This summer, The Division of Continuing Education is a moveable feast, offering up an appetizing array of classes, programs and workshops. It’s a banquet with dozens and dozens of courses! Can we tempt you with an evening poetry class? Shakespeare under the stars? Or a few bytes of technological insights? The menu is in your hands. Peruse it with pleasure. And help yourself to a summer to savor.

**Help yourself to expanded parking.** Campus has added on-campus spaces, with two new parking structures—on Regent opposite the Engineering Center and on Euclid next to the UMC. See campus map for details.

## Four Ways to Register

1. **Register by mail.** A postage-paid envelope is located in this catalog. Registration forms are on page 37 for noncredit and certificate, page 39 for credit.

2. **Fax your registration**. Fast and easy. Day or night to (303) 492-3962. Send both front and back of page 37 for noncredit and certificate courses. Send both front and back of page 39 for credit courses.

3. **In person.** Come to the Continuing Education Office, 1221 University Avenue, between 8:30 a.m. and 5:30 p.m. Monday through Thursday (8:30 a.m. to 5 p.m. Fridays).

4. **Register by phone**, using Discover, Visa or MasterCard. Note: this applies only to noncredit and certificate courses. Complete the registration form (page 37) and have your credit card information handy. Then call 492-5148 or 1-800-331-2801.

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

### Where Are Courses Given?

Course locations are given at the end of each course description. Many campus parking lots offer $1.00 parking after 5 p.m. and on Saturdays. Some are free evenings and weekends. The Campus Map gives both building and parking lot locations. To skip parking altogether, take the RTD bus to campus.

### 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 with convenient evening hours.

- **Independent Study Programs**
  Independent study by correspondence and individualized instruction lets you learn at home.

- **Center for Advanced Training in Engineering and Computer Science (CATECS)**
  Earn a Masters degree or graduate credit with courses televised live to your workplace.

### Professional Enhancement: Certificate Programs

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

Or earn a Certificate in:

- **Business and Technology Leadership**
- **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, means no tests, no grades, and no prerequisites. Yet noncredit courses, encompassing both personal and professional interests, are taught by highly qualified instructors. Enjoy non-competitive learning with others who share your interests.

### Professional Development

- **Programs for working professionals, to build skills and enhance your understanding of business today.**

  - **Real Estate Education Program**
  - **Special Professional Programs**
  - **Video Teleconferencing**

### 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.

### Severe Weather

Classes are held when scheduled. The Chancellor closes the campus only because of extreme weather conditions. Closings are announced on local radio stations. Or call 492-5900 for campus closing information.

### Other Questions? Problems? Special Needs?

Disabled individuals should feel free to call our registration staff for special needs and arrangements. We will gladly assist you.

### Books and supplies

Required for all courses are available at the University Book Center in the basement of the University Memorial Center on campus.

Call us at 492-5148 or 1-800-331-2801 if you need help or additional information. You can reach us between 8:30 a.m. and 5:30 p.m. Monday through Thursday or until 5 p.m. on Friday.
Help Yourself to a World of Ideas.

First-rate instructors teach some of the university’s most popular courses after 5 p.m. Evening credit students are a mixed group that includes full-time students and part-time students with a broad range of interests.

Credits earned can be applied to the degree of your choice. Each school or college admits a certain number of evening credit hours—usually 12—before you must apply for admission as a degree student. If you are thinking of applying to CU, you should consult a current catalog for admission requirements and make an appointment with a CU admissions advisor.

Eligibility: All you need is a high school diploma or GED. (Individuals on University of Colorado financial stops or academic suspension from the College of Engineering and Applied Science, 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 $70 per credit hour. Residency makes a difference only if you are registering 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 for documentation.

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 live out of state, you may petition the University of Colorado for resident status as an emancipated minor. If you believe your initial classification is incorrect, talk to the Classification Coordinator at 492-5148.

Tuition: Resident tuition is $70 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 see Survival Tip on page 5 for more information.

Privileges: As a Boulder Evening Credit student, you have access to the following services.

- Total library services at no additional charge
- Membership in the Recreation Center ($25 a semester)
- Wardenburg Student Health Services ($35)
- Photo IDs ($10 cash, check with guarantee card, Visa, MasterCard)

To sign up for these and other student benefits, simply take your registration receipt to the appropriate office.

Counseling Services: Free academic counseling is available to help you plan a degree program, decide on a major, or simply explore your options. 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). 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 veteran dependent, you may enroll in evening classes and apply credit toward a degree. If you have questions about your eligibility and benefits, contact the Veterans 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 on the inside front cover of this catalog.

To Drop: To drop a credit course and ensure that you receive any tuition refund that may be due, come to the Division of Continuing Education, 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 8.
Credit Classes Calendar—Dates You Should Know

May 11 .......................... First day of registration at the Division of Continuing Education, 1221 University Avenue, 8:30-5:30 Monday through Thursday, 8:30-5 Friday.

June 8 .......................... Classes begin.

June 19 .......................... FACULTY/STAFF registration for Boulder Evening classes on space available basis. 50% discount. Active PAF employment verification copy required.

June 19 .......................... LAST DAY TO REGISTER. Withdrawals from classes after this date will appear as a "W" on student's academic record.

June 22 .......................... Instructor's signature required to drop classes.*

July 6 .......................... Petition required to drop classes.

July 30 .......................... Classes end.

*This signature indicates you were doing passing work when you dropped the course.

Refund Schedule for Credit Classes

FULL TERM
100% through June 19
60% June 22 through June 26
40% June 29 through July 6

Classes by Starting Date, Summer 1992

<table>
<thead>
<tr>
<th>Dept.</th>
<th>Course No.</th>
<th>Section</th>
<th>Time</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Monday and Wednesday Evening Courses, Begin June 8 and End July 29</td>
</tr>
<tr>
<td>COMM</td>
<td>2000-3</td>
<td>300</td>
<td>6:30-8:30 p.m.</td>
<td>Perspectives on Human Communication</td>
</tr>
<tr>
<td>ECON</td>
<td>2020-3</td>
<td>300</td>
<td>5:30-8 p.m.</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ENGL</td>
<td>1600-3</td>
<td>300</td>
<td>5:30-8 p.m.</td>
<td>Masterpieces of American Literature</td>
</tr>
<tr>
<td>ENGL</td>
<td>3051-3</td>
<td>300</td>
<td>6:30-9 p.m.</td>
<td>Intermediate Fiction Workshop</td>
</tr>
<tr>
<td>KINE</td>
<td>5430-3</td>
<td>300</td>
<td>6:30-9 p.m.</td>
<td>Nutrition and Physical Performance</td>
</tr>
<tr>
<td>MATH</td>
<td>1101-3</td>
<td>300</td>
<td>6:30-9 p.m.</td>
<td>Fundamentals and Techniques of College Algebra</td>
</tr>
<tr>
<td>PSYC</td>
<td>4303-3</td>
<td>300</td>
<td>6:30-8 p.m.</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

|       |            |         |            | Tuesday and Thursday Evening Courses, Begin June 9 and End July 30 |
| COMM  | 1010-3     | 300     | 6:30-8:30 p.m. | Public Speaking                                    |
| COMM  | 2030-3     | 300     | 6:30-8:30 p.m. | Interpersonal Communication                        |
| ECON  | 2010-3     | 300     | 5:30-8 p.m.   | Principles of Microeconomics                       |
| ENGL  | 3001-3     | 300     | 6:30-8:30 p.m. | Intermediate Poetry Workshop                      |
| ENGL  | 3152-3     | 300     | 5:30-8 p.m.   | Report Writing                                     |
| GEOG  | 1982-3     | 300     | 6:30-8:30 p.m. | World Regional Geography                          |
| PHIL  | 1100-3     | 300     | 6:30-9 p.m.   | Ethics                                            |
| PSYC  | 1001-3     | 300     | 6:30-9 p.m.   | General Psychology                                |
| PSYC  | 4406-3     | 300     | 6:30-8:30 p.m. | Social Psychology                                 |
Communication

Communication 1010-3
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.
Section 300: Tuesdays and Thursdays, 6-8:30 p.m. Hellem's 285. $218 (resident).

*Communication 2000-3
Perspectives on Human Communication
Surveys communication in a variety of contexts and applications. Topics include basic concepts and general models of communication, ethics, language and nonverbal communication, personal relations, group decision making, organizational communication, and impact of technological developments on communication.
Section 300: Mondays and Wednesdays, 6-8:30 p.m. McKenna 112. $210 (resident).

*Communication 2030-3
Interpersonal Communication
Focuses on basic processes in face-to-face interaction, including verbal and nonverbal messages, coordination in conversation, messages about self and other, and communication in personal relationships. Emphasizes theory and concepts rather than skills.
Section 300: Tuesdays and Thursdays, 6-8:30 p.m. McKenna 112. $210 (resident).

English

*English 1600-3
Masterpieces of American Literature
Enhances student understanding of the American literary and artistic heritage through an intensive study of a few centrally significant texts, emphasizing works written before the twentieth century. Approved for Arts and Sciences Core Curriculum: Literature and the Arts.
Section 300: Mondays and Wednesdays, 5:30-8 p.m. Engineering Center CR 1-28. $230 (resident).

English 3021-3
Intermediate Poetry Workshop
Workshop environment focuses on the poetic possibilities of language and experience, with special attention paid to students' creative ideas, techniques of image-making, surrealism, dream imagery and poetic voice. May be taken up to three times for credit.
Section 300: Tuesdays and Thursdays, 6-8:30 p.m. Hellem's 241. $210 (resident).

Economics

*Economics 2010-3
Principles of Microeconomics
Studies decision making under uncertainty in the presence of scarcity by households, firms, and government units. Analyzes resource allocation under competitive and noncompetitive market structures, income distribution, and comparative economic systems. Approved for Arts and Sciences Core Curriculum: Contemporary Societies.
Section 300: Tuesdays and Thursdays, 5:30-8 p.m. Economics 117. $210 (resident).

*Economics 2020-3
Principles of Macroeconomics
Examines basic concepts of macroeconomics, or behaviors and interactions of individuals, firms, and government. Topics include determining economic problems, how consumers and businesses make decisions, how markets work and how they fail, and how government actions affect markets. Approved for Arts and Sciences Core Curriculum: Contemporary Societies.
Section 300: Mondays and Wednesdays, 5:30-8 p.m. Economics 117. $210 (resident).

English 3051-3
Intermediate Fiction Workshop
Explores aspects of narrative fiction through both development, narrative voice and structure. Workshop critique of students' writing with a focus on developing individual talents and finished stories. May be taken up to three times for credit.
Section 300: Mondays and Wednesdays, 6-8:30 p.m. Hellem's 271. $210 (resident).

English 3152-3
Report Writing
Sharpen your ability to write reports, memos, business letters and resumes with clarity and ease. Topics include organizing content, writing for a specific audience, and the writing process. Format combines lecture, discussion and evaluation, with practical skill-building exercises.
Section 300: Tuesdays and Thursdays, 5:30-8 p.m. Engineering Center CR 1-28. $210 (resident).

Survival Tips

*This course will partially satisfy Arts and Sciences College List requirements. Please see an advisor.

Constance King of Boulder says that Evening Credit courses have been "helpful" in meeting the demands of a Master's program while working full time. Her goal is teaching Social Studies at the junior high level.
**Geography**

*Geography 1982-3
World Regional Geography*
Using interrelated concepts of population, urbanization, trade resources, and development as an organizing framework, the world's regions are geographically analyzed and placed in global perspectives.
Section 300: Tuesdays and Thursdays, 6-8:30 p.m. Guggenheim 2. $210 (resident).

**Kinesiology**

*Kinesiology 3430-3
Nutrition and Physical Performance*
Current research relating to nutrition and optimal physical performance. Topics include energy utilization, fluid requirements, vitamin and mineral needs of the athlete, body composition and other issues.
Section 300: Mondays and Wednesdays, 6:30-9 p.m. Hellem 201. $210 (resident).

**Mathematics**

*Mathematics 1011-3
Fundamentals and Techniques of College Algebra*
Simplifying algebraic expressions, factoring linear and quadratic equations, inequalities, exponentials, logarithms, functions and graphs, complex numbers, binomial theorem. Students may not receive credit for both MATH 1011 and math modules MATH 1000, 1010 and 1020. Prerequisite, placement examination score for MATH 1000 or 1 year of high school algebra. May fulfill part of the Arts and Science Core Curriculum quantitative reasoning and mathematical skills.
Section 300: Mondays and Wednesdays, 6:30-9 p.m. Engineering Center CR 1-42. $210 (resident).

**Philosophy**

*Philosophy 1100-3
Ethics*
Introductory study of major philosophies on the nature of the good for humanity, principles of evaluation, and moral choice. Approved for Arts and Sciences Core Curriculum: Ideals and Values.
Section 300: Tuesdays and Thursdays, 6:30-9 p.m. Hellem 211. $210 (resident).

**Psychology**

*Psychology 1001-3
General Psychology*
Surveys major topics in psychology: perception, development, personality, learning and memory, and the biological bases of behavior.
Section 500: Tuesdays and Thursdays, 6:30-9 p.m. Hellem 201. $210 (resident).

*Psychology 4303-3
Abnormal Psychology*
Examines borderline disorders as extreme variations of the normal personality. Focuses on major functional and organic disorders, theories of mental disorders, and methods of psychotherapy. Not open for credit to those who have credit for PSYC 4313. Prerequisite, PSYC 1001.
Section 300: Mondays and Wednesdays, 6:30-9 p.m. Biosciences E432. $210 (resident).

*Psychology 4406-3
Social Psychology*
General psychological principles underlying social behavior. Overview and analysis of major social psychological theories, methods and topics, including attitudes, conformity, aggression, attraction, social perception, helping behavior, and group relations. Prerequisite, PSYC 1001. Recommended, PSYC 2101. Approved for Arts and Sciences Core Curriculum: Contemporary Societies.
Section 300: Tuesdays and Thursdays, 6:30-9 p.m. Biosciences E432. $210 (resident).

**Survival Tips**

*This course will partially satisfy Arts and Sciences College List requirements. Please see an advisor.*

Instructor Jay Kaplan (right) enlisted the help of student Chris Cielo to explain a concept. Kaplan teaches Macroeconomics in the Evening Credit program.
Help Yourself to Powerful New Skills.

There's nothing academic about the changes taking place in business today. To succeed, you need broad-based skills and a better understanding of the big picture. The Management Development Certificate Program can help. There are no prerequisites for enrollment, and you need not be working toward certification to take these courses. However, certification is a nice acknowledgment of your interest in developing a better understanding of relevant managerial issues.

The Management Certificate of Achievement is earned by completing three requirements.* You must:

A. Successfully complete four required courses:
   - Critical Issues in Current Management
   - Accounting for the Non-Accounting Manager
   - Managing Marketing: Matching Products and Services for Profit
   - Managing People

B. Successfully complete at least three elective courses. Any course not listed in the required core curriculum is considered an elective course. Any one Computer Applications course and any one Business Noncredit course may be used as an elective course to fulfill Certificate requirements. Elective courses also available through the Special Professional Programs.

C. Participants must complete the Registration for Certificate and Noncredit Courses on page 57.

Courses cover task-related skills and basic concepts in relevant management areas. They are scheduled so that a Certificate can be achieved in two or three semesters, but not every course is offered every semester.

Getting Started. If you are a new supervisor or have not enrolled in formal management training before, it is recommended that you first enroll in the elective course, Skills for New (and Newly Promoted) Supervisors. This course is offered every September and January. Otherwise, there is no special required sequence for course enrollment.

Refunds are granted any time before a course begins, none later.

*Note: Those enrolled before Fall, 1991, have the option of pursuing the Certificate under former or current guidelines.

Getting Started

MDP 403
Basic Skills for the New (and Newly Promoted) Supervisor
Basic principles of supervision. Topics include effective communication, handling conflicts, ethics, and employee development and discipline.
Charles Rice, M.B.A.
Section 100: Tuesdays and Thursdays, June 13 and 15, 6:30-9:30 p.m. 4 sessions. Business 250. $100.

Core Courses

MDP 459
Critical Issues in Current Management
Confront high priority management issues in this challenging workshop. Obtain in-depth understanding of critical issues, and the tools, tactics, and strategies to successfully resolve them in any business setting. Topics include, but are not limited to:
- Managing morale and motivation
- Pluralism and commitment to diversity
- Developing and maintaining high productivity
- Changing "problem" employees to success stories
- Merging work groups for accomplishments

Elective Courses

MDP 431
Building and Managing Customer Service
Better service is on everyone's agenda. How do you make it happen? Our goal is to provide practical training by focusing on effective communication styles and powerful listening skills that demystify the process of dealing with customers, even in difficult situations. Principles are taught using examples—and ideas—from businesses that have built success on excellent customer service.
Loren Ankarlo, B.A., B.S.
Section 100: Wednesdays and Thursdays, June 24 and 25, 6:30-10 p.m. 2 sessions. Duane Physics G116. $88.

Courses available through the Special Professional Programs:
NCPS 001-100
 Preventing Miscommunication
Vicki Hamer, Ph.D.
Friday, June 5, 9 a.m. - 4 p.m.
1 all-day session. $150.
NCPS 005-100
Motivating and Managing People
Randy Bauer, M.B.A.
Friday, July 17, 9 a.m. - 4 p.m.
1 all-day session. $150.
NCPS 004-100
Cultural Diversity and the Workplace
Isidro Rubi, Ph.D.
Friday, June 19, 9 a.m. - 4 p.m.
1 all-day session. $150.
Help Yourself to Leading-Edge Learning.

Never before have there been so many ingenious tools for gathering, sorting and applying information. Finding time to acquaint yourself with new systems and programs is another matter. This makes it easy. You can earn a certificate—or just learn some shortcuts. Either way, you can count on individual attention from instructors who will help you learn to do what you need to know as painlessly as possible.

Certificate in Computer Applications
You may earn a Certificate in Computer Applications in roughly three or four semesters, but there is no time limit. As you complete appropriate courses, credit is automatically applied toward Certificate requirements. The requirements are straightforward.

A. Four required core courses:
   1. Computer Literacy*
   2. Concepts of Data Processing and Information Technology
   3. Computer Application Systems Overview
   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.

B. At least one course in programming. Programming languages offered include BASIC, Pascal, and C. Others are added to keep pace with industry standards.

C. Four 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, including all graphics courses (see next paragraph).

These courses will give you hands-on experience with important design systems and graphics technology. Classroom labs are equipped with IBM PC and compatible 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. 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 hard disk access are given at class. Only preregistered students may attend 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.

Locations
The classroom location is given at the end of each course description. Many courses are conducted at the University Computing Center, 3645 Marine Street, southwest corner of 38th & Arapahoe. Consult the campus map at the end of this catalog for other locations.

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, 1-800-331-2801.

Samta Nagarajan has come a long way to teach computer skills in Boulder. Born in India, raised in Malaysia, he earned his undergraduate degree in Economics at Harvard, and did his graduate work in Sociology. He worked for many years as a therapist before deciding to make a career change. In fact, his interpersonal communication skills serve him well in the classroom, and with clients. He works as a consultant and trainer for Computer Source in Boulder, helping businesses select, install and learn complex systems.
Getting Started

CCA 100
Computer Literacy
Beginner Level
A vital introduction to concepts and terminology that make successive courses much easier to handle. Learn what computers really are—their uses and their limitations. An introductory lecture prepares you for seven hands-on labs: three on IBM PCs, three on Macintosh (Apple), one on the campus mainframe (VAX) system. After the course, spreadsheet, word processing, database and communication applications will be familiar concepts to you. Take the mystery out of basic computer jargon and learn start-up skills that open the door to more targeted learning.

John Dick, Ph.D.
Section 101: Tuesday, June 2, 6:30-8:30 p.m. plus lab sections. Please indicate lab section preference (10A or 10B) at registration:
Lab Section 10A: Tuesdays, June 9-July 21, 6-8 p.m.
Lab Section 10B: Tuesdays, June 9-July 21, 8-10 p.m.
Section 102: Friday, June 5, 6:30-8:30 p.m. plus lab sections. Please indicate lab section preference (10C or 10D) at registration:
Lab Section 10C: Fridays, June 12-July 24, 6-8 p.m.
Lab Section 10D: Fridays, June 12-July 24, 8-10 p.m.
Both Sections: 8 sessions.
Computing Center U-23.
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. $99.

Apple Macintosh

CCA 105
Introduction to the Macintosh
Beginner Level
Meet the friendly system that is a powerful productivity tool. Learn practical business options, system management, and basic graphics, with hands-on practice. As time permits, we will demonstrate other, more advanced applications for business and personal use. Obtain the confidence and expertise required for other Macintosh courses.
Section 101: Bob Carlisle, M.A.
Thursdays, June 11-July 9.
Section 102: Scott Dixon, M.A.
Wednesdays, July 15-August 12
Both Sections: 6:30-9:30 p.m. 5 sessions.
Fine Arts C185. $99.

IBM and Compatible

CCA 120
Introduction to the IBM and Compatible Personal Computer
Beginner Level
Get to know your DOS microcomputer. Learn important vocabulary and see the beauty of the system. Master user commands and DOS functions, with lots of hands-on practice. Also: a survey of easy software programs and an introduction to BASIC as a programming language. Course features IBM and compatible PCs, with an overview of the new Personal System 2 (PS/2) hardware and some Operating System 2 (OS/2) software features. Enrollment strictly limited.
Nancy VanWecel, M.B.A.
Section 101: Mondays, June 1-15.
Section 102: Tuesdays, June 2-16.
Section 103: Wednesdays, June 3-17.
Section 104: Thursdays, June 4-18.
All Sections: 6:30-9:30 p.m. 3 sessions.
Engineering Center CR 2-3. $79.

CCA 200
Using MS-DOS
Intermediate Level
File management made easier, with a firm grasp of DOS commands. We cover: practical commands like copy, delete, disk format; hard disk commands to create, remove, and back up directories; and an introduction to batch files. Prerequisite is CCA 100, CCA 120 or equivalent experience. Bring a double-sided/double-density 5¼ inch diskette to class to store your example files.
Section 101: Chris Mattson, B.A.
Tuesdays, June 2-16, 6:30-9:30 p.m.
3 sessions. Computing Center 114. $90.
Section 102: Verlene Leeburg.
Saturday, June 20, 9 a.m.-5 p.m.
1 session. Computing Center 142. $90.
Section 103: Pat Melton, M.A.
Saturday, June 27, 9 a.m.-5 p.m.
1 session. Computing Center 114. $90.
**Systems—continued**

CCA 203
**Intermediate DOS**
Intermediate Level
Learn to create your own commands, take control of your system and create "smart" commands. We begin with I/O redirection, pipes, and filter commands forcustomizing DOS, leading to creation of smart commands that allow you to develop other powerful commands tailored to your specific needs. Prerequisite is CCA 200 or comparable skill level.
Nancy VanWechel, M.B.A.
Section 100: Saturday, July 18, 9 a.m.–4:30 p.m. 1 session.
Computing Center 114. $90.

**UNIX Systems**

CCA 360
**Introduction to UNIX**
Intermediate Level
Become a proficient user of the UNIX operating system. For anyone who needs to use UNIX, program it in its environment, manage UNIX users, or obtain sufficient knowledge to evaluate it. No prior UNIX experience is required, but computer literacy is assumed. We cover fundamentals and a few advanced topics, including history, the importance of different versions, files, directories, permissions, essential commands, editors, the Bourne and C shells, I/O redirection, pipes, command substitution, environment variables, powerful features of the shell and a look inside the UNIX kernel.
Ed Zucker, M.S., and David Black, Ph.D.
Section 100: Tuesdays, June 9–July 21, 6:30-9:30 p.m. 7 sessions.
Computing Center 123. $250.

CCA 364
**Intermediate UNIX**
Specialized Level
The perfect next step for advancing your use of UNIX, to create your own tools, or do system administration. We cover advanced use of UNIX commands, including: creating and executing shell programs, start-up files, variables, parameters, simple and multiple case branching, loops, signal handling, testing file attributes. Plus some ingenious little-known features. Note: a thorough knowledge of UNIX fundamentals is required.
Ed Zucker, M.S., and David Black, Ph.D.
Section 100: Monday–Friday, August 10–14, 6:30-9:30 p.m. 5 sessions.
Computing Center 123. $235.

**Systems General**

CCA 350
**Software Operations and Maintenance**
Intermediate Level
Develop effective tools to monitor and organize computer systems that are critical to efficient computer operations. We cover: systems analysis, configuration options, software design and selection, installation, data conversion, logging and file maintenance, documentation, support contracts, training, and error identification.
Lab session included.
Pat Melton, M.A.
Section 100: Thursdays, June 4–July 23, 6:30–9 p.m. 8 sessions.
Computing Center 123. $165.

**NOVELL TECHNOLOGY INSTITUTE**

These courses will be offered again starting with the Fall schedule.

**Programming**

CCA 325
**Intermediate C Programming**
Specialized Level
First, we examine the ANSI C changes to the language. Then, each week we explore a particular topic in more detail, delving into more complex data structures, command line arguments and the environment, the standard C library file I/O and dynamic memory management routines, advanced features of the compiler, and speciality data structures (bit fields, enumerations, and unions). Also covered: techniques for writing portable code, and ANSI enhancements to the language. Prerequisite: CCA 320 or 6 months C programming experience and comfort with intro topics (including pointers). Recommended text: *The C Programming Language* by Kernighan and Ritchie, University Book Center, UMC 10.
Carol J. Meier, M.S.
Section 100: Monday–Friday, August 5–7, 8:30 a.m.–12 noon. 5 sessions.
Computing Center 123. $250.

CCA 324
**Advanced Topics in C Programming**
Specialized Level
A one-day tutorial for intermediate C programmers who want to explore more powerful features. We will take an in-depth look at several important new ANSI C changes to the language such as const, volatile, new preprocessor directives and void pointers.

The section on functions will cover function prototypes, writing functions with a variable number of arguments, pointers to functions, jump tables, setjmp, longjmp, and signal handling. Next we'll cover C portability issues and present techniques for handling system differences, including a portable file I/O example. We conclude with some examples that illustrate data encapsulation and dynamic binding as basic techniques for object-oriented programming in C.
Carol J. Meier, M.S.
Section 100: Saturday, June 20, 9 a.m.–4:30 p.m. 1 session.
Computing Center 123. $150.
Programming—cont.

CCA 327
Introduction to C++ Programming
Intermediate Level
C++ is an extension of C that supports "object-oriented programming," focusing on the class (an extension of C's struct). We cover class member functions, constructors, and destructors, followed by class inheritance and virtual functions. Also, language extensions not directly related to object-oriented programming, including: function overloading, default arguments, function prototypes, const, and in-line functions. Best of all, we cover what not to use and what features to avoid.
Tom Cargill, Ph.D.
Section 100: Mondays, June 15-July 20, 6:30-9:30 p.m. 6 sessions.
Muenzinger E0046. $235.

CCA 328
Intermediate C++ Programming
Specialized Level
This course reinforces object-oriented programming and concentrates in-depth on important details—how classes and references interact with regular C features, for example. Memory allocation is well covered, because it can be a serious performance bottleneck. Class materials include an introduction to multiple inheritance and operator overloading and an outline of language extensions that will soon appear in compilers.
Tom Cargill, Ph.D.
Section 100: Saturday, August 8, 9 a.m.-1:30 p.m. 1 session.
Computing Center 123. $150.

Software Applications on IBM and Compatibles

Graphical User Interfaces

CCA 210
Introduction to Windows
Intermediate Level
Microsoft Windows (with IBM Presentation Manager and other desktop accessories), is generating tremendous interest. We answer your questions about this important PC development, and explore the utility of this powerful program covering the desktop system, standard MS-DOS interface, the future of OS/2, and Windows as a productivity enhancer.
Section 101: Samten Nagarajan, B.A.
Tuesdays, June 2-16.
Section 102: Chris Mattson, B.A.
Fridays, June 5-19.
Both Sections: 6:30-9:30 p.m.
3 sessions. Computing Center 142. $96.

Alison Thomson (left) is a graduating Geography major who decided that Computer Literacy would make her more employable. Sophie Korkiewicz (right) is a recent arrival in Boulder, via London and Poland, who is also interested in building basic computing skills.

Word Processing

CCA 375
Word for Windows
Novice Level
Learn all the fundamentals with Microsoft Word for the IBM-compatible Windows environment—a powerful package. We cover everything you need to create a simple document: editing and formatting, cursor movement, deleting, simple formatting, the help system, special effects, and printing. Bring a 5¼ inch double-sided/double-density diskette to class.
Samten Nagarajan, B.A.
Section 100: Thursdays, June 18-July 9, 6:30-9:30 p.m. 4 sessions.
Computing Center 114. $130.

CCA 380
Beginning WordPerfect Word Processing
Novice Level
Learn to use WordPerfect to produce and edit simple documents. Learn to set margins and tabs, copy and move blocks of text, check spelling, use the thesaurus, and print documents. An understanding of file management and disk management principles is assumed. Prerequisite is CCA 120, CCA 100 or equivalent experience. Bring a 5¼ inch double-sided/double-density diskette.
Section 101: Peggy Purvis.
Wednesdays, June 3-17.
Section 102: Pat Melton.
Wednesdays, June 24-July 8.
Both Sections: 6:30-9:30 p.m.
3 sessions. Computing Center 114. $115.

CCA 382
Intermediate WordPerfect
Intermediate Level
If you like WordPerfect, this course helps you use it to full advantage. We cover file management, page format (headers, footers, page layout, page numbers), columns, macros, and merge and sort. Prerequisite: CCA 380 or comparable experience. Bring a formatted 5¼ inch double-sided/double-density diskette.
Peggy Purvis.
Section 100: Wednesdays, July 15-29, 6:30-9:30 p.m. 3 sessions.
Computing Center 114. $115.

CCA 385
Tables and Forms with WordPerfect 5.1
Intermediate Level
Create your own calendars, invoices, lists, title pages, lists, fill-in formats, for preprinted documents, government and tax forms. Topics include automatic numbering, graphic lines, macros, math, merges, and fonts as tools to customize forms. Bring a printed form to use as a class project, and a formatted 5¼ inch diskette.
Peggy Purvis.
Section 100: Saturday, July 11, 9 a.m.-5 p.m. 1 session.
Computing Center 114. $90.
Applications on IBM –continued

CCA 387

WordPerfect 5.1—Reports
Advanced Level
Learn to use WordPerfect’s advanced features to assist in writing lengthy reports or technical documents. Topics include automatic outlines, footnotes/endnotes, headers/footers, page/paragraph/line numbering, table of contents, indexes, master/subdocument styles, bringing graphics into text. Bring a 5½ inch floppy diskette to class, in order to keep your work.
Peggy Purvis.
Section 100: Wednesdays, August 5-12, 6:30-9:30 p.m. 2 sessions.
Computing Center 114. $115.

CCA 386

WordPerfect 5.1—MACROS
Advanced Level
Learn to create, edit, delete, and organize macros for everyday use, plus an introduction to the macro programming language. Any WordPerfect user will appreciate these shortcuts to automate often-used functions. Many ideas and examples will be provided but feel free to bring your own class work.
Peggy Purvis.
Section 100: Saturday, August 1, 9 a.m.-4 p.m. 1 session.
Computing Center 114. $95.

CCA 388

WordPerfect 5.1—Merge/Sort
Advanced Level
Enhance your WordPerfect skills by mastering the merge and sort commands. Prepare “personalized” letters by merging information from a mailing list or a form letter. Learn how to import data from other software, such as dBASE. Obtain hands-on practice to create documents using lists, envelopes, mailing labels and reports.
Peggy Purvis.
Section 100: Saturday, June 20, 9 a.m.-4 p.m. 1 session.
Computing Center 114. $95.

CCA 389

WordPerfect for Windows
Intermediate Level
Access the power of WordPerfect 5.1 for Windows by learning the special features available in the Windows environment. Utilize commands to more effectively manage your files and documents. Bring a formatted 5½ inch double-sided/double-density diskette.
Nancy Van Wechel, M.B.A.
Section 100: Saturday, July 11, 9 a.m.-5 p.m. 1 session.
Computing Center 123. $130.

Spreadsheets

CCA 345

Excel for Windows
Novice Level
Explore this increasingly popular spreadsheet/graphics/database package that runs in the Windows environment. We cover basic worksheet skills (entering data, formatting cells, creating formulas, etc.), and explore the wealth of graphic features like 3-D bar and pie charts, with rotational capabilities. 1-2-3 users will learn how easily Excel reads their files, and the extensive Help facility, designed with them in mind.
Dennis Taylor, M.S.
Section 100: Thursdays, June 4-25, 6:30-9:30 p.m. 4 sessions.
Computing Center 142. $125.

CCA 330

Beginning Lotus 1-2-3
Novice Level
Boost your productivity by learning to use Lotus efficiently. Learn practical guidelines for: designing and building spreadsheets with classic problem-solving steps, database sort and query, graphics/chart generation and printing. We cover: copying, ranges, painting, pointing, functions and relative and absolute referencing. Includes hands-on exercises to reinforce learning. Updated for Version 2.2 (2.0 and 3.1 users are accommodated). Bring a double-sided/double-density 5½ inch diskette.
Section 102: Dennis Taylor, M.S. Saturdays, August 8 and 15.
Both Sections: 9 a.m.-4 p.m. 2 sessions. Computing Center 114. $135.

CCA 332

Intermediate Lotus 1-2-3
Intermediate Level
Master more advanced applications through work in four areas. Advanced commands covers: menu items, worksheet, range, and file commands, with attention to preventing data loss, range naming and manipulating, global search/replace and enhancements. File linking encompasses design, approaches, and rules for linking files. All categories of functions are studied. Macros are covered last (defining, naming, rules). Hands-on exercises in all four areas. Updated for significant enhancements of version 2.2/2.3. Bring a formatted 5½ inch double-sided/double-density diskette. Prerequisite: CCA 330 and/or working knowledge of Lotus spreadsheets.
Nancy Van Wechel, M.B.A.
Section 100: Saturday, July 25, 9 a.m.-5 p.m. 1 session.
Computing Center 114. $125.

Dona Hauser of Boulder is taking an introductory level computer course, "To upgrade my skills and make myself more marketable," as part of a job search process.

CCA 334

Advanced Lotus 1-2-3
Intermediate Level
For the experienced Lotus user, comprehensive review of format to enhance spreadsheet construction and data interpretation. Major sections include: memory optimization techniques, hints and hazards, advanced data commands, file translation, and advanced macros. Advanced data commands include tables, distribution, regression, matrix multiply, and database statistics. The macro section includes version 2.2 learn and macro manager along with special macro commands. We focus on version 2.2 and 3.1 concepts but 2.0 users are accommodated. Bring a 5½ inch double-sided/double-density diskette.
Nancy Van Wechel, M.B.A.
Section 100: Saturday, August 1, 9 a.m.-5 p.m. 1 session.
Computing Center 123. $95.
Applications on IBM —continued

Computer Aided Design

CAD 311
Beginning Computer Aided Design
Novice Level
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 have 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, need basic information, and have no CAD background.

David W. Claffin, M.Arch.
Section 100: Mondays, June 1-8, 6:30-9:30 p.m. 2 sessions.
Computing Center 142. $70.

CAD 322
Computer Aided Design: Level I
Novice Level
Explore the capabilities of computer aided design, using AutoCAD on a 386-based PC. We cover drawing set-up, creating and editing points—all the skills you need to create, edit and plot your own drawings.

Topics include:

- Loading AutoCAD
- Drawing Edits
- New Drawing Set-Up
- Text Specifications and Editing Commands
- MIRROR Commands
- Display Commands
- Producing Hardcopy
- Layering
- Putting it all together

Who Should Attend: Anyone involved, or who plans to be involved, in technical drafting or drafting. Helpful for architects, engineers, or designers who need these skills to upgrade their work. Anyone interested in the dynamic CAD field.

Section 101: Dan Myers, M.S.
Mondays, June 11-July 20, 6:30-9:30 p.m. 6 sessions.
Section 102: Philip M. Kreiker, M.S.E.
Wednesday, Thursday, Friday, July 15-17 9 a.m.-4 p.m. 3 sessions.
Both Sections: Computing Center 142. $240.

CAD 333
Computer Aided Design: Level II
Intermediate Level
Expert instruction for people seeking advanced CAD drafting capabilities. Topics include:

- Semi-automatic Dimensioning
- Dimensioning variables
- Isoplanar grids
- Object snap and aperture commands
- 3-D and prototype drawings
- High quality, less known commands
- Compatibility with other software
- STATUS Utility
- Purpose and components overview
- Attributes
- Wireframe construction and viewpoint selection
- Advanced file management

Recommended prerequisites are CAD 322 or equivalent hands-on experience.

Who Should Attend: Helpful for engineers, architects, designers seeking to advance computer applications in their fields. Skills also apply to a variety of other fields.

Section 201: David M. Claffin, M.Arch.
Thursdays, July 16-August 13, 6:30-9:30 p.m. 5 sessions.
Section 202: Philip M. Kreiker, M.S.E.
Wednesdays and Thursdays, July 22 and 23, 9 a.m.-4 p.m. 2 sessions.
Both Sections: Computing Center 142. $230.

CAD 345
Computer Aided Design: Level III
Customizing AutoCAD
Specialized Level
For professionals who are customizing a microcomputer-based CAD system to modify drawings and handle routine tasks more quickly. In class, the keyboard is used mostly for editing text, with extensive use of peripherals. Generating slide shows and presentation-quality hardcopy are covered.

Topics include:

- Custom libraries and menus
- Creating sets of shapes, symbols, and/or drawings, text
- MENU command
- Creating and modifying text fonts
- Macros and custom menus
- Adding Commands to AutoCAD
- AutoLISP interface for Artificial Intelligence functions
- Creating SCRIPT files
- System variables

Prerequisite is CAD 333 or very extensive AutoCAD use.

Who Should Attend: Lead draftspersons, lead engineers, those with specific or unique applications for CAD. Very helpful for any advanced user who wants to maximize system benefit.

Philip M. Kreiker, M.S.E.
Section 301: Mondays and Thursdays, July 29 and 30, 9 a.m.-4 p.m. 2 sessions. Computing Center 142. $240.
Applications on IBM
—continued

Database

CCA 235
Introduction to SAS—Statistical Analysis System
Intermediate Level
Get comfortable with the valuable business/research tool. We cover SAS language, processing data into SAS data sets, manipulating data, SAS procedures for analyzing, rearranging, displaying and summarizing data.
Otis Pratt, M.S.
Section 100: Fridays, June 5-26, 6:30-10 p.m. 4 sessions. Computing Center 114. $99.

CCA 370
Database Management: Applying dBase III+/IV
Intermediate Level
From a wealth of information, we need easy ways to extract and organize data for decision making and custom functions. dBase III+ and IV are powerful, productive systems for this use. This course covers the database concept, different ways to organize, access and report information; and how to develop applications for specific needs. We study special applications of dBase III+ and previous versions as they relate to version IV. Bring two double-sided/double-density 5¼ inch diskettes.
Clyde Getty, B.S.
Section 100: Mondays, June 1-29, 6:30-9:30 p.m. 5 sessions.
Computing Center 114. $165.

CCA 372
Advanced dBase III+/IV Applications
Intermediate Level
Explore advanced features of this powerful software. We cover multiple files, use of functions, total system design and, time permitting, automatic command file generation and other sophisticated features. Some programming background is required, plus familiarity with dBase, or CCA 370 as a prerequisite. Bring a double-sided/double-density 5¼ inch diskette.
Clyde Getty, B.S.
Section 100: Mondays, July 6-20, 6:30-9:30 p.m. 5 sessions.
Computing Center 114. $125.

CCA 375
dBase III+/IV for Programming
Specialized Level
Learn to use this powerful software for special custom applications. Topics include upgrade from dBase III to dBase IV. We focus on dBase IV, but dBase III+ users are accommodated. Some programming experience recommended, and familiarity with dBase commands. Bring a double-sided/double-density 5¼ inch diskette.
Clyde Getty, B.S.
Section 100: Mondays, July 27-August 10, 6:30-9:30 p.m. 3 sessions.
Computing Center 114. $96.

Desktop Publishing

CCA 377
Introduction to PageMaker Desktop Publishing
Novice Level
This intensive workshop addresses the basics of desktop publishing, including page layouts, creative formats, and type font styles. All work is done with a computer. We cover innovative type management and style issues, building art into page construction, and scanner technology in graphics and text. This hands-on course uses PageMaker extensively, with interactive demonstrations of other software. A course of great value whether you publish a club newsletter, restaurant menu or financial statements. Bring a 5¼ inch double-sided/double-density or high density diskette to class.
Bruce Frehner, M.A.
Section 100: Wednesdays, June 3-July 1, 6:30-9:30 p.m. 5 sessions.
Computing Center 114. $160.

CCA 386
Advanced PageMaker Desktop Publishing for the IBM PC
Intermediate Level
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 display 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 overall polished look of your work. Bring a 5¼ inch double-sided/double-density or high-density diskette to class.
Bruce Frehner, M.A.
Section 100: Saturdays, June 27-July 11, 9 a.m.-4:30 p.m. 2 sessions.
Computing Center 114. $160.

CCA 387
Ventura Desktop Publishing
Novice Level
Learn to use this popular software to enhance your ability to produce camera-ready originals, merging high quality typography with graphics. We cover publication of long documents, use of peripheral software programs for creating and manipulating text and graphics, file management, style sheet maintenance, and output devices. We study page design and typographic concepts. High quality printing of finished products is done in class. Bring a 5¼ inch double-sided/double density or high density diskette to class.
Bruce Frehner, M.A.
Section 100: Wednesdays, July 5-August 5, 6:30-9:30 p.m. 5 sessions.
Computing Center 114. $160.
Applications on IBM –continued

Computer Graphics

CCG 351
Computer Graphics Art I
Novice Level
The drawing board of the future is a computer screen. Hands-on understanding begins here. See what’s new, and do in-class work that lets you use the computer as a creative tool. A print is made of your best work. Four of the most recent bit-map and object-oriented packages are introduced. Software packages include: Micrograflx, CorelDraw, and Arts & Letters. These contain over 170 professional typefaces, ability to fit text to a curve, calligraphic pen shapes, special effects using H-D and airbrush with fountain fills. We cover creative use of graphics tools, font manipulation, instant layout, design considerations for logos and illustrations, and production of business graphics. Some exciting work and do some, too. Especially recommended for working professionals. Course counts toward the Certificate in Commercial Design. Bring a double-sided/double-density 5¼ inch diskette.
Jerry Reynolds, MSEEE
Section 100: Tuesdays, June 30-July 28, 6:30-9:30 p.m. 5 sessions.
Computing Center 142. $150.

CCG 361
Computer Graphics Art: Level II
Intermediate Level
This progressive course takes you to the next level of computer graphics skill. Gain hands-on experience solving design problems. We cover: making your own fill pattern, advanced illustration, grids, production from start to finish, portfolio preparation using color laser prints—even how to network for computer graphics jobs. We focus on drawings for high resolution output. Software used is an ideal tool for creating professional-quality art work, business graphic presentations, and technical illustrations. We review slides and videos presenting video-paint systems. Ideal for people in the visual arts, or anyone interested in this dynamic field. Course counts toward the Certificate in Commercial Design. Bring a double-sided/double-density or high density 5¼ inch diskette. prerequisite: CCG 351, comparable experience or instructor consent.
Jerry Reynolds, MSEEE
Section 100: Saturdays, August 1 and 8, 9 a.m.-4:30 p.m. 2 sessions.
Computing Center 142. $160.

Presentation Graphics

CCA 230
Introduction to Harvard Graphics
Novice Level
For IBM and IBM-compatible users, an excellent way to make data and graphic presentations more effective. Learn how to professionally display or document your output for presentations or printing. Create charts, graphs, lists, and explore personalized variations of program features. Bring a DOS-formatted 5¼ inch double-sided/double-density diskette.
Samten J. Nagarajan, B.A.
Section 100: Saturday, June 6, 9 a.m.-5 p.m. 1 session. Computing Center 142. $75.

CCA 212
Introduction to PowerPoint on the PC
Novice Level
Create presentations using Microsoft PowerPoint running on Windows. Topics include: designing the master slide, creating text and graphic charts, drawing objects and entering text on slides, editing objects and text, creating notes and handouts for presentations; pasting graphics from other programs; printing options.
Samten Nagarajan, B.A.
Section 100: Saturday, June 13, 9 a.m.-5 p.m. 1 session.
Computing Center 142. $75.

Software Applications on Apple Macintosh

General

CCA 215
Introduction to HyperCard
Novice Level
HyperCard is a self-contained programming environment for non-programmers that’s easy to learn and use, yet allows you to create very sophisticated custom applications. It facilitates the creation of databases the way word processing automates the creation of documents. In this beginning class we examine what the program does and the controls used to make it work. We work on developing a “stack” designed to show you many of HyperCard’s unique assets. Bring a standard 3 ½ inch diskette to class.
Greg McArthur, Ph.D.
Section 100: Saturday, June 20, 9 a.m.-4 p.m. 1 session.
Fine Arts C1B53. $75.

CCA 217
Advanced HyperCard
Intermediate Level
HyperCard is a “software Erector Kit,” allowing you to program your Mac to manage information in truly innovative ways. The power of the program comes from its English-like programming language termed “HyperTalk” and we spend most of the class learning to program (scrip) HyperCard stacks. We cover basic HyperTalk message handlers, properties, commands, functions, and operators. Prerequisite: CCA 215, comparable experience or instructor consent.
Greg McArthur, Ph.D.
Section 100: Saturday, July 18, 9 a.m.-4 p.m. 1 session. Fine Arts C1B53. $75.

Word Processing

CCA 378
Beginning Microsoft Word
Novice Level
Tap the full power of flexible, efficient word processing through mastery of Word, the leading Macintosh software package. Learn basics that enable you to produce practical business documents: editing, text/graphic interfaces, use of key features. Bring a 3 ½ inch diskette to class.
Steven A. Johnson, B.S.
Section 100: Wednesdays, June 17-July 8, 6:30-9:30 p.m. 4 sessions.
Fine Arts C1B53. $135.
Applications on Apple Macintosh—continued

CCG 351
Advanced Microsoft Word
Intermediate Level
Master the most popular advanced features of Word. We emphasize time-saving skills, formatting styles sheets, mail merge facility, formulas and how to produce professional-looking text. Prerequisite: CCA 578 or comparable experience. Bring a 3.5 inch diskette.
Steven A. Johnson, B.S.
Section 100: Thursdays, July 23-August 6, 6:30-9:30 p.m. 3 sessions.
Fine Arts C1B53. $99.

Spreadsheets

CCA 336
Excel Spreadsheet Productivity
Novice Level
Discover features that make Excel a powerful and easy-to-use productivity tool for the Mac and see how it works with other software. Learn the basics of spreadsheet design, including editing, formatting and printing a worksheet. Also: formulas and functions, the database, charting and graphing, and macros. Bring a 3.5 inch diskette to class.
J. Burke Taft, M.Ed.
Section 100: Mondays, June 1-22, 6:30-9:30 p.m. 4 sessions.
Fine Arts C1B53. $135.

Desktop Publishing

CCG 373
QuarkXPress for the Designer
Novice Level
The preferred desktop publishing software of professional graphic designers, XPress permits more precise type manipulation and more comprehensive treatment of illustrations and halftones with color separation. Its impact on the designer or production artist is dramatic as more work is produced in less time and last-minute changes are easier to handle. This course teaches proficiency and highlights the package's compatibility with related products like PostScript drawing programs, paint applications, scanners, image editing programs, word processors, and other page layout programs. Recommended text. Using QuarkXPress, available at University Book Center, UMC 10.
Tim Mehan
Section 100: Saturdays, August 8-15, 9 a.m.-5 p.m. 2 sessions.
Fine Arts C1B53. $160.

CCG 371
Introduction to Aldus PageMaker
Novice Level
Easy enough for the novice, yet comprehensive enough for the professional designer, PageMaker streamlines design, layout and production of any material, while putting the standard Macintosh interface to excellent use. Hands-on time is spent getting to know PageMaker, using the electronic drawing board, creating formats and master pages, placing text and graphics, editing your documents and creating your own masterpiece. Finished work is laser printed in class. Bring a 3.5 inch diskette to class.
Juliana Packer, B.F.A.
Section 100: Saturdays, June 27 and July 11, 9 a.m.-5 p.m. 2 sessions.
Fine Arts C1B53. $160.

Computer Graphics

CCG 356
Basic Macintosh Computer Art
Novice Level
Get hands-on experience with basic graphics techniques as we explore the program SuperPaint. Discover how to use this creative tool both for business and personal artistry. In the process, become familiar with bit-mapped and object-oriented design, and learn to produce camera-ready computer-generated images. We cover scanner technology and graphics, laser printing, color separations, logotypes, and more. Use the Macintosh SE with opportunities to work on the Macintosh II. Course counts as elective credit toward the Certificate in Commercial Design. Some Macintosh experience is assumed. Bring a 3.5 inch diskette to class.
Michael Nash, M.F.A.
Section 100: Tuesdays, June 30-July 28, 6:30-9:30 p.m. 5 sessions.
Fine Arts C1B53. $150.

CCG 365
Adobe Photoshop
Intermediate Level
Course focuses on image processing capabilities of Adobe Photoshop. Learn to use “standard photographic manipulation" of electronic images and how to create special effects using filters, paint tools, masking and image overlay. In addition, investigate output options such as color proofs and separations. Course is project oriented to allow hands-on experience. Prerequisite: some familiarity with a Macintosh paint program or photographic experience. Bring a 3.5 inch diskette to first class.
Michael Nash, M.F.A.
Section 100: Mondays, June 29-July 27, 6:30-9:30 p.m. 5 sessions.
Fine Arts C1B53. $150.

Lib Mach is says: "This is the first time I've ever touched a computer." She's taking the class because she "didn't want to be left behind by today's technology. I wanted to see what was going on." And, who knows? The knowledge may prove helpful in her volunteer work with Colorado Therapeutic Riding Center.
Help Yourself to Design Excitement.

Every day we are bombarded with messages and information. In this “noisy” environment, design becomes an increasingly effective communications tool. These courses address every aspect of the field: graphic and environmental design, publishing and illustration, advertising, cartooning and more. And provide useful information on career opportunities and strategies for approaching the job market.

Certificate in Commercial Design

Whether you’re an experienced professional or a newcomer, the Certificate in Commercial Design can be a career booster. This sequential program of short, intensive courses can fit into the busiest schedule. There are three parts to the program:

A. Required Courses:
   • The Commercial Artist: Design, Layout and Paste-up
   • Commercial Art II
   • Professional Illustration Techniques
   • The Artist Goes to Market

B. Four elective courses, to introduce you to design trends.

C. You must complete your own fully developed professional portfolio and have it professionally reviewed. Call 492-5148 to schedule your portfolio review.

After certification, many designers continue to take classes, to update skills. A transcript of your record is always available, free of charge.

Tuition varies according to the materials used and the length of time of each class. Tuition is listed at the end of each course description.

Course enrollments are limited and advance registration is required. Because commercial design classes are scheduled as intensive two- or three-session courses, no refunds can be given once the course has started.

Bring to class: a pencil, a ruler, a fineliner pen, X-acto knife, note paper, tracing paper, a 9” x 12” pad of bristol board—plate finish, a 4-ounce can of rubber cement, and a non-photo blue pencil. Other materials and workbooks are provided. If possible, you’ll also find it useful to bring work samples from your portfolio.

Commercial Design courses attract growing numbers of students like Marta Jackson who want to learn more about career opportunities.
Commercial Design

Commercial Art

CDD 210
The Commercial Artist I:
Design, Layout, Paste-up
For beginners, an introduction to important commercial art concepts and applied techniques, stressing how to break into the profession. We cover rough composition, layout, type selection, production of camera-ready art, choice of materials and basic illustration processes used in marketing and publishing. We emphasize development of finished commercial-quality work, portfolio presentation, and client interviews.
Jill Barton
Section 100: Saturday and Sunday, July 18 and 19, 9 a.m.-5 p.m. 2 sessions. Geology 114. $135.

Calligraphy

CDD 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 Barton
Section 100: Monday, Tuesday, Wednesday, July 20, 21 and 22, 5:30-10 p.m. 3 sessions. Geology 114. $135.

Illustration

CDD 330
Professional Illustration Techniques
The beginning illustrator seeking to enter the world of commercial illustration must be aware of specific market needs. This program introduces the illustrator to contemporary illustration techniques used for assignments with advertising agencies, book illustration firms, magazines, and newspapers. Drawing lab, lecture, demonstration, and workshop cover scratchboard processes, color technique, airbrush procedures, and photo retouching. Attendees complete final drawing samples for presentation to various markets.
Eric Teitelbaum
Section 100: Saturday and Sunday, July 11 and 12, 9 a.m.-5 p.m. 2 sessions. Geology 114. $135.

Special Fun Summer Courses for Young People...

CDD 100
Cartooning for Teens:
An Art Workshop for Young People
Fun and fascinating, this three-day workshop takes kids into the world of cartooning and gives them skills to create animals, people, and caricatures. For t-shirt art, posters, comic books and other special applications. Art lessons are integrated with music and drawing activities for a unique learning experience. Materials included.
Eric Teitelbaum
Section 100: Wednesday-Friday, July 8-10, 2-5 p.m. 5 sessions. Geology 114. $55.

CDD 104
Cartooning for Kids
Cartoons have always held a wide fascination for children, but have you ever wondered how they were created. This workshop especially created for children ages 8-12 deals with the world of funny images. Workshop, drawing activities, cover how to draw cartoon characters, expression, movement in creating illustrations for cartoon strips, the comic book art, greeting cards, T-shirt decorations, and a variety of other practical applications. An ideal learning experience for all interested young artists.
Eric Teitelbaum
Section 100: Wednesday-Friday, July 8-10, 9 a.m.-12 noon. 3 sessions. Geology 127. $55.
Help Yourself to a Change of Pace.

Henry Adams said, "What one knows is, in youth, of little moment; they know enough who know how to learn." These courses provide exciting opportunities to indulge an interest in learning—a habit that often leads to important insights and personal gain. A burst of creative energy. Or a new career direction. Our students routinely discover keen interests and untapped talents.

**Most classes have limited enrollment. Early registration assures your place in class.**

**NOTE: Classes will not meet July 3 for Independence Day.**

Tuition and classroom locations are listed at the end of each course description. Full refunds are given on request before the second class meeting for noncredit courses that meet five times or more; for courses that meet four times or less, requests must be made before the first class meeting. Requests for exceptions should be made in writing to the Director of Noncredit Programs. To register call 492-5148 or 1-800-351-2801.

Marti Nash (left) in conference with instructor Robert McCreary. As a working writer and a published author, his insights on fiction writing are right to the point. Marti, a graphic designer with an interest in writing children's books, says, "I'm very pleased — it's been stimulating, interesting and helpful."

Kathryn Black teaches a lively noncredit course called Telling True Stories, in which she teaches students to use techniques of fiction to write nonfiction. She says the class attracts people who are working on memoirs and family histories, and people who have had unusual experiences. A Boulder native and a CU graduate, she worked in New York for 10 years as a magazine assignment editor, and now writes for magazines like Good Housekeeping, Redbook, New Woman and Working Woman.
## Noncredit Courses, Summer 1992

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NC B 011  
Financial Planning for Couples  
The class will explore the difficulties of planning for two. Extensive materials help you understand your needs and the possibilities to achieve financial security.  
Laurie Hyland, C.F.P.  
Section 100: Wednesdays, June 5 and 10, 7-9:30 p.m. 2 sessions. Hellems 257.  
$50 per couple/$25 per person.

NC B 014  
Beyond Difficult: Handling the Challenge of Difficult People  
You can’t escape them. They are customers, co-workers, bosses, subordinates and family members. Learn to handle the difficult people in your life with confidence, humor and satisfying results.  
Carolyn Duff, M.A.  
Section 100: Saturday, June 27, 8:30 a.m.–12 p.m. 1 session. Hellems 229. $20.

NC B 015  
What Women Need to Know About Working With Men  
Forty-seven percent of the work force is made up of women. Yet women have traditionally been trained to work with men. Here’s what you need to know about relationship networks, competence expectation, cooperation and competition, and other issues. Through explanations, exercises, discussion, inventories and dramatizations, you will learn how to tap the strengths and eliminate the problems when women work with men.  
Carolyn Duff, M.A.  
Section 100: Saturday, June 20, 8:30 a.m.–12 p.m. 1 session. Hellems 229. $20.

NCFA 025  
Intermediate Field Photography  
This course is intended for those who possess a good general knowledge of the technical theories of photography, but would like a chance to achieve a greater working knowledge of the medium through assignments and field trips. Course will be structured with evening sessions for assignment explanation/review, and Saturday field trips where assignments are performed. (One Saturday field trip will be held at night.) Students should note that the course is accelerated and lasts only 3½ weeks with two classes per week. No lab work is involved. Topics covered include composition, fine tuning exposure, nighttime “existing light” photography, “painting” with light, indoor artificial light, various aspects of flash photography, simple portraiture, and filters. Prerequisite: Must have knowledge of your camera, f-stops, shutter speeds, and various methods of exposure. Equipment required: 35mm SLR camera which MUST have manual override capability, a tripod, a shutter/cable release, a flash with tiltable bounce head, polarizing filter, FLD filter, 81A filter. Film/developing cost estimate $50 to be paid by student.  
Greg Lamb, B.F.A.  
Section 100: Thursdays and Saturdays, July 9-30. Thursday classes 7-9 p.m. Saturday field-trips t.b.a. 7 sessions. Environmental Design 120. $90.

NCFA 001  
Basic Photography  
Learn to know and love your 35mm SLR camera. We cover mechanical functions, lenses and film, accessories, proper exposure (even nighttime and fireworks), good composition and portraiture techniques. No lab work. One field trip. Slides, lecture and discussion with helpful handouts. Optional text is Black and White Photography; Henry Horenstein.  
Greg Lamb, B.F.A.  
Section 100: Mondays and Thursdays, June 1-22, 7-9 p.m. Field-trip, Saturday, June 13. 8 sessions. Environmental Design 120. $90.

Ralph Vickery of Eldora is taking a couple of noncredit classes. He says both of his instructors “are very well prepared and conduct a lively class. It’s wonderful — these courses have opened up a lot of ideas for me.”
Fine Arts—continued

NCFA 005
Life Drawing
Using exercises in learning to see and respond, drawing the figure will become a skill that belongs to you. We progress from gestural to contour line drawings. Bring soft compressed charcoal, eraser, 18" x 24" newsprint pad, 2B pencil, black India ink, a 4 bamboo brush, charcoal pencil, white and brown Conte crayon, pen holder and point, soft pastels (optional). Tuition includes fees for a model, present at every session.
Barbara Paskorn, M.F.A.
Section 100: Wednesdays, June 3-July 8, 7-9 p.m. 6 sessions. Fine Arts N298. $85.

NCFA 020
Introduction to Drawing
Study basic concepts, line, shape, volume, texture and composition to learn skills of observation and self-expression that teach you the art of drawing. Bring pencil and sketch pad to first class.
Michael Mitchell, M.F.A.
Section 100: Mondays, June 22-July 20, 6-9 p.m. 5 sessions. Fine Arts C175. $85.

NCFA 028
Introduction to Painting
Working in acrylic, we cover the basics of color, composition, techniques and materials, exploring a variety of subjects. Bring to the first class: acrylic tube paints, 2-3 small brushes, a palette knife sturdy enough to mix paint, a palette, and a few (8½ x 11 or larger) sheets of heavy white watercolor paper. Later we will use stretched canvas, canvas board or masonite.
Michael Mitchell, M.F.A.
Section 100: Tuesdays, June 23-July 21, 6-9 p.m. 5 sessions. Fine Arts N105. $85.

NCFA 031
Collage
Discover the craft and history of collage in a one-day workshop. Create colorful art using paper, cloth, wallpaper and found materials. Bring a lunch. Supply list available from Continuing Education.
Brenda Wirth-Schott, M.F.A.
Section 100: Saturday, July 11, 9 a.m.-4 p.m. 1 session. Geology 127. $35.

NCFA 030
Book Binding
Learn to bind and repair books using ordinary tools and materials. We begin by taking a book apart and studying its components. Then we assemble one from scratch—folding and stitching its pages, shaping the book, adding end papers. We also look at books of other cultures.
Kyo Murray Green, M.F.A.
Section 100: Mondays, June 1-29, 7-9 p.m. 5 sessions. Geology 114. $60.

Foreign Languages

NCFL 100
Beginning Conversational French
Designed for beginners this class will build conversational skills using practical vocabulary. Language lab tapes demystify pronunciation. Text announced at first class.
Nadia Turk, Ph.D.
Section 100: Mondays and Wednesdays, June 1-July 1, 5:30-7:30 p.m. 10 sessions. Elements 229. $110.

NCFL 200
Intermediate Conversational French
Students should be able to use the present tense before taking this class. Increased vocabulary and speaking skills are stressed. Text to be announced at first class.
Nadia Turk, Ph.D.
Section 100: Tuesdays and Thursdays, June 2-July 2, 5:30-7:30 p.m. 10 sessions. Elements 229. $110.

NCFL 300
Advanced Conversational French
If you’re comfortable with basic French grammar (present and past tense) and want to work on real fluency, this class is for you. Future tense, conditional and subjunctive are introduced, and short texts are distributed at each class for discussion at the next class meeting. Emphasis is on building vocabulary and on using French more easily.
Nadia Turk, Ph.D.
Section 100: Mondays and Wednesdays, July 6-August 5, 5:30-7:30 p.m. 10 sessions. Elements 245. $110.

NCFL 102
Beginning Conversational Italian
Designed for beginners, we will stress conversation and useful vocabulary and explore Italian culture. Required text is Buongiorno Italia by Cremona, available at the University Bookstore.
Teresa Tieri, M.A.
Section 100: Mondays and Wednesdays, June 1-July 1, 6-8-8:30 p.m. 10 sessions. Elements 229. $110.

NCFL 203
Intermediate Conversational Italian
For students who have taken Beginning Italian and would like to learn more vocabulary, tenses and build speaking skills.
Required text is Buongiorno Italia by Cremona, available at the University Bookstore.
Teresa Tieri, M.A.
Section 100: Tuesdays and Thursdays, June 2-July 2, 6-8-8:30 p.m. 10 sessions. Elements 229. $110.

NCFL 103
Beginning Conversational Spanish
Basic but lively conversational Spanish for travelers. We stress practical vocabulary.
Elizabeth Medina, Ph.D.
Section 100: Tuesdays and Thursdays, June 9-July 2, 7-9 p.m. 8 sessions.
Elements 237. $90.

NCFL 202
Intermediate Conversational Spanish
An opportunity to build vocabulary and conversational ability and address cultural and social aspects. Prerequisite: Beginning Spanish or equivalent.
Elizabeth Medina, Ph.D.
Section 100: Wednesdays, June 10-July 29, 7-9 p.m. 8 sessions. Elements 251. $90.

NCFL 105
Beginning Conversational and Written Russian
For students with little or no knowledge of Russian. Conversational skills are stressed, but students will learn the Cyrillic alphabet and to read and write simple sentences. We cover grammar essentials, useful vocabulary and cultural aspects. From the first session, students will learn to use phrases, ask questions and master correct pronunciation.
Luba Pesin, M.A.
Section 100: Thursdays, June 11-August 6, 6-8 p.m. 8 sessions. Geology 114. $90.
No class July 2.
Investments

NC 1 001 Investing for Income
How much income can you make from investments? Learn to evaluate income-producing investments, from CDs through government and tax-free bonds, based on your personal tolerance for risk and need for liquidity.
Arnold Hart, M.A.
Section 100: Tuesdays, July 7-14, 6:30-8:30 p.m. 2 sessions.
Duane Physics 0021. $20.

NC 1 005 Introduction to Investing in Art and Antiques
Enter the world of galleries, dealers, antique furniture, collectibles, paintings and prints. Learn what gives a piece value. How to build a collection. Terminology. Questions to ask. Traps to avoid. How to protect your art and your investment.
Ruth Linton, Consultant in Contemporary Art.
Section 100: Tuesdays, July 14-21, 7-9 p.m. 2 sessions.
Duane Physics 0041. $20.

Lifestyles

NC 1 002 Eating As If Your Life Depended On It
Confused about diet and health? Become informed about dietary fiber, dietary fat and cholesterol, healthy weight control and vitamin and mineral supplements such as calcium. Learn why butter is better for you than margarine.
Peggy Phillips, M.Ed.
Section 100: Tuesdays, June 16-30, 7-9 p.m. 3 sessions.
Hellems 251. $30.

NC 1 014 Psychology of Intimate Relationships: How Intimate Relationships Work
An experiential workshop that tackles core issues—why relationships are hard to maintain; how and why people repeat old patterns with new partners; stages of intimacy; the function of power struggles, arguments, conflicts and affairs; falling out of love; how to evaluate a partner or potential partner.
Neil Rosenthal, Licensed Marriage and Family Therapist.
Section 100: Saturday, June 6, 10 a.m.-5 p.m. 1 session.
UMC 235. $40.

NC 1 024 Changing the Patterns in Your Relationships
The same attitudes that once protected you as a child may now be blocking your ability to form happy adult relationships. These childhood stances can create a chronic lack of self-esteem and sabotage your capacity for intimacy. This is a hands-on, experiential workshop for people who want to understand self-defeating behavior patterns. Come learn how to keep yourself healthy and fulfilled while in or out of a relationship, and learn what you might do to improve your relationships.
Neil Rosenthal, Licensed Marriage and Family Therapist
Section 100: Saturday, June 20, 10 a.m.-5 p.m. 1 session.
UMC 235. $40.

NC 1 029 Intimate Companions: Towards Creating Healthier & Happier Relationships
In a relaxed, comfortable and supportive atmosphere, we’ll address how to deal with conflicts and differences in a relationship; issues of trust and betrayal; relationships as mirrors, blaming and finger pointing; early warning signs of divorce; healing the wounded heart; evaluating a partner; enriching intimate relationships and keeping love alive.
Neil Rosenthal, Licensed Marriage and Family Therapist.
Section 100: Saturday, July 11, 10 a.m.-5 p.m. 1 session.
UMC 235. $40.

NC 1 032 Intimacy: The Search for Love
An evocative workshop for people who want to heal old wounds and cultivate more love and intimacy in their lives. Join us as we address why some people stay in relationships that aren’t good for them; how co-dependency and adult children issues affect intimacy; lessons relationships teach us; forgiveness; healing a wounded relationship, and owning your own power.
Neil Rosenthal, Licensed Marriage and Family Therapist.
Section 100: Saturday, July 25, 10 a.m.-5 p.m. 1 session.
UMC 235. $40.

NC 1 021 Speed Reading
Good news. Your mature thinking skills can help you become a more effective and efficient reader. You will learn helpful techniques for all kinds of materials, and ways to better remember what you read. Individual learning styles are also discussed.
Liane Brouillette, M.S.
Section 100: Mondays, June 8-July 13, 7-9 p.m. 6 sessions.
Hellems 263. $60.

NC 1 034 Study Smarter
Learning that takes place in college is self-directed not teacher directed. This course will focus on learning strategies that will cut your study time in half and increase effectiveness. Topics covered are: note taking, reading strategies, test preparation, concentration, time management and motivation/procrastination.
Sherry Snyder, M.A.
Section 100: Tuesdays and Thursdays, June 9-July 2, 7-8 p.m. 8 sessions.
Willard 309. $40.
Science

NCSO 003
The Universe
This basic course is designed to learn more about the sun, earth, planets, the birth and death of stars, the galaxy, the origin and evolution of the Universe, and the development of life on Earth. Fundamental concepts will be shared. Lectures will be illustrated by slides. Recommended text is *Cycle of Fire* by W.K. Hartmann.
Joe Romig, M.Sc., Ph.D.
Section 100: Wednesdays, June 3-24, 7-9 p.m.
4 sessions. Duane Physics 60021. $40.

NCSO 020
Evenings with the Stars
Enjoy constellation identification, learning and viewing motion of the planets and general discussion of the planets and stars. Outdoor star gazing will follow planetarium activities, weather permitting.
Katy Garmann, Ph.D., Director, Fiske Planetarium
Section 100: Thursdays, June 4-June 25, 7-9 p.m.
4 sessions. Fiske Planetarium. $65.

NCSO 016
Hands On Physiology: What People with Bodies Need To Know About Them
A basic view of human physiology as it pertains to our own health and fitness. Lecture and discussion work toward a general understanding of basic issues and then turn to specific systems (skeletal, joint, muscles).
Barbara Kelly, M.A.
Section 100: Thursdays, June 11-July 16, 7-9 p.m.
5 sessions. Ketchum 207. $50.
No class July 2.

Testing

NC T 490
Preparing for the Law School Admission Test (LSAT)
We address strategies for each section of the LSAT: writing sample, reading comprehension, logical reasoning, and analytical reasoning. Special focus is placed on demystifying the "logic games." Other sections deal with general test-taking strategies and how to conquer test anxiety. Students need texts at the first class—call for textbook information. Students register separately for the LSAT examination.
Melissa Mahaney, J.D.
Section 100: Saturdays, July 18, July 25,
August 1, 9 a.m.-2 p.m. Sundays, July 19,
July 26, August 2, 12-5 p.m.
6 sessions. Ketchum 119. $175.

Theatre and Music

NCTH 001
Behind the Scenes!
The Colorado Shakespeare Festival
Enjoy four plays in the beautiful outdoor theatre of the Colorado Shakespeare Festival (CSF). Each evening includes a backstage tour, lecture by CSF experts and the performance (orchestra seats). We'll see *All's Well That Ends Well, Henry V* and *The Winter's Tale* by Shakespeare and *The Rivals*, a non-Shakespearean play set in turn-of-the-century Colorado. Enrollment limited, no refunds. Registration deadline is Friday, June 26. Rain policy: Plays proceed unless conditions threaten players or audience. If a performance is cancelled before 10 p.m. because of weather, your ticket stub serves as a rain check.
Judith Bock, Ph.D.
Section 100:
Monday, July 6, *Henry V*
Wednesday, July 8, *The Winter's Tale*
Sunday, July 12, *All's Well That Ends Well*
Wednesday, July 15, *The Rivals*
Lectures at 6:45 p.m. Hellem's 229. $85.

David Cole, Louisville, reflects on a concept in a creative writing class. He says the class is "great — it gives me stimulation to write."
NC W 008
Short Story Writing
Designed for both beginning and experienced writers, this course will cover all aspects of writing the short story, including characterization, plot, setting, theme, and developing one's own style and voice. We will use a workshop format where students will bring their stories-in-progress to class to receive helpful editorial suggestions. The course will also include discussion of the marketplace and how to prepare and submit manuscripts for publication. The recommended text is *American Short Story Masterpieces*, edited by Raymond Carver and Tom Jenks. Robert McTeerley, M.F.A.
Section 100: Thursdays, June 4-July 23, 7-9 p.m. 8 sessions. Muenzinger D156. $80.

NC W 033
Writing for Direct Mail
We dissect the whole direct marketing process and focus on how to create powerful communication. We cover writing steps, 40 questions to ask yourself before you begin to write, a formula for sure-fire results, tips for writing fund-raising copy, five frequent mistakes, and more. Guest speakers discuss fulfillment, list rental and graphic design. Debra A. Jason, M.A., Copywriter
Section 100: Tuesdays, June 9-July 14, 5-45-7-45 p.m. 6 sessions. Hellem's 81. $60.

NC W 035
Is There a Book in You?
For people who have a promising idea for a book. We talk about how to develop a book idea and how to research and write a book proposal. Other important issues: how to approach a publisher, whether you need an agent, source material, rights and contracts. Kathryn Black, M.A.
Pamela Novotny, M.A.
Section 100: Saturday, June 27, 9 a.m.-4 p.m. 1 session. Hellem's 267. $40.

NC W 015
The Journal: A Genre of Self-Discovery
This workshop is for those wanting to learn why and how to keep a journal. For those already journaling, it will present new techniques and offer support for the process. Journaling provides a way to understand the past, discover the present and create the future. The creative techniques presented may be applied to writing projects, changing directions in living, solving problems and enjoying the here and now. Tristine Rainer's *The New Diary* is an optional text for the class. Kaye Bache-Snyder, Ph.D.
Section 100: Mondays, June 1-29, 6-30-8 p.m. 5 sessions. Hellem's 251. $40.

NC W 037
Short Writing Forms: A Workshop
Aspiring and emerging writers will benefit from this workshop. You will experiment with short forms of poetry and prose poems, vignettes, fables, personality sketches, anecdotes, how-to-copy and short stories. Enjoy the satisfaction of completing work and review markets for it.
Kaye Bache-Snyder, Ph.D.
Section 100: Thursdays, July 2-30, 6:30-8 p.m. 5 sessions. Hellem's 251. $40.

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 covers types of books, market trends, illustration techniques, portfolio//manuscript development and submission, book production/printing (including artwork/te preparation), agents, contracts, awards and self-publishing. For writers or illustrators.
Sandy Ferguson Fuller, Professional Illustrator.
Section 100: Saturday, June 13, 9 a.m.-4:30 p.m. 1 session. Economics 119. $40.

NC W 018
Writing the Novel
This one-day seminar will focus on how to write the novel today's readers—and movie producers—will buy. It will include: How to get ideas. How to structure, plot and pace. How to make characters come alive inside and out. How to select and control viewpoint. How to use dialogue. How to slant for today's book and movie market. How to get an agent.
Jenny Earl Brown, Professional Writer.
Section 100: Saturday, July 18, 9 a.m.-4 p.m. 1 session. UMC 250. $45.

NC W 029
Usage and Grammar: Guidelines and Rules for Everyday Use
In a workshop setting, learn simple rules for avoiding spelling, punctuation and usage errors in writing. Review grammar rules and when to break them. Improve your speaking skills as well as your ability to write clear, concise memos, letters and business documents.
Michael Foley, M.A.
Section 100: Saturday, June 13, 9 a.m.-12 p.m. 1 session. Hellem's 245. $15.

NC W 031
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 materials, 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 100: Mondays, June 1-July 6, 9 a.m.-4 p.m. 6 sessions. Duane Physics G116. $65.

NC W 032
Write With Power
This is an intensive workshop on business writing. Emphasis is placed on choosing the exact word, building sentences and paragraphs, organizing material, and rewriting with purpose. We will discuss applying professional writing techniques to letters, memos and reports.
Margaret Coel, Business Writer.
Section 100: Saturday, June 6, 9 a.m.-4 p.m. 1 session. Business 250. $40.

NC W 040
Environmental Writing
Through their craft, writers can make a powerful contribution to environmental awareness. Learn how to communicate your concepts in letters to the editor, essays and investigative pieces. We collaborate on a class project, but students are also encouraged to complete individual assignments. Learn to develop your writing skill in alignment with your own values and benefits.
Naomi Rachel, M.A.
Section 100: Mondays, June 1-July 6, 7-9 p.m. 6 sessions. Duane Physics G116. $65.

NC W 041
Telling True Stories
All around us are stories worth telling. In this seminar, we use fictional techniques to enhance nonfiction writing. Learn the elements of dramatic narrative and how to use them in short pieces or books. Also—how to spot a good idea, ways to engage the reader and keep the story moving, dialogue, plot and character development.
Kathryn Black, M.A.
Pamela Novotny, M.A.
Section 100: Saturday, June 13, 9 a.m.-4 p.m. 1 session. Duane Physics G116. $40.
Help Yourself to the Teleconference Solution.

With increasing fares and tighter budgets, business travel just isn’t what it used to be. Business leaders from coast to coast are trimming travel budgets through creative use of video teleconferencing. Enthusiastic users point to the convenience and quality of teleconferences and to the efficiency and value this approach creates.

Must-Know Topics

Teleconferences cover a wide range of topics, providing useful information for people whose livelihood depends on current knowledge and effective training. Topics include business management, marketing, global trade, small business skills, new industrial and information technologies, government policies and requirements, advances in engineering, human resources issues, health care issues, and professional development skills.

Excellent Facilities

Most teleconferences are presented during daytime hours at the Coors Events/Conference Center on the Boulder campus, near the corner of Colorado Avenue at Regent, one block west of 28th Street. Featuring six large meeting rooms and an 11,000 seat arena, the Events Center can accommodate a variety of groups. The large-screen G.E. Talaria projection system is capable of receiving programming from virtually all of the present generation communication satellites. We also have a portable antenna that receives presentations via the newer Ku-band frequency which can be transported to workplace sites.

Fees and Parking

Fees vary, but usually include materials, refreshments, parking and lunch. Group rates are available on a program-by-program basis. Parking is available in the parking structure just north of the Events Center. Parking permits and maps are sent to those who register in advance.

Lively Interactive Workshop Format

U S-Boulder teleconferencing utilizes a live talk-back format featuring national teams of presenters and panels who represent the leading edge in their fields. A typical video teleconference is led by an on-site team of experts. Live-via-satellite presentations are reinforced by detailed agendas, workbooks, texts and worksheets. Throughout the day there are question/answer sessions with the teleconference presenters, interspersed with on-site presentations and demonstrations. The on-site team wraps up the session with a local and regional perspective on the subject, and answers any remaining questions.

Scheduling Information

Because they are live, teleconferences are often scheduled just a few weeks in advance. We are continually adding events to our schedule. To stay current, 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 492-5168. You may call toll free from outside the Denver/Boulder area by dialing 1-888-531-2801. For information on in-house programming, please call 303-492-6596.

Upcoming Teleconferences

May 14 ... Marketing to Compete
May 19 ... Inexpensive Justice: Boosting Business Revenues by Using the Small Claims Court
May 28 ... Environmental Issues and Impact to Engineers
September 30 ... Emerging Technologies: Will Your Company Be Ready?
Real Estate Education Program

Help Yourself to Career Momentum.

These college level courses can give you a useful overview of the real estate field, or help you acquire knowledge to advance your real estate career. Instruction, open to all interested individuals, covers the following areas of study:

- Continuing Education courses for current Real Estate Licensees
- Real Estate Sales and Broker Licensing courses
- Licensed Appraiser courses
- Courses in Property Management, Closings, Water Law, Commercial and Investment Properties, Computer, Foreclosure, and other real estate subjects.

For information about the complete statewide real estate schedule call 492-8666 and ask for the current Real Estate Brochure.

Real Estate
Continuing Education Law—1990
The Colorado Legislature passed House Bill 90-1131 concerning continuing education requirements for licensed real estate brokers and salespersons. The law requires that each licensee complete an 8-hour mandatory course with exam and fulfill the remaining 16-hour requirement with qualified elective courses. For persons renewing or reinitiating an active license the following classroom hours are required for each renewal period:

January 1, 1993 16 hours (8 mandatory—8 elective)
January 1, 1994 24 hours (8 mandatory—16 elective)

For the current schedule call 492-8666 and request the Real Estate Brochure.

1990 Real Estate Appraiser's Law
The Colorado Legislature passed Senate Bill 90-34 to regulate the Real Estate Appraisal Industry. This law requires appraisers to be licensed by July 1, 1991. To become licensed in Colorado see the following qualifications required by the new law.

Licensed Appraiser (Now Federal) or Licensed Assessment Appraiser:
Applicants shall have had at least 55 clock hours of appraisal education and pass a state exam.

Licensed Appraiser:
Applicants shall have had at least 95 clock hours of appraisal education, 2 years of appraisal experience as approved by the Appraisers Board and pass a state exam.

Certified Appraiser:
Applicants shall have had at least 165 clock hours of appraisal education, 3 years experience as approved by the Appraisers Board and pass a state exam.

For the current schedule call 492-8666 and request the Real Estate Brochure.

Colorado Real Estate 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, $125.
(2) NCRE 28—Closings and Trust Accounts, 24 hours, $125.
(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) Tuesdays and Thursdays, June 2-July 21, 6:30-9:55 p.m.
Location: Engineering Center CR 1-46, Boulder Campus.
Tuition: $255 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 counterproposal. Special emphasis will be placed on understanding each clause and on properly completing each type of contract.
Section 401: Night Course. 7 sessions.
Tuesdays and Thursdays, July 23-August 13, 6:30-9:55 p.m.
Location: Engineering Center CR 1-46, Boulder Campus.
Tuition: $125 plus text $16.

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: 3 sessions. Wednesday, Thursday, Friday, June 17, 18, 19, 8:30 a.m. - 5:30 p.m.
Instructor: Lorraine Roemer, C.R.S., C.R.B., Broker Associate, First Realty, Longmont.
Location: Longmont Board of Realtors, 420 Kimbark, Longmont.
Tuition: $125.

NCRE 100
Required Real Estate
Continuing Education Course
NCRE 103 to 155
Elective Real Estate
Continuing Education Courses
NCRE 200 to 225
Appraisal License Courses
Call 492-8666 and request a current Real Estate brochure.
Help Yourself to Special Professional Programs.

These are focused, interactive workshops for people who need to stay on top of new developments in rapidly evolving fields. Our workshops present new knowledge and its applications in practical, real-life terms. Each one has been designed for this market, to offer fresh thinking geared to the achievement of personal and organizational goals. These programs are designed for people who are concerned about productivity and results — in business, industry, government and nonprofit organizations.

Registration. To register, call 303-492-5148 or toll free outside the Denver Metro Area, 1-800-331-2801. Group discounts are available in some cases.

<table>
<thead>
<tr>
<th>NCPS 001</th>
<th>Preventing Miscommunication</th>
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<tbody>
<tr>
<td>Errors in communication range from the merely humorous to the truly tragic. Over the next 15 years, the demographic character of the U.S. will diversify dramatically — creating even greater opportunities for misunderstanding. Learn to identify patterns of miscommunication, increase clarity and prevent costly communication errors. Course fee includes all materials, refreshments, lunch and parking.</td>
<td></td>
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<tr>
<td>Vicki Hamer, Ph.D., Communications Consultant</td>
<td></td>
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<tr>
<td>Section 100: Friday, June 5, 9 a.m. – 4 p.m. 1 all-day session. Coors Events/Conference Center. $150.</td>
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<thead>
<tr>
<th>NCPS 002</th>
<th>Personal Essay and Memoir Writing</th>
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<tr>
<td>Learn to trust your intuition and instincts when writing. Discover the power of &quot;writing practice&quot; using Natalie Goldberg’s &quot;Writing Down the Bones&quot; approach. Instruction in using specific details will be given to make your writing come alive. Other techniques are drawn from examples of both fiction and non-fiction works. Lunch not included.</td>
<td></td>
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<tr>
<td>Deidre Elliott, Professional Writer</td>
<td></td>
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<tr>
<td>Section 100: Saturday, June 27, 9 a.m. – 4 p.m. 1 all-day session. Woodbury 106. $90.</td>
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<tr>
<th>NCPS 003</th>
<th>Motivating and Managing People</th>
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<tr>
<td>Employee motivation directly impacts productivity and bottom line profits. This seminar teaches practical skills related to motivation, communication, leadership and time management, to improve work group and organizational effectiveness. An exciting learning process makes the material come alive and sends you back to work equipped to create results. Course fee includes all materials, refreshments, lunch and parking.</td>
<td></td>
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<tr>
<td>Randy Bauer, M.B.A., Communications Consultant</td>
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<tr>
<td>Section 100: Friday, July 17, 9 a.m. – 4 p.m. 1 all-day session. University Computing Center, Room 123. $150.</td>
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<tr>
<th>NCPS 004</th>
<th>Cultural Diversity and the Workplace</th>
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<tr>
<td>Cultural diversity is more than a buzz word — it is a reality of the 1990's. Diversity is valuable but the process of change may be difficult. Learn about the challenges of diversity in the workplace. Course fee includes all materials, refreshments, lunch and parking.</td>
<td></td>
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<tr>
<td>Isidro Rubi, Ph.D.</td>
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<tr>
<td>Section 100: Friday, June 19, 9 a.m. – 4 p.m. 1 all-day session. Coors Events/Conference Center. $150.</td>
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<tr>
<th>NURS 6153</th>
<th>(3 graduate credit hours)</th>
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<tbody>
<tr>
<td>NURS 4727</td>
<td>(3 undergraduate credit hours)</td>
</tr>
<tr>
<td>CNE 400</td>
<td>(4.5 CEUs)</td>
</tr>
<tr>
<td>Center City, USA</td>
<td></td>
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</tbody>
</table>

A Management Course for School Health Professionals

Using the hypothetical town of Center City, we address the problems faced by school nurses and other school health professionals. We use simulations, case studies and other exercises to examine organizational behavior, strategic planning and leadership. You will learn how to conduct and interpret a needs assessment for your own school; how to develop a school health program; establish a school health council; and manage policies and procedures for special health needs.

This class is available for graduate, undergraduate, and CEU credit. CE activity is approved by the Colorado Nurses’ Association. CNA is accredited as an approved of CE for nursing by the American Nurses' Association’s Board on Accreditation. Attendance at all class sessions is required. Use credit registration form on page 39.

Judith Igoe, R.N., M.S., FAAN, Director of School Health Programs and Associate Professor, School of Nursing, University of Colorado Health Sciences Center.

Section 712: July 13-17, 8:30 a.m. – 5 p.m. 5 sessions.
3 graduate credit hours, $306, NURS 6153;
3 undergraduate hours, $335, NURS 4727;
4.5 CEUs, $275, CNE 400
Location: School of Nursing Health Sciences Center.
Help Yourself to Independent Study.

Help Yourself to Independent Study

Independent Study offers unique opportunities for learning. Correspondence Instruction and Individualized Instruction allow you to choose your own time and place for learning, freedom not offered in other academic situations. No need to wait for a term to begin. Register anytime. Work at your own pace.

Busy people use courses by Independent Study to earn university credit, to fill graduation requirements, to meet recertification needs, to polish professional skills, to solve schedule conflicts and to enrich their lives.

College Credit Opportunities

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 telephone. Some courses use multimedia materials. Courses may be taken pass/fail or for no credit.

More than 70 college credit courses, approved by the University, are offered in 16 academic areas:

- anthropology
- business
- economics
- education
- engineering
- English
- fine arts
- geography
- history
- kinesiology
- mathematics
- music
- philosophy
- political science
- psychology
- sociology

Individualized Instruction

Individualized Instruction provides an opportunity to earn college credit 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 Opportunity: Real Estate Education

Noncredit courses are offered to meet the educational requirements for licensing for real estate salespeople and brokers. All course work is by correspondence. The courses are developed and graded by instructors who have both academic and professional qualifications.

High School Opportunities

High School Correspondence

These courses provide opportunities for students to meet college entrance requirements, to accelerate graduation, or to meet high school graduation requirements.

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
1-800-331-2801 (Toll Free)
Help Yourself to Fluency.
International English Center

Help Yourself to Fluency

A member of the national consortium of University and College Intensive English Programs (UCIEP), the International English Center (IEC) provides year-round intensive English-language instruction, cultural orientation, and academic-placement counseling for non-English-speaking students who are planning to enter degree programs in the United States.

The Center places students in six proficiency levels, from introductory to advanced. In 25 hours of classwork each week, attention is paid to all the language skills (listening, speaking, reading, and writing). Students also learn the study skills necessary for undergraduate or graduate academic work. At the advanced levels, students may participate in University of Colorado credit courses or in special career-related Continuing Education certificate programs.

The Center’s eight-week (half-semester) sessions are suitable, too, for tourist visitors seeking full-time study in general English combined with intercultural enrichment.

... for Career Advancement

Among recently arrived new residents now working in Colorado—as for many temporary visiting employees—English is an unfamiliar medium of communication. Adequate English-language proficiency is a vital key to satisfactory interaction in any English-speaking workplace.

For speakers of English as a second language, the International English Center offers evening classes in speaking and writing contemporary English, designed to foster effective interpersonal exchange on the job and in the community.

NCFL 900
English for Speakers of Other Languages

This combined-skills course is taught at the intermediate to advanced level and emphasizes practical English appropriate to the personal and professional needs of the participants. The instructor provides study materials.

Ellen Polsky, M.A., is an experienced language teacher who has worked as ESL Coordinator for UCE’s Department of Linguistics, where she is completing a Ph.D. degree. She currently holds a full-time appointment as an academic coordinator for the intensive program at the International English Center.

Section 100: Mondays and Wednesdays, June 22-July 29, 6:30-8:30 p.m. 12 sessions. $120.
IEC Classroom OA1, 1230 Grandview Avenue.

For further information, write or call the IEC directly:

International English Center
Campus Box 63
Division of Continuing Education
University of Colorado at Boulder
Boulder, Colorado 80309-0063
Telephone: (303) 492-5547
Fax: (303) 492-5515

From 8 a.m. to 5 p.m. daily, you may visit the Center’s offices, just one block north of the Division of Continuing Education buildings, at 1353 Grandview Avenue.

To register for NCFL 900, contact the Division of Continuing Education. (See Page 36 for Four Ways to Register.)
CATECS

Help Yourself to Advanced Training in Engineering and Computer Science (CATECS)

The Center for Advanced Training in Engineering and Computer Science (CATECS) provides the best of both worlds—the quality of University of Colorado graduate courses combined with the convenience of video classes at the jobsite.

- **Efficient:** Take live, televised classes with two-way audio at your own workplace, or receive videotapes.
- **Up-to-Date:** Keep current with the fast pace of change in your field.
- **Flexible:** Take courses for professional development for credit or noncredit. Or work toward a master's degree in computer science, telecommunications, or engineering fields—aerospace, civil & environmental, electrical & computer, engineering management, mechanical, and software engineering.

In the past year, CATECS delivered over 60 courses to about 700 students at over 100 different worksites. Many students work at companies up and down Colorado's Front Range that are set up as "live sites." Classes are broadcast simultaneously as they are taught on campus, and students participate via two-way audio interaction. Those who are not able to attend live broadcasts watch courses on tape.

### Proposed Summer 1992 Courses

<table>
<thead>
<tr>
<th>Number</th>
<th>Course</th>
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<tbody>
<tr>
<td>Aerospace</td>
<td>H-Infinity Control of Multivariable Systems</td>
</tr>
<tr>
<td>ASEN 5526</td>
<td>Wave Mechanics</td>
</tr>
<tr>
<td>ASEN 5519</td>
<td>Leadership and Management</td>
</tr>
<tr>
<td>EMEN 5020</td>
<td>Telecommunications Standards</td>
</tr>
<tr>
<td>Engineering Management Program</td>
<td>Engineering Contracts</td>
</tr>
<tr>
<td>EMEN 5050</td>
<td>Introduction to Telecommunications System Theory</td>
</tr>
<tr>
<td>MGEN 5126</td>
<td>Radio, Mobile and Secure Communications</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>Applied Statistics for the Manufacturing and Process Industries</td>
</tr>
<tr>
<td>*TLEN 5190</td>
<td>Special Offering</td>
</tr>
<tr>
<td>TLEN 5300</td>
<td>Engineering Contracts</td>
</tr>
<tr>
<td>TLEN 5510</td>
<td>CVEN 5246</td>
</tr>
</tbody>
</table>

*Classes begin June 8 and end July 10. All other classes begin June 8 and end July 31.*

### Registration:

Call CATECS for a catalog with registration materials and tuition rates. Registration period: May 1-15 (late registration fees after this date).

### Fall Preview

Fall semester will offer over 30 courses in all engineering fields, including Aerospace, Civil, Computer Science, Electrical, Engineering Management, Mechanical, and Telecommunications. Classes begin August 26.

Registration period: July 15-August 7.

Call CATECS to receive a Fall Catalog in June.

### CATECS Tape Library

The new CATECS Tape Library makes it possible to view selected courses for a three-year period after they were originally taught. Videotapes can be rented for 16 weeks or purchased. Instructor handouts are included when available. Tape Library courses are primarily intended for a noncredit review of the material. There is only a single fee for a company site to rent or buy a Tape Library course, no matter how many employees watch the tapes. There are currently over 45 courses as well as three special seminars now in the Tape Library, in all engineering fields. Call CATECS for a current list of available tapes.

For more information about CATECS courses, the Tape Library, and special seminars, contact:

CATECS
Campus Box 435
University of Colorado at Boulder
Boulder, CO 80309-0435
(303) 492-6331
Fax 492-5987
During any special event, Continuing Education students shall present their registration receipt to obtain parking at no extra charge (Parking Regulation III-D-6a.)

- Free parking after 5 p.m., and Saturdays
- $1.00 parking after 5 p.m., and Saturdays (bring 4 quarters)

Free
$1.00
$1.00
$1.00
$1.00
$1.00
$1.00
$1.00
$1.00
Four Ways to Register

1. **Register by mail.** A postage-paid envelope is located in this catalog. Registration forms are on page 37 for noncredit and certificate, page 39 for credit.

2. **Fax your registration.** Fast and easy. Day or night to (303) 492-3962. Send both front and back of page 37 for noncredit and certificate courses. Send both front and back of page 39 for credit courses.

3. **In person.** Come to the Continuing Education Office, 1221 University Avenue, between 8:30 a.m. and 5:30 p.m. Monday through Thursday (8:30 a.m. to 5 p.m. Fridays).

4. **Register by phone, using Discover, Visa or MasterCard.** Note: this applies only to noncredit and certificate courses. Complete the registration form (page 37) and have your credit card information handy. Then call 492-5148 or 1-800-331-2801.

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

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Where Are Courses Given? Course locations are given at the end of each course description. Many campus parking lots offer $1.00 parking after 5 p.m. and on Saturdays. Some are free evenings and weekends. The Campus Map gives both building and parking lot locations. To skip parking altogether, take the RTD bus to campus.

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 with convenient evening hours.

- **Independent Study Programs**
  - Independent study by correspondence and individualized instruction lets you learn at home.

- **Center for Advanced Training in Engineering and Computer Science (CATECS)**
  - Earn a Masters degree or graduate credit with courses televised live to your worksite.

Professional Enhancement: Certificate Programs To polish skills or acquire new ones, enhance a career or explore another field, Continuing Education offers a full spectrum of programs. Or earn a Certificate in:

- **Business and Technology Leadership**
- **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, means no tests, no grades, and no prerequisites. Yet noncredit courses, encompassing both personal and professional interests, are taught by highly qualified instructors. Enjoy non-competitive learning with others who share your interests.

Professional Development Programs for working professionals, to build skills and enhance your understanding of business today.

- **Real Estate Education Program**
- **Special Professional Programs**
- **Video Teleconferencing**

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.

Severe Weather Classes are held when scheduled. The Chancellor closes the campus only because of extreme weather conditions. Closings are announced on local radio stations. Or call 492-5700 for campus closing information.

Other Questions? Problems? Special Needs? Disabled individuals should feel free to call our registration staff for special needs and arrangements. We will gladly assist you.

Books and supplies required for all courses are available at the University Book Center in the basement of the University Memorial Center on campus.

Call us at 492-5148 or 1-800-331-2801 if you need help or additional information. You can reach us between 8:30 a.m. and 5:30 p.m. Monday through Thursday or until 5 p.m. on Friday.
Registration for Certificate and Noncredit Courses

PLEASE PRINT

S.S. No. # ________________________________

Former Student Number ____________________________

Birthday ___________________________ Month/Day/Year

Mr. ___________________________ Ms. ___________________________ M (Middle Initial) ___________________________ Mrs. ___________________________ Name ___________________________

Mailing Address ___________________________ Home Telephone ___________________________

City ___________________________ State ___________________________ Zip ___________________________

Business Name ___________________________

Business Address ___________________________ Office Telephone ___________________________

City ___________________________ State ___________________________ Zip ___________________________

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

Campus ___________________________ Term ___________________________ Year ___________________________ of most recent attendance.

It is not necessary to be a candidate for certification in order to enroll in certificate program courses.

Please check the appropriate box for registration for candidacy to the following programs.

☐ Management Development Certificate Program

☐ Certificate in Business and Technology Leadership

☐ Certificate in Computer Applications

☐ Certificate in Commercial Design

This application signifies my intention of pursuing a course of study leading toward the program indicated above.

Signature ___________________________ Date ___________________________

Print name as desired on certificate ___________________________

Course No. ___________________________ Section No. ___________________________ Course Title ___________________________ 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 ☐ Discover ☐ (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).
Save Time and Money—Use the Postage-Paid Envelope in the Center of this Catalog to Mail Your Registration Form.

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: ____________

Optional Request for Non-Disclosure of Directory Information
Division of Continuing Education
University of Colorado at Boulder

Under the provisions of the Family Educational Rights and Privacy Act of 1974 (the "Buckley Amendment"), you have the right as an enrolled student to refuse disclosure of personal information such as name, address, and telephone number which has been designated "Directory Information." Please complete the appropriate section of this form if you wish to change your status designation.

___ I request that Directory information NOT be released. I understand that non-disclosure status will be carried forward through all terms I attend until I file a written request to remove it.
___ I had previously selected non-disclosure status. Change my disclosure status so that Directory Information can be released.

Student Name (Print): __________________________ Date: ____________

Student #: __________________________ Date: ____________

Student Signature: __________________________
Credit Registration Form

UNIVERSITY OF COLORADO
DIVISION OF CONTINUING EDUCATION

PROGRAM / TERM

Last Name

First Name

Middle Name

Former or Maiden Name

Suffix

Mailing address

No. and Street, Apt. No.

City

State

Zip Code + 4

Phone

Employment address

No. and Street, Apt. No.

City

State

Zip Code + 4

Phone

BIRTHDATE

SEX:

- Male

- Female

ETHNICITY:

- American Indian or Alaskan Native

- Asian or Pacific Islander

- Black

- Caucasian/White

- Hispanic

- Other

I do not wish to provide this information

CITIZENSHIP:

- U.S. Citizen

- Non-U.S. Citizen/Permanent Resident

- Not a U.S. Citizen - Country

- List Type of Temporary Visa

RESIDENCY:

- Colorado

- Other State

- Non-veteran

- Veteran

- Active Duty

MARRITAL STATUS:

- Single

- Married

1. Do you have a high school diploma or a G.E.D. Certificate? ☐ No ☐ Yes

2. Have you ever taken credit at another college? ☐ No ☐ Yes

3. Are you currently enrolled at any college? ☐ No ☐ Yes

4. Do you have a degree? ☐ No ☐ Yes

5. Do you have a college degree? ☐ No ☐ Yes

6. Have you ever been convicted of a felony? ☐ No ☐ Yes

Select a reason for not attending: [ ] Personal reasons [ ] Financial reasons [ ] Change of career [ ] Other

SELECTIVE SERVICE REGISTRATION CERTIFICATION:

☐ I certify that I am registered with the Selective Service

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

□ I am a female

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

□ I have not reached my 18th birthday.

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

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

Title(s) of course(s) for which you are enrolling:

Location

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

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

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

Date of continuous physical presence in Colorado (mo./day/yr.)

Dates of employment in Colorado (mo./day/yr.)

List exact years for which Colorado income taxes have been paid.

Dates of extended absences from Colorado of more than two months within the past two years (mo./day/yr.)

Dates of active duty military service, if applicable (mo./day/yr.)

Dates stationed in Colorado (mo./day/yr.)

Date of your marriage, if applicable (mo./day/yr.)

Date current Colorado driver's license, if applicable (mo./day/yr.)

Issue date of previous Colorado license, if applicable (mo./day/yr.)

List exact years of Colorado motor vehicle registration

Dates of Colorado voter registration (mo./day/yr.)

Dates of ownership of any Colorado residential property (mo./day/yr.)

Are your parents separated or divorced? Yes ☐ No ☐

□ PARENT ☐ GUARDIAN ☐ SPOUSE

I hereby certify that to the best of my knowledge the information furnished on this application is true and complete without evasion or misrepresentation.

Student's Signature

dated

The University of Colorado is an Affirmative Action/Equal Opportunity Educational Institution.
Save Time and Money—Use the Postage-Paid Envelope in the Center of this Catalog to Mail Your Registration Form.

Optional Request for Non-Disclosure of Directory Information

Division of Continuing Education
University of Colorado at Boulder

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I had previously selected non-disclosure status. Change my disclosure status so that Director Information can be released.

Student Name (Print):

Student #: Date:

Student Signature:

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, please enclose the following information.

Charge: VISA □ MasterCard □ Discover □ (check one)

___________/___________/___________/___________

Expiration Date: __________/___________

Print cardholder’s name, as it appears on the charge card.
Help yourself!

The markets are full of summer's bounty. The air is full of warm, sweet scents. Anything is possible. Your imagination catches a thermal and soars above the foothills. Indulge! If you've been resisting an urge to learn Russian, write a book, become an artist or try your luck in international markets... stop resisting and start learning how to make it happen. The table is set for a summer feast. And you're invited. So help yourself to a summer to savor.

To register, call 492-5148 or 1-800-331-2801.