehend and use basic French in different situations. Conversational French will be stressed. With support of other class members, you start asking questions in the first class. Work with small groups will emphasize the practice of the language. Extensive course materials provided in class and included in tuition.

Nadia Turk, Ph.D. French Literature.

Section 100:
Mondays and Wednesdays,
June 12-July 19, 6:30-8:30 p.m.,
(no class July 3 and 5).
10 sessions. Education 138. \$75.

NCFL 101 Beginning Conversational German

This course is designed for students with no or very little preliminary knowledge of German. We will cover grammar which is essential for using the language creatively, but the emphasis will be on conversation and from the very beginning you will have many opportunities to speak German. Since many students want to travel to German-speaking countries, we will emphasize practice in practical conversation. Text

for the course will be available at the first class session.

Ed Maier-Heym, M.A., German
Instructor at CU-Boulder.

Section 100:
Mondays and Wednesdays,
June 5, July 10, 7-9 p.m., (no class July 3)
10 sessions. Education 136. \$75.

NCFL 201 Intermediate German

For students who have taken an introductory course or have otherwise gained some background in spoken German. Emphasis is on improving conversation skills, but reading and writing will also be part of the course. Course features a variety of methods to stimulate and facilitate learning, and to enjoy the language in the process. Text for the course will be available at the first class session.

Daphne Guericke, M.A. German,
Instructor at CU-Boulder.

Section 100:
Tuesdays and Thursdays,
June 6-July 11, 7-9 p.m.,
(no class July 4). 10 sessions.
Hellem 211. \$75.

NCFL 102 Beginning Conversational Italian

This class is designed for students with minimal or no knowledge of Italian. It is a course for anyone interested in speaking the language and learning more about the culture. Listening, speaking, and vocabulary building will be emphasized, but also essential verb tenses and grammar will be introduced in order to use dialogues for different types of speaking situations. Games, songs, dialogues, pictures and small group activities in the classroom will make learning a more enjoyable experience. Required text is *Buongiorno Italia* by Cremona, available at the University Bookstore.

Luigina Cerri, M.A., has taught both Italian and French in several schools, including CU-Boulder.

Section 100:
Tuesdays and Thursdays,
June 6-July 11 6:30-8:30 p.m.
(no class July 4).
10 sessions. Education 136. \$75.



Noncredit Courses

Foreign Languages - con't.

NCFL 103 Beginning Conversational Spanish

Spanish for travelers. Basic but lively conversational Spanish for travel to Spanish-speaking countries. Course includes short field trips during class time to emphasize practical vocabulary. Elizabeth Medina, Ph.D. Advisor, Regis College.
Section 100:
Tuesdays and Thursdays, June 6-29, 7-9 p.m. 8 sessions. Education 134. \$60.

NCFL 202 Intermediate Conversational Spanish

Designed to increase vocabulary and conversational ability for travelers. Cultural and social aspects will be introduced. Prerequisite, beginning Spanish or equivalent. Elizabeth Medina, Ph.D. Advisor, Regis College.
Section 100:
Mondays and Wednesdays, June 5-28, 7-9 p.m. 8 sessions. Education 134. \$60.

Investments

NCI 001 Investing for Income

This seminar covers guarantees, safety, risk, and tax implications, CDs, money market funds, banks, savings and loans, U.S. Government securities, zero coupon bonds, municipal bonds, income-producing limited partnerships, high income stocks, Blue chip stocks, utility stocks, mutual funds, corporate bonds, GNMA's, annuities, and single premium whole life policies. Arnold Hart, B.A. Cornell, M.A. Syracuse and Sr. Vice President of Investments at Prudential-Bache.
Section 100:
Thursday, July 13, 6:30-8:30 p.m. 1 session. Duane Physics G131. \$15.

NCI 002 Investment Strategies

Learn how to select and manage investments to suit your own objectives. Topics include: money growth, safety, liquidity, diversification, interest and dividends, guarantees, minimizing taxes, professional management, money market funds, CDs, zero coupon bonds, GNMA's, corporate and municipal bonds, unit trusts, tax-free investments, stocks, utilities, limited partnerships, mutual funds, options, precious metals, commodities. Mary Wright, B.A. University of Colorado, Account Executive at Prudential-Bache.
Section 100:
Thursdays, June 15-July 6, 6:30-9 p.m. 4 sessions. Duane Physics G131. \$38.

NCI 004 Stock Market Profits

This course covers insights, tools, and strategies for success in the stock market: how to be a consistent winner; how to be in phase with the market; how and when to sell; how to handle psychological pressures and emotion; how to do effective fundamental analysis; how to apply technical analysis and charting; how to develop an overview that leads to profit. Arnold Hart, B.A. Cornell, M.A. Syracuse and Sr. Vice President of Investments at Prudential-Bache.
Section 100:
Thursdays, July 20-August 3, 6:30-8:30 p.m. 3 sessions. Duane Physics G131. \$22.

Lifestyle

NCL 002 Eating As If Your Life Depended On It

You cannot afford to be ignorant, confused or misled about the nutrition facts. What you eat today affects your immediate energy level and mood. The cumulative effects of your daily diet determine your risks of having heart disease, certain types of cancer, osteoporosis, high blood pressure and other serious diseases. In this one day seminar, learn why eating fish could be great for your heart; the five types of fiber and the food source of each; why calcium supplements may be hazardous to your bones; three dietary ways to reduce your cancer risk; which vitamin supplements are right for you; where you can find reliable nutrition information; how to lose weight without starving yourself; why butter is better for you than margarine; how to strengthen your immune system through nutrition. Tuition includes extensive hand-out materials. Peggy Phillips, M.Ed. Nutrition Educ., Tufts Univ.; Registered Dietician/Nutritional Consultant.
Section 100:
Tuesdays, July 11-25, 7-9:30 p.m. 3 sessions. Education 134. \$28.

NCL 025 Handwriting Analysis: An Introduction

You are what you write. Handwriting reflects your real personality — how you approach life's events, how you set goals and pursue their achievement, how you problem solve, your fears and how you cope with them. Explore the uses of handwriting analysis in today's world. Learn the introductory principles of scientific handwriting analysis as you make application to your own writing. Understand how you can utilize this new information in your business, in your job, in your family and with friends. Carol Ford, B.S. nursing, certified Graphoanalyst, has private practice in handwriting analysis and document examination.
Section 100:
Saturday, July 15, 9 a.m.-5 p.m. 1 session. Geology 134. \$30.



NCL 023
Sports Nutrition

Physical performance depends on the proper mix of fuels — carbohydrates, proteins and fats, adequate fluid intake and optimal vitamin and mineral replacement. Come learn how to fine tune your body.

Peggy E. Phillips, M.Ed. Nutrition Educ., Tufts University; R.D./Nutritional Consultant.

Section 100:
Tuesdays, June 6-13, 6:30-9:30 p.m.
2 sessions. Education 138. \$24.

NCL 014
Psychology of Intimate Relationships

Why intimate relationships are so hard to find and maintain; how and why people keep choosing similar partners and repeat similar patterns in their relationships; the stages of intimacy; the function of power struggles, arguments, conflicts and affairs; how your childhood influences your intimate adult relationships; reflections on love and loving; falling out of love; how expectations affect our relationships; how to evaluate a potential partner, and how to stay healthy and filled in a relationship.

Neil Rosenthal, Psychotherapist/
Marriage Therapist.

Section 100:
Saturday, June 10, 10 a.m.-5 p.m.
1 session. U.M.C. 422. \$27.

Outdoors

NCSO 005
**Xeriscape Landscaping:
Low Water, Low Maintenance
Landscapes for Colorado**

Xeriscape landscaping deals with choosing the right plants for the right places in your yard. Careful plant selection and good planting techniques can lead to a lush beautiful home with low water needs. Plant lists and handouts will be provided.

Andrew Mead, B.S. University of Colorado at Boulder. Landscape manager and designer at Fruehaufs Nursery.

Section 100:
Wednesday, June 14, 6:30-9:30 p.m.
1 session. Geology 134. \$12.

Testing

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

For persons planning to take the Law School Admission Test (LSAT), this course offers diagnostic exam, intensive review, preparation, and sample testing in all areas of the new LSAT format, including application of issues and facts, reading comprehension, writing sample, logical diagrams, logical reasoning, and analytical reasoning. Emphasis is on taking verisimilar exams with full explanations and interpretations. The course fee includes extensive materials covering all aspects of the exam.

Kollie Elinoff

Section 100:
Friday, July 28, 6-10 p.m., Saturday and Sunday, July 29-30, 9 a.m.-5 p.m.
3 sessions. Guggenheim 205. \$145.

Writing

NC W 001
Creativity and Right Brain Activities for Writers

Creativity lagging? Learn how to tap into your right brain for increased productivity, innovative ideas, direction, and techniques to help you become a more successful writer. You can develop insight into writing problems, nurture ideas, eliminate writer's block. Your writing can become more effective, more enjoyable.

Barbara Steiner, Professional Writer.
Section 100:
Wednesdays, June 7-July 19, 6:30-8 p.m.
7 sessions. Hellems 81. \$39.

NC W 002
Journal Keeping

You are unique and special. The more you discover about yourself, the more there will be to discover. This class will teach journal techniques as a tool for self-exploration, developing creativity, clarifying relationships, decision making, and planning for your future. Bring a spiral or looseleaf notebook to class.

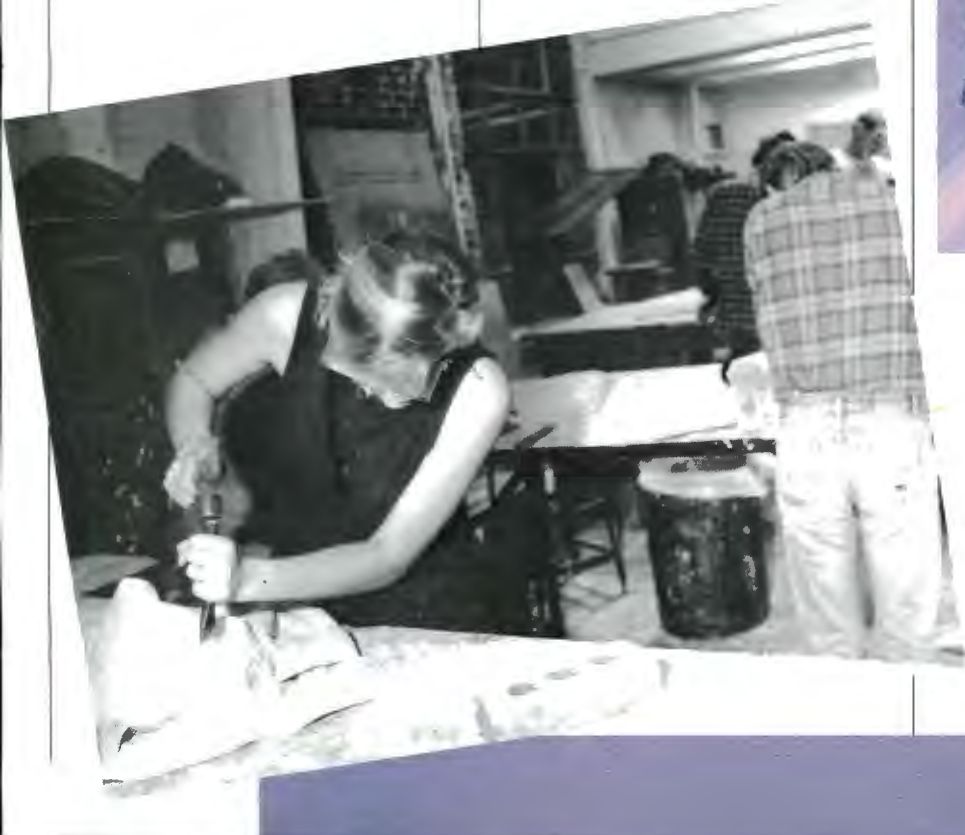
Barbara Steiner, Professional Writer.
Section 100:
Wednesdays, June 7-July 19, 8-9:30 p.m.
7 sessions. Hellems 81. \$39

NC W 012
**The Children's Book:
Illustrating and Getting Published**

Learn how to succeed in the highly competitive and rewarding field of children's books! Discussion includes types of children's books, current market trends, effective illustration techniques, portfolio/mss. development and submission, book production/printing (including artwork/mss. preparation), agents, contracts, awards, and self-publishing. Emphasis on illustration, but valuable for writers as well.

Sandy Fuller, Professional illustrator and children's book publishing consultant.

Section 100:
Saturday, July 15, 9:00 a.m.-5:30 p.m.
1 session. Economics 119. \$32.



Noncredit Courses



Experience the Best from Around the Country: Video Teleconferencing State-Of-The-Art Information

Video teleconferencing is the newest, most economical way for professionals to stay current in fields and activities where the pace of change outruns any individual's ability to keep up. CU-Boulder teleconferencing is "live" — national teams of presenters and panels are put together representing the cutting edge of a field. These "how to" specialists can speak to the future authoritatively. They have practical, here-and-now answers to the questions that Colorado professionals and their counterparts across the country can ask satellite presenters directly throughout the teleconference day.

Diverse Topics

Live teleconferences cover a global range of topics, current among professionals, including: business management, marketing, global trade, small business skills, new industrial and information technologies, government policies and requirements, advances in engineering, personnel supervision, productivity, the health care industry, physical fitness, new directions in teaching and student affairs, and professional development skills.

Training & Development

A typical video teleconference starts with an on-site team of experts who set the stage for the topic. Live-via-satellite presentations are reinforced by detailed agendas, workbooks, texts, and worksheets in a take-home packet. Throughout the day there are live question/answer sessions interspersed with presentations and demonstrations. The on-site team wraps up the day with a local and regional perspective on the subject — and answers remaining questions.

Colorado professionals rate teleconferencing to be as good or better than traditional conferencing, pointing to the convenience and quality of teleconferences and to the currency and credibility of information via satellite. Teleconferencing puts a premium on real-world expertise that is replicable in many settings.

Save Time and Money

Teleconference fees are all-inclusive, covering materials, parking, and catered meals. Instead of the time and cost of traveling hundreds of miles to hear the experts, the same information can be obtained in a day spent dialoguing — not traveling.

Nationally recognized experts like Victor Kiam enliven the Boulder campus through video teleconferencing.

Video Teleconferencing

Practical Applications and Dynamic Communication

The visual medium lends itself to animated graphics, charts, fieldwork sequences, demonstrations, on-site interviews and case studies. Professional audiences can translate information into practical workplace applications on the spot. Its visual quality and "liveness" attracts experts who like the dynamism of networking live with audiences around the country.

Everyone Has a Front Row Seat

Ideas are demonstrated in a visual laboratory in which everyone has a front row seat. The dynamic intensity of live national teleconferencing sets it apart from traditional face-to-face meetings in its scale, the power of the medium to focus attention, the efficient use of time, and its convenience.

State-Of-The-Art Equipment

Staff of the Division of Continuing Education and of the Events/Conference Center at The University of Colorado at Boulder have developed and equipped a customized facility acknowledged to be one of the most outstanding of its kind. The flexibility of six ample meeting rooms and an 11,000-seat arena allows diverse audiences to be accommodated simultaneously. Located on the campus near the corner of Colorado Avenue at Regent, one block west of 28th Street, the facility offers easy access and ample parking.

The large-screen General Electric Talaria projection system is capable of receiving programming from virtually all of the present generation of business-oriented and educational satellites. In addition, a portable antenna that can receive presentations via the newer Ku-band can travel to workplace sites.

Professionally Staffed

Through its charter membership in the 270-campus National University Teleconference Network founded in 1982, the Division of Continuing Education receives continuous announcements of teleconference opportunities. The Division has published nationally in the teleconference field and has conducted training and consulting projects with agencies on planning and managing their own teleconferencing, using campus or other facilities. Cooperative presentation of teleconferences is frequent, enabling businesses, organizations, and associations to use their training and development resources more effectively.

Place & Time, Parking, Fees

Most teleconferences are presented during daytime hours at the Events/Conference Center on the Boulder campus. There is ample parking. The fees for teleconferences vary, but include materials, parking, refreshments, and usually lunch. Group rates are available on a program-by-program basis.

Parking is available in Lot 436, just north of the Events Center. Parking permits and maps are sent to those who register in advance. There is easy access to the Events Center, which is situated one block off 28th Street near the corner of Colorado and Regent.

Teleconferences Scope and Volume Increasing Rapidly

The live teleconference industry is in a growth phase. We make it our number one task to keep up with what is available for professionals and to present it as part of our regular schedule, or by request from an organization or association. Why should *you* care? Because with their increasing availability, there is likely to be teleconferencing that can make a difference to your professional growth. This is one of today's most rapid means of obtaining new, "must know" information.

Teleconferences run the gamut from highly specialized technical topics to wide-ranging business management subjects. Our live videoconferences in recent months have included glass safety glazing standards for building code professionals; hazardous waste management requirements; a series for law enforcement agents; customer service strategies for specialty retailers; an eight-part series for business managers; and more. All national teleconference presenters take questions from audiences such as ours, and we always arrange a local workshop in conjunction with teleconferences.

Teleconferences are often presented cooperatively. Our partners have included chambers of commerce; the Boulder County Sheriff's Department; the Colorado Chapter of the International Conference of Building Officials; the Colorado Institute for Artificial Intelligence; several campus-based departments, and a number of professional associations.

We present teleconferences from numerous national sources: the Internal Revenue Service, Executive Communications, Satellite Conference Network, the Federal Bureau of Investigation, the American Management Association, and a 270-campus consortium, the National University Teleconference Network. We expect to add new dimensions to our heavily business-oriented schedule through new programming from the Federal Emergency Management Agency, PBS's adult learning service, and a cultural series with the Smithsonian Resident Associate Program in Washington, D.C.

Keeping Up With Teleconferences To Come

Because teleconferences are "live," they are frequently scheduled only a few weeks in advance. We are continually adding events to our schedule. To be kept up-to-date, please write: Division of Continuing Education, University of Colorado at Boulder, Campus Box 178, Boulder, Colorado 80309-0178. Visit us at: 1221 University Avenue; or call: 303-492-6596 or 492-5148; in Colorado, outside the Denver/Boulder area, call toll free: 1-800-332-5839. For information on in-house programming, please contact Becky Duning, Manager, Teleconferences, (303) 492-6596.

Our Newest Capability Is Audioconferencing

We are equipped to link up to 20 or more sites for formal or informal audioconferenced meetings that can link locations across the country — or the world. Audioconference services are available on an ad hoc or regular basis to the public. Please inquire regarding charges and booking time on our bridging system.



Real Estate Education

Make a New Career Blossom Real Estate Education Program

Looking for a career in real estate, advancement in your current real estate related profession, or do you simply want to learn more about the real estate industry?

This real estate program offers seminars and courses that include Principles, Law, Appraisal, Closings, Finance, Property Management, Tax Factors, and other current subjects. All of the required Colorado real estate licensing courses are available through the program. These college level courses are open to all persons and can provide you with valuable information related to this important field.

For additional information about courses offered and cities served in Colorado by this statewide program, call 492-8666 for a detailed real estate brochure.

Colorado Sales License

The Colorado Sales License Law requires that a candidate successfully complete the following courses of real estate education and receive a passing score of 70% on the state exam given by the Real Estate Commission:

- (1) NCRE 7 — Practice and Law, 48 hours, \$225 plus textbooks.
- (2) NCRE 18 — Colorado Contracts and Law, 24 hours, \$110 plus textbooks.

Colorado Broker License

The Colorado Broker License Law requires that a candidate complete the following 48 classroom hours of real estate education in addition to meeting the requirements of a sales license.

- (1) NCRE 26 — Finance and Advanced Law, 24 hours, \$110.
- (2) NCRE 28 — Closings and Trust Accounts, 24 hours, \$110.
- (3) Score 75% on the state exam.
- (4) Two years' experience as a real estate sales licensee OR completion of four elective 24-hour courses.
- (5) If you are applying for your broker's license you will also be required to prove to the Real Estate Commission that you have completed a Colorado Contracts course required for licensing.

For full details and to apply for the sales or broker license exam, please call the Colorado Real Estate Commission at (303) 894-2166.

NCRE 07 Practice and Law

Designed to meet the educational requirements for the Colorado real estate sales examination, the course offers a comprehensive survey of the real estate field for those who intend to enter the profession as well as others who desire a basic knowledge of real estate markets, real property interests, deeds, land descriptions, property transfers, contracts, finance and appraisal. Course begins with an examination of fundamental concepts and vocabulary, including Colorado license law and the law of agency.

Section 401
Night Course. 14 sessions. (48 hours)
Tuesday and Thursday,
June 6 to July 25, 6:30 p.m. to 9:55 p.m.
Location: University of Colorado at
Boulder Business Building, Room 125.
Tuition: \$225 plus textbooks.

Section 411
Daytime Course. 6 sessions. (48 hours)
Wednesday, Thursday, Friday, Monday,
Tuesday, Wednesday, July 19, 20, 21,
24, 25, 26, 8:30 a.m. to 5:30 p.m.
Location: Jeffco Realtor Board,
950 Wadsworth Blvd., Lakewood.
Tuition: \$225 plus textbooks.

NCRE 18 Colorado Contracts and Law

A practical course covering Colorado license law and analyzing the standard listing contract, the sales contract, the extension agreement, and counter-proposal. Special emphasis will be placed on understanding each clause and on properly completing each type of contract.

Section 401
Night Course. 7 sessions.
Tuesday and Thursday,
July 27-August 17, 6:30 p.m. to 9:55 p.m.
Location: Engineering Building CR 1-46,
Boulder Campus.
Tuition: \$110.

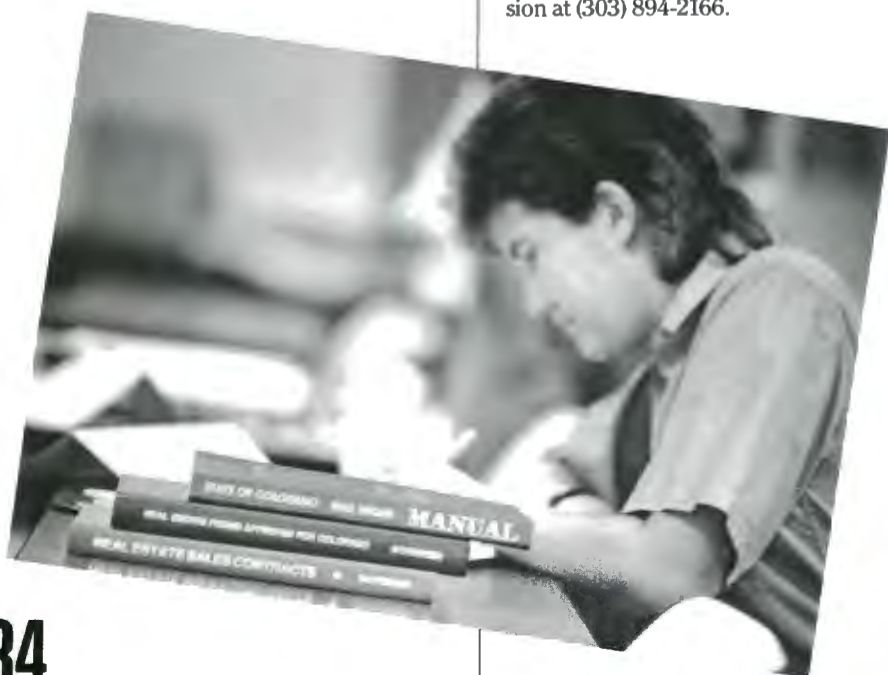
NCRE 28 Real Estate Closings and Trust Accounts

The course offers an in-depth study of the closing statement, including an examination of the contract and a review of the other relevant documents. Primary emphasis will be on the gathering of data, the organization into debit and credit items, and the actual completion of various kinds of closing statements. Maintaining brokerage trust accounts will also be thoroughly covered.

Section 401
Daytime Course. 3 sessions.
Wednesday, Thursday, Friday,
June 21, 22, 23, 8:30 a.m.-5:30 p.m.
Location: Holiday Inn
800 28th Street, Boulder.
Tuition: \$110.

NCRE 7	Practice and Law
NCRE 18	Colorado Contracts and Law
NCRE 26	Finance and Advanced Law
NCRE 28	Closings and Trust Accounts
NCRE 33	Appraisal I — Residential
NCRE 35	Listing and Selling Real Estate
NCRE 60	Commercial and Investment Properties
NCRE 61	Tax Factors in Real Estate
NCRE 71	Real Estate Construction
NCRE 72	Property Management

For Course Information call 492-8666 and ask for the Summer Real Estate Brochure.



Nature is Your Guide in the Mountains of Colorado: Meeker '89

For a real getaway, enroll in one of a selection of University of Colorado courses taught exclusively in Meeker, Colorado during the summer of '89. The offering is a cooperative effort by the town of Meeker and the Division of Continuing Education to join the resources of the western Colorado community with courses that take advantage of the natural environment and the scenic beauty of the region. The courses will be taught by CU faculty in residence in Meeker.

The two-term schedule, June 19 to July 7 and July 10 to July 28, is conveniently arranged to allow students to take a five-week term on the Boulder campus if they wish to. Note the special Independent Study in Geologic Mapping available July 31 through August 18.

Classes will be conducted in the modern facilities of the Meeker public schools and in the field. Transportation to field locations will be provided. The Meeker region is partly agricultural, partly protected wilderness, and totally suited to the study of geology, western slope flora, wilderness ecology, freshwater ecology, and environmental and energy issues. The landscape, from river valley to mountain formations, also invites an artistic enjoyment of the region.

Classes, field work, and independent projects will occupy your time and your intellect. But don't overlook the opportunities for recreation and refreshment of your senses.

You (and your family) can also enjoy Meeker's recreational programs — organized sports and lessons, parks, playing fields, tennis courts, golf course, and swimming pool. And fishing in nearby lakes and streams. Full service guest ranches offer a variety of trail rides and outfitted camping experiences.

Tuition: \$180 per course (resident or nonresident).

Credit: Each course is offered for 3 semester hours of credit. If the course number is 4000/5000, it may be taken for either undergraduate or graduate credit. 5000- and 6000-level courses are for graduate credit only.

**For registration and course information, visit
1229 University Avenue or call, 492-6409.**

Field work takes on a new meaning in the Western Slope setting of Meeker where special summer classes offer a refreshing combination of learning and recreation.

Independent Study Programs

Plant a Seed for Your Own Growth Independent Study

Independent Study Puts You Ahead of the Crowd.

People who take continuing education courses are people with goals and the motivation to achieve them. Whether you are trying to accelerate your degree or to gain career skills, independent study can let you put your motivation to work without waiting for a semester to begin or for a course to be offered at a time when you can take it. Register anytime. Work at your own pace without interrupting family or employment activities.

Guided Correspondence Study

Independent study through correspondence allows you to begin courses at any time, not tied to the academic calendar. You work directly with an instructor by mail and by telephone. Written assignments are returned to you with grades and comments. Some courses make use of multimedia materials. Many of the courses include self-checking test questions with each unit so that you judge your own progress. Courses may be taken pass/fail or for no credit.

More than 70 college credit courses, approved by the University, are offered in 17 academic areas:

- accounting
- anthropology
- business
- economics
- education
- engineering
- English
- fine arts
- geography
- geology
- history
- mathematics
- philosophy
- physical education
- political science
- psychology
- sociology

Individualized Instruction

Individualized Instruction provides an opportunity to earn college credit for course work by meeting with a faculty member in a non-classroom setting. It may be used when you cannot enroll in the course on campus. You may not earn credit for work completed before registering. Registration requires the approval of the faculty member, the department, or school and the appropriate dean.

Professional Certification Opportunities

Noncredit courses are offered so that you can meet Colorado Real Estate licensing requirements or earn certificates in Childhood Education. All courses carry Continuing Education Units (CEUs).

All course work is by correspondence, graded and commented upon by faculty members who have both academic and professional qualifications.

Real Estate Education

In cooperation with the Colorado Real Estate Commission and the Colorado Association of Real Estate Boards, CU provides independent study courses to meet licensing requirements for real estate salespeople and brokers.

Childhood Education

Courses were developed to meet standards established by Colorado law for Preschool Teachers and Preschool Administrators. Certificates are awarded to those who complete a specified series of courses. Courses are open to all who are interested in the growth, development, and education of young children. These courses are especially helpful to childcare center personnel, nurses, social workers, day care home workers, and parents of young children.

High School Credit Opportunities

The University of Colorado offers guided independent learning courses for high school students who want to enrich their high school programs.

High School Correspondence

These correspondence courses provide special opportunities for students to meet college entrance requirements, to accelerate graduation, or to meet high school graduation requirements. High School credit is granted by the student's high school, not by the University of Colorado.

It works like this: using printed study guides, texts, kits, and audio materials, you and your supervisor (usually a counselor) stay in touch with faculty who work for the Independent Study Programs at CU by mail and by telephone. Graded assignments are returned to you with comments so you can see how you are progressing. Start the course anytime. Work at your own pace.

Ask your guidance counselor or advisor about high school independent learning courses.

Concurrent Registration in College Credit Courses

Qualified high school seniors can get a head start at CU through concurrent registration in college credit courses by correspondence.

If approved by your school, courses can be used for high school graduation or accepted for college credit (nondegree student) at the University of Colorado.

FOR A COURSE CATALOG CALL OR WRITE:

Independent Study Programs
Division of Continuing Education
University of Colorado at Boulder
Campus Box 178
Boulder, Colorado 80309-0178
303-492-8756
1-800-332-5839 (Toll Free in Colorado)



Special Professional Programs

Special Professional Programs use an applications-oriented approach that can help you progress in fast-evolving fields. They offer you the opportunity to study under conditions conducive to here-and-now outcomes. Drawing on case studies and emphasizing personal applications, these one to three-day seminars give you the opportunity to stay on top of new information. They offer fresh ideas to achieve personal and organizational goals. At their best, these programs have enduring intellectual and practical value.

This is results-oriented programming. It is intended for business and industry, government, and nonprofit organizations. Most special professional programs are applicable to certificate programs described in this catalog.

This is an opportunity to apply knowledge in real-life terms. These special programs are distinguished by their dynamic approach to a field. They bring depth to subjects that deserve the more intensive treatment offered by their one, two, or three-day formats. Presented in daytime hours, these programs accommodate schedules for which evening courses extending over several weeks are less well-suited.

For the person on a demanding career track, for those who want to be more effective in their positions, and for those in leadership roles who recognize that they, and their subordinates, comprise a team in which everyone must be highly skilled — intensive workshops can make the difference.

Advance registration is necessary and should be completed two weeks prior to the program date. Group discounts are available for some seminars. Call 492-5148 or toll free in Colorado, 1-800-332-5839 to register. Specially tailored programming for your own organization can also be arranged.

NCSS 067 Practice in Lotus Commands for Developing Your Marketing Plan on a Personal Computer

This optional three-hour workshop is offered for those enrolling in NCSS 057 Developing Your Marketing Plan on a Personal Computer. It will enable participants who are unfamiliar with basic Lotus commands to practice the commands that will be used in the Marketing Plan workshop to develop spreadsheet "what-if" models on Lotus 1-2-3.

Peggy Purvis

Section 100: Tuesday, July 25, 1-4 p.m.
One half-day session. .3 CEUs.
University Computing Center. \$45

NCSS 057 Developing Your Marketing Plan on a Personal Computer

This hands-on computer seminar will show you how to use nine marketing computer models. These computer models should enable you to avoid the six most common mistakes in marketing. Prior computer experience is not required, but you should have some marketing background. The models are templates that overlay Lotus 1-2-3, Symphony, or other compatible software. The instructor, who is the author of the models, will explain each one and provide problems to be solved. You will receive a manual written by the instructor, along with a diskette containing the case histories used for the models. A second diskette contains only the models and is the one you will use in your own business. This program qualifies for the Management Development Certificate Program. Course fee includes the specially prepared manual and two diskettes that together have a retail value of \$195.

William M. Luther, President,
Luther Management

Section 100:
Wednesday, July 26 and Thursday,
July 27, 9:00 a.m.-4:00 p.m.
Two all-day sessions. 1.2 CEUs.
Computing Center. \$250.

NCSS 063 How To Target Your Advertising

Many small advertisers do not properly target their advertising. Try these questions on yourself. Do you clearly identify your most likely prospects? Do you send these prospects the right advertising message about your service? And finally, are you certain about how to choose the best media to reach your prospects? If you are unsure about the answers to these questions, it is likely that your advertising is often ineffective and wasteful. It simply does not produce desired results. This workshop will give you the techniques you need to target your advertising properly. These are the very same disciplines used by the most sophisticated advertisers, but simplified so that they can be used by any business, no matter how small. You will see how to isolate your most likely prospects and how to develop the most meaningful advertising message. You will gain more confidence about your decisions regarding how to reach these prospects through the proper choice of media. This workshop should be especially meaningful for health care, educational institutions, professional organizations, small businesses, and those in accounting, legal, and other specialized professional services. A specially prepared package of easy to use take-home materials will be supplied. These materials will make it possible for you to put the workshop techniques to work in your own business immediately, with more certainty that you know how to target your advertising.

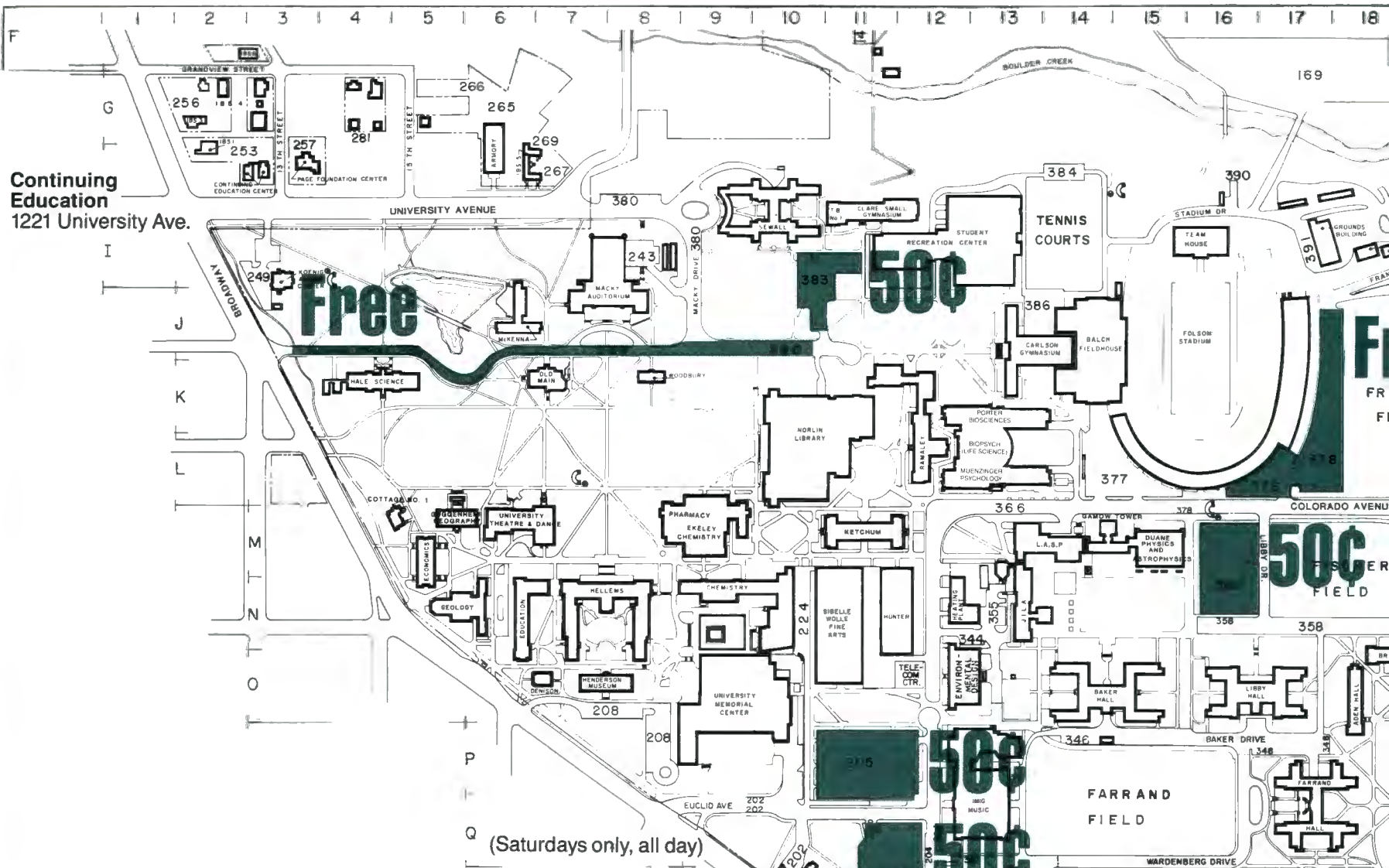
Raymond F. Marcus, Marketing and
Merchandising Consultant.

Section 100:
Friday, June 23, 9 a.m.-4 p.m.
One all-day session. .6 CEUs.
Computing Center. \$75.



Special Professional Programs





Continuing Education
1221 University Ave.

(Saturdays only, all day)



Free = Free parking after 5 pm, and Saturdays

50¢ = 50¢ parking after 5 pm, and Saturdays (bring 2 quarters)

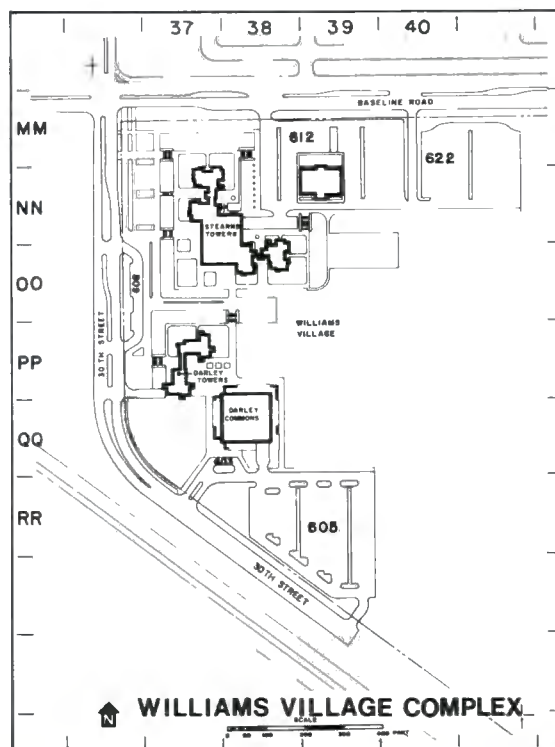
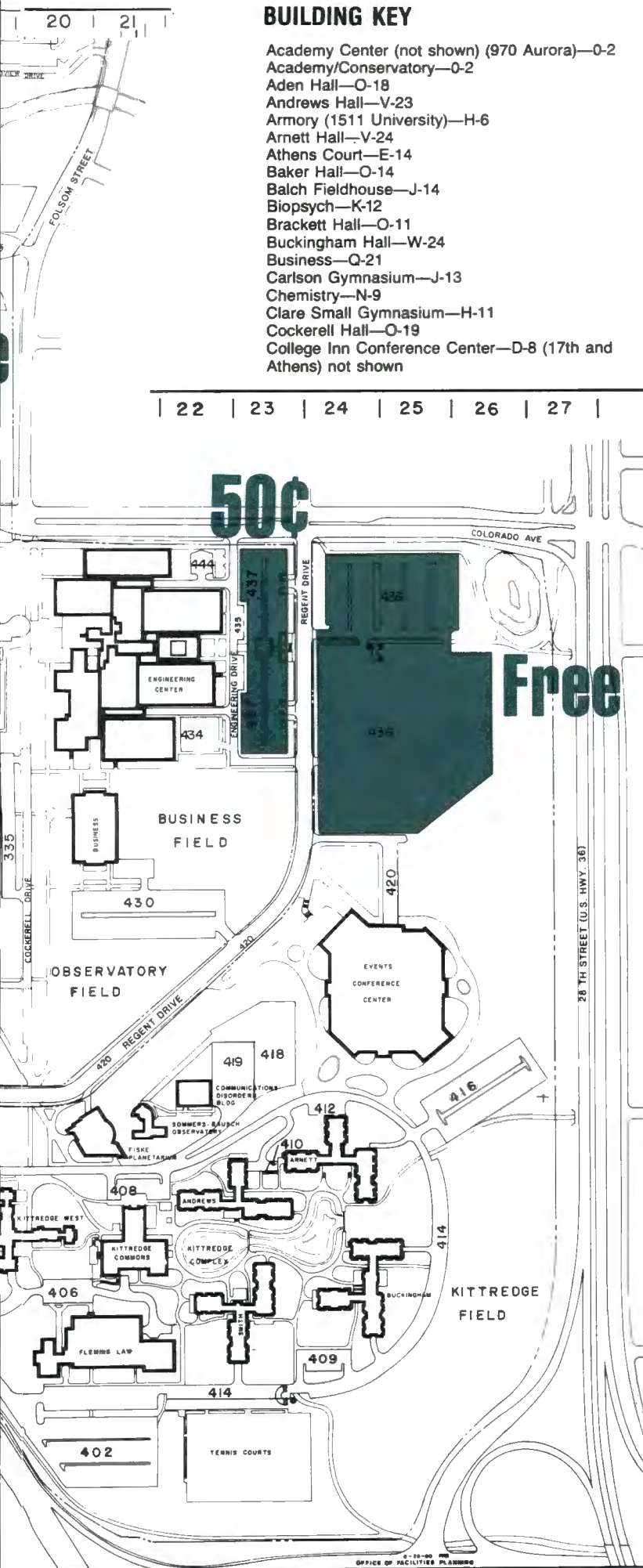
During any special event, Continuing Education students shall present their registration receipt to obtain parking at no extra charge (Parking Regulation III-D-6a.)

BUILDING KEY

Academy Center (not shown) (970 Aurora)—0-2
 Academy/Conservatory—0-2
 Aden Hall—O-18
 Andrews Hall—V-23
 Armory (1511 University)—H-6
 Arnett Hall—V-24
 Athens Court—E-14
 Baker Hall—O-14
 Balch Fieldhouse—J-14
 Biopsych—K-12
 Brackett Hall—O-11
 Buckingham Hall—W-24
 Business—Q-21
 Carlson Gymnasium—J-13
 Chemistry—N-9
 Clare Small Gymnasium—H-11
 Cokerrell Hall—O-19
 College Inn Conference Center—D-8 (17th and Athens) not shown

Colorado Court—KK-32
 Communication Disorders Bldg.—T-22
 Computing Center—AA-36
 Continuing Education—H-3, 1221-1229 University
 Cottage No. 1—M-5
 Crosman Hall—P-19
 Darley Commons—QQ-38
 Darley Towers—PP-37
 Day Care Center (2202 Arapahoe)—B-17
 Denison Laboratory—O-7
 Distribution Center (not shown) 2000 Central Ave
 Duane Physical Laboratories (includes Duane Physics and Astrophysics, George Gamow Tower, Laboratory for Atmospheric and Space Physics (LASP), and Joint Institute for Laboratory and Astrophysics (JILA—Laboratory and Tower)—M-14
 Duane Physics and Astrophysics—M-15
 Economics—M-5
 Education—N-6
 Ekeley Chemical Laboratories—(includes Ekeley Chemistry and Pharmacy) M-8
 Ekeley Chemistry—M-8
 Engineering Center—M-21, O-20, O-22, P-21
 Environmental Design—O-12
 Events/Conference Center—S-24
 Faculty-Staff Court—E-10
 Farrand Hall—Q-17
 Fiske Planetarium—U-20
 Fleming Law—X-20
 Folsom Stadium—K-16
 Gamow Tower—M-14
 Geology—N-5
 Grounds and Service Center—I-17
 Guggenheim Geography—M-5
 Hale Science—K-4
 Hallett Hall—R-18
 Health Physics Laboratory—I-18
 Heating Plant—N-12
 Helms Arts and Sciences—N-7
 Henderson Museum—O-7
 Hunter Science—N-11
 Imig Music—Q-13
 Institute of Behavioral Genetics—EE-28
 Institute of Behavioral Science No. 1—H-2 (1416 Broadway)
 Institute of Behavioral Science No. 2—E-1 (1546 Broadway)
 Institute of Behavioral Science No. 3—G-2 (1424 Broadway)
 Institute of Behavioral Science No. 4—G-2 (1220 Grandview)
 Institute of Behavioral Science No. 5—H-6 (1201 17th)
 Institute of Behavioral Science No. 6—F-2 (1243 Grandview)
 Joint Institute for Laboratory Astrophysics—N-13 (JILA—Laboratory and Tower)
 Ketchum Arts and Sciences—M-11
 Kittredge Commons—W-21
 Kittredge (includes Andrews Hall, Arnett Hall, Buckingham Hall, Smith Hall, and Kittredge Commons, Kittredge West)—W-22
 Kittredge West—V-19
 Koenig Alumni Center—I-3
 Laboratory for Atmospheric and Space Physics (LASP)—M-13
 Libby Hall—O-16

Life Sciences Laboratories—(includes Ramaley Biology, Biosciences, and Muenzinger Psychology) L-13
 Macky Auditorium—I-7
 Marine Court—D-14 not shown
 McKenna Languages—J-6
 Muenzinger Psychology (Life Sciences Laboratories)—L-13
 Newton Court—E-19
 Nichols Hall—R-14
 Norlin Library—L-10
 Nuclear Physics Laboratory—CC-33
 Old Main—K-7
 Page Foundation Center—H-4
 Pharmacy (Ekeley Chemical Laboratories)—M-9
 Porter Biosciences—K-12
 Ramaley Biology (Life Sciences Laboratories)—L-12
 Reed Hall—Q-19
 Regent Administrative Center—S-15
 Research Laboratory No. 1—BB-28
 Research Laboratory No. 2—DD-28
 Research Laboratory No. 3—BB-30
 Research Laboratory No. 4—DD-28
 Research Laboratory No. 6—AA-32 (Marine St. Sciences Center)
 Service Center—AA-33
 Sewall Hall—H-10
 Sibell Wolle Fine Arts—N-11
 Smiley Court—JJ-29
 Smith Hall—X-22
 Sommers-Bausch Observatory—U-21
 Stearns Towers—NN-38
 Student Recreation Center—I-13
 Team House—I-19
 Temporary Building No. 1—H-11
 Temporary Building No. 84 (Ski Shed)—GG-33
 Transportation Center—AA-31
 University Administrative Center—T-14 (914 Broadway)
 University Club—R-10
 University Memorial Center—O-9
 University Services Center (includes Motor Pool, Service Center, and Research Laboratory No. 5)—AA-29
 University Theatre—M-7
 Wardenburg Student Health Center—R-13
 Willard Administrative Center (north side) and Willard Hall (south side)—R-16
 Williams Village (includes Darley Commons, Darley Towers, and Stearns Towers)—OO-39
 Woodbury Arts and Sciences—K-8



Registration Instructions for Credit, Noncredit, and Certificate Courses

Advance Registration is Necessary and Can Be Accomplished:

In person:

Monday through Thursday, 8:30 a.m.-5:30 p.m.; Friday, 8:30 a.m.-5 p.m.,
1221 University Avenue, Boulder. Short-term metered parking nearby.

By mail:

To enroll for courses, please fill out the appropriate forms (page 41 for
Noncredit/Certificate — on page 43 for credit) completely, and send them to:
Division of Continuing Education
Campus Box 178
University of Colorado at Boulder
Boulder, Colorado 80309-0178

You may register for up to three credit hours by mail. For additional credit
hours, visit our office. No limit on Noncredit or Certificate courses. Use
the postage paid envelope located at the center of the catalogue.

By phone:

If you are enrolling for Noncredit or Certificate courses, you may register
by phone with payment made by MasterCard or VISA credit cards. Call
492-5148. Longmont or outside Denver Metro area, call 1-800-332-5839.

Please:

Most courses have limited enrollment, so register as soon as possible to
insure your place in class. Courses may be closed or cancelled, depending
upon enrollment. Please register at least five days before the starting date
of any Noncredit/Certificate course.

Please call 492-5148 with any questions on your registration procedure.
From Longmont or outside Denver metro area, call 1-800-332-5839.

No courses conducted July 4, Independence Day.

Compliance with Colorado House Bill 1021 requires that course enrollees
verify their Selective Service registration status. Your mail-in registration
form contains this information. In-person registrants will be given this
phone. Phone-in registrants may give information over the

Disabled individuals who would like to register, please call our registra-
tion staff at 492-5148 and we will make special arrangements to assist you.

All listed textbooks and supplies are available at the University Book
Center, UMC basement, on campus.

Refund Information is listed with the specific program information. In
all cases, if a course is cancelled or rescheduled at an inconvenient time, a
full refund is given. Credit course cash and credit card tuition refunds are
processed within two weeks of completing a Drop Voucher in the Division
Registration Office, 1221 University Avenue. Noncredit/Certificate course
drops may be phoned in. If payment was made by check, the refund will
take 4-6 weeks. That time can be cut considerably by presenting a copy of
both front and back of your cancelled check when dropping.

Weather-related closing policy: Students may expect classes to be held
when scheduled even in inclement weather, the only exception being
when the Chancellor closes the campus because of extreme weather con-
ditions. Local radio stations will announce the campus closing frequently
during the day. Call 492-5500 for campus closing information.

The University of Colorado is an affirmative action/equal opportunity
institution.

Registration for Certificate and Noncredit Courses

PLEASE PRINT

S.S. No. # _____

Birthdate _____
Month/Day/Year

Mr. _____
Ms. _____
Last First Middle Initial

Mailing Address _____ Home Telephone _____

City _____ State _____ Zip _____

Business Name _____

Business Address _____ Office Telephone _____

City _____ State _____ Zip _____

SELECTIVE SERVICE REGISTRATION CERTIFICATION

Information on Selective Service registration must be provided in order to comply with Colorado law. Male students born after December 31, 1959, must complete this form in order to be permitted to register.

_____ 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. (NOTE: Members of the Reserves and National Guard must register with Selective Service.)

_____ I have not yet reached my 18th birthday. (NOTE: You must file this notice every term, if you are male, until you turn 18 and have registered with the Selective Service.)

_____ I am age 26, or older, as of the date of the first day of classes for the term for which I am registering.

_____ I am a non-immigrant alien lawfully admitted in the United States.

I affirm under penalty of perjury that the information presented on this form is true and complete.

(NOTE: A person may file, but shall not be required to file, a statement indicating his position as a Conscientious Objector. The filing of a Conscientious Objector statement does not exempt one from completing this form.)

Student Signature _____ Date _____

Course No.	Course Title and (if applicable) Section Number	Tuition

Attach additional sheet if needed

Total Enclosed _____

Tuition Payment by Mail

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
enclose the following information:

Charge: VISA MasterCard (check one)

_____ / _____ / _____ / _____

Expiration Date _____ / _____

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

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

Registration Information

**Save Time
and Money —
Use the
Postage-Paid
Envelope
in the Center
of this
Catalogue
to Mail Your
Registration Form.**

Last Name	First Name	Middle Name	Maiden Name	Suffix
-----------	------------	-------------	-------------	--------

If changed, give name under which you were last registered _____

SOCIAL SECURITY NUMBER:

--	--	--

for record-keeping and identification of students only

Mailing address _____
 No. and Street _____ City _____ State _____ Zip Code _____

Home Phone _____

Work Phone _____

- SEX:**
 Male
 Female
- RACE:**
 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. _____

- MARITAL STATUS:**
 Single
 Married

FORMER STUDENT NUMBER:

--

BIRTHDATE

Month	Day	Year

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

- MILITARY SERVICE:**
 Non-veteran
 Active Duty
 Veteran
 Veteran Eligible for VA benefits

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

ALL APPLICANTS

- 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 _____
- 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 as a Degree Student or Special Student
- Are you currently on suspension from any Campus/School of CU? No Yes School _____
- Do you owe a debt to any University of Colorado campus? No Yes
- Do you have a college degree? No Yes Highest Degree _____ Date Awarded _____
 College Name/City/State _____
- Have you ever been convicted of a felony? (other than traffic violation) No Yes (Attach statement)
- Do you have any serious health conditions/limitations which should be brought to the attention of the University? No Yes (Attach statement)

DO NOT WRITE IN THIS COLUMN

Sex	Race
Citz	TRC 1
Birth Date Mo/Day/Yr	
Hours	
School	Major
Class	Grad Stat
Res	Res State
Adm Stat	Adm Type
Mar	GPA
Stops	
Fin Stop	Vet
Prev Term/Yr /Campus	
SAVE	

THE UNIVERSITY OF COLORADO IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EDUCATIONAL INSTITUTION
 Admission to the University of Colorado as a Special Student does not guarantee eligibility for regular degree status.

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	Your Parent/Guardian (if you are under 22)
Dates of continuous physical presence in Colorado (mo/yr)	____/____ to ____/____	____/____ to ____/____
Dates of employment in Colorado (mo/yr)	____/____ to ____/____	____/____ to ____/____
List exact years Colorado income taxes have been filed	_____	_____
Dates of extended absences from Colorado of more than two months (mo/yr)	____/____ to ____/____	____/____ to ____/____
Date of marriage, if applicable (mo/yr)	____/____	____/____
Date current Colorado Driver's License was issued (mo/yr)	____/____	____/____
Have you had a previous Colorado Driver's License?	Yes _____ No _____	Yes _____ No _____
List exact years of Colorado Motor Vehicle Registration (mo/yr)	_____	_____
Date of Colorado Voter Registration (mo/yr)	____/____	____/____
Date of purchase of any Colorado residential property (mo/yr)	____/____	____/____
Dates of military service, if applicable, (mo/yr)	____/____ to ____/____	____/____ to ____/____

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 dismissal.

Student's Signature: _____

Registration Information

**Save Time
and Money —
Use the
Postage-Paid
Envelope
in the Center
of this
Catalogue
to Mail Your
Registration Form.**

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_____ I am in the U.S. Armed Forces on active duty. (NOTE: Members of the Reserves and National Guard must register with Selective Service.)

_____ I have not yet reached my 18th birthday. (NOTE: You must file this notice every term, if you are male, until you turn 18 and have registered with the Selective Service.)

_____ I am age 26, or older, as of the date of the first day of classes for the term for which I am registering.

_____ I am a non-immigrant alien lawfully admitted in the United States.

I affirm under penalty of perjury that the information presented on this form is true and complete.

(NOTE: A person may file, but shall not be required to file, a statement indicating his position as a Conscientious Objector. The filing of a Conscientious Objector statement does not exempt one from completing this form.)

Student Signature _____

Date _____

Tuition Payment by Mail

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
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