# COMMUNITY COLLEGE OF DENVER



LIFE!

2002-2003

CATALOG

# EXPERIENCE FOR YOUR

C C D . R I G H T C H O I C E . O R G



Member of Colorado Community College System





CATALOG 2002-2003



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CCD North 6221 Downing St. Denver, CO 80216 Phone 303-289-2243 Fax 303-289-1044

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# TELEPHONE DIRECTORY

Academic Support Center
Admissions, Registration and Records
Auraria Interfaith Center
Auraria Operator
Book Center, Auraria
Cashier
Campus Closure
Campus Police and Security
Campus Recreation
Career Services
Cashier
Center for Business and Technology303-556-2487

# Accounting, Business & Industry Services,

Business Administration, Business Technology, Computer Training for People with Disabilities,

Center for Educational Advancement ... 303-556-8455 Academic Support Center, Child Development Center, Developmental English, Developmental Math, Early Childhood Education, Education & Paraeducator, English as a Second Language, GED & Adult Basic Education, Personal Growth & Development, Reading, Special Learning Support Program, Student Support Services, Testing Center, Vocational Tutoring and Academic Technology Center.

#### Center for Health, Math & Science

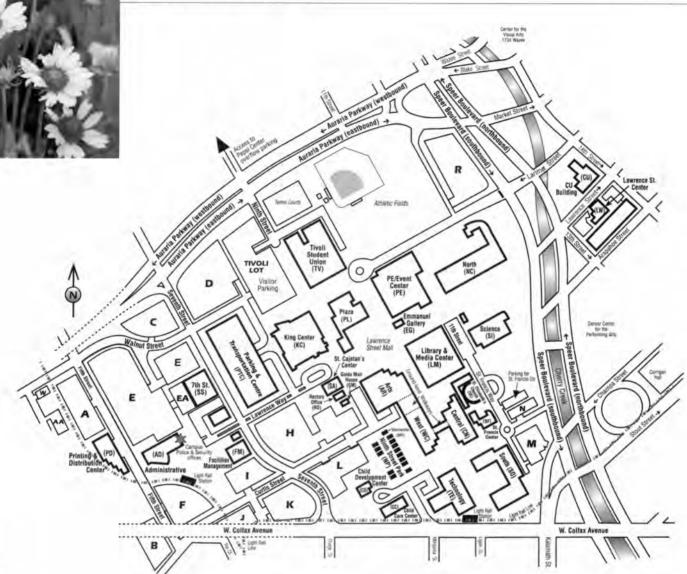
#### Center for Language, Arts & Behavioral Sciences

Teaching/ Learning Center, Workforce Initiatives Branch Campuses

#### Evening and Weekend College ..., .303-556-3573 Computer Training for People Dental Hygiene, CCD Lowry Campus ....303-365-7771 Educational Planning and VP for Learning and Academic Affairs ....303-556-2414 VP for Student and Enrollment Services \_ .303-556-2413



CCD ON THE AURARIA CAMPUS



# CCD AURARIA MAIN CAMPUS • 303-556-2600

1111 W. Colfax Ave. P. O. Box 173363 Denver, CO 80217-3363

# RTD LIGHT RAIL STATIONS ON AURARIA CAMPUS

West Colfax Avenue, between Lipan and Mariposa streets

Between 5th Street and Curtis Street

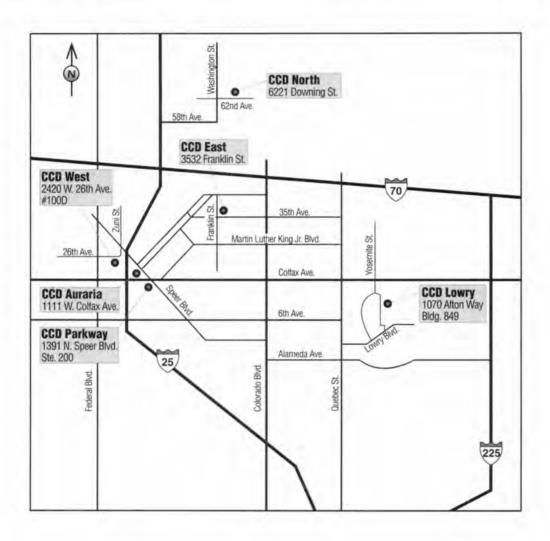
### RTD ROUTES TO THE AURARIA CAMPUS

Via Auraria Parkway: #0, #15 Via Colfax: #1, #9, #16, #29L, #30, #31, #36L Via 7th Street: #10

\*4 Hours of Free Parking in Tivoli Lot are available for prospective students who are being assessed and/or registering. Bring your ticket to South Classroom Building 134 for validation. Your student fee-paid Regional Transportation District (RTD) bus pass entitles you to ride buses and Light Rail free in the Denver area and now gives you regional service, too.



BRANCH CAMPUS SITES



CCD EAST • 303-293-8737 3532 Franklin St. Denver, CO 80205

CCD PARKWAY • 303-226-5300 1391 N. Speer Blvd., Suite 200 Denver, CO 80204-2552

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#### CCD NORTH • 303-289-2243 6221 Downing St.

Denver, CO 80216

# CCD WEST • 303-477-5864

Diamond Hill Complex 2420 W. 26th Ave., #100D Denver, CO 80211



# ACADEMIC CALENDAR

FALL 2002 August 12-16 Advising and Registration August 6 Graduation Application deadline Fall 2002 August 12-17 New Student Orientation August 19 Classes Begin September 2 Labor Day Holiday (No classes/Campus closed) September 4 Census Day - Last day to drop a class and receive a refund September 6 Fall Convocation October 8 Project Success Day November 14 Last day to withdraw from class and receive a "W" November 20 Spring 2003 Advising and Priority Registration begins November 20 Advising Day November 28-29 Thanksgiving Holiday (No classes) **December 8** Last Day of Classes

December 9 MSCD/UCD Final Exams Begins December 14 MSCD/UCD Final Exams End SPRING 2003 November 20-January 17 Advising and registration continues December 3 Graduation Application Deadline Spring 2003 January 13-18

New Student Orientation January 20

Martin Luther King, Jr. Holiday (No classes/Campus open) January 21

Classes Begin February 5 Census Day — Last day to drop

a class and receive a refund February 7

Spring Convocation February 25

Project Success Day March 24-30

Spring Break (No classes/Campus open) April 16

Summer and Fall 2003 Advising & Priority Registration begins

April 16 Advising Day April 16 Last day to withdraw from a class and receive a "W" May 12 MSCD/UCD Final Exams Begins May 14 Last Day of Classes May 14

Graduation Day May 17 MSCD/UCD Final Exams Ends SUMMER 2003 April 16-May 23 Advising and Registration Continues May 19-24 New Student Orientation

May 6 Graduation Application Deadline Summer 2003

May 26 Memorial Day Holiday (No Classes/Campus Closed) May 27

Classes begin

June 5 Census Day — Last day to drop a class and receive a refund

July 4 Independence Day Holiday (No Classes/Campus Closed) July 15 Last day to withdraw from a class

and receive a "W" August 2

Last Day of Classes



#### ASSOCIATE OF ARTS DEGREE EMPHASES

Art Arts Management **Behavioral Sciences** Anthropology Psychology Sociology Communications Mass Communication Arts Emphasis Multicultural Communications Emphasis Economics English/Literature Graphic Design History Humanities/Philosophy Multimedia Design Music Photography **Political Science** Speech Theatre Technical Theatre Track Theatre Performance Track

#### ASSOCIATE OF ARTS DEGREE IN BUSINESS ADMINISTRATION

#### ASSOCIATE OF SCIENCE DEGREE EMPHASES

Biology Chemistry Computer Science Earth Science Pre-Engineering Mathematics Medical Cluster Pre-Dental Pre-Medical Pre-Medical Pre-Medical Technology (under review) Pre-Pharmacy

# DEGREE & CERTIFICATE PROGRAMS

Pre-Physical Therapy Pre-Physician Assistant Pre-Veterinary Science Physics

#### ASSOCIATE OF GENERAL STUDIES DEGREES AND EMPHASES

General Studies - Generalist Early Childhood Education (MSCD) Early Childhood Education Early Childhood Education/Violence Prevention Graphic Design (MSCD/CU-Denver) Human Services (MSCD) Paralegal (CU-Denver) Photography (MSCD/CU-Denver) Teacher Education, Elementary Education (MSCD)

#### ASSOCIATE OF APPLIED SCIENCE DEGREES AND EMPHASES

Accounting Managerial Accountant **Operational** Accountant Applied Technology **Business Administration Business Generalist** Finance Insurance International Business Management Marketing Real Estate Travel and Tourism Associate **Business Technology** Administrative Assistant Legal Administrative Assistant Medical Administrative Assistant Office Manager Secretarial/Computer Applications Dental Hygiene

Early Childhood Education Early Childhood Education Early Childhood Education/Violence Prevention Electroneurodiagnostic Technology Electronics Technology (under review) Engineering Graphics Architectural Drafter Mechanical Drafter Graphic Communication Technology Graphic Design Health and Wellness Management (under review) Human Services Information Technology CISCO Networking Associate Computer Programming Computer Technology Computer Training for People with Disabilities, Computer Programming Computer Training for People with Disabilities, Network Administration Network and Computer Security Network Administration Oracle Database Technology PC Support Technology Telecommunications Web Site Administration Windows 2000 Network Administration Multimedia Design **Computer** Graphics Graphic Design Photography Video Production/ Communications Nursing Nursing — Advanced Placement Paralegal Photography Radiology Technology Recreational Assistant (under review) Trades and Industry Airframe/Power Plant Trades CNC Machine Tool Operator Fabrication Welder Veterinary Technology



# CERTIFICATES

Accounting Managerial Accountant **Operational** Accountant Billing/Payroll Technician **Business Administration** Entrepreneurship Finance/Commercial Credit Management International Business Marketing Supermarket Management Travel and Tourism Associate **Business Technology** Administrative Assistant Data Entry Clerk Executive Assistant General Clerical General Office Clerk Medical Administrative Assistant Microsoft Office Specialist Stenographic Central Service Technology (under review) Early Childhood Education Early Childhood Education Director Group Leader Group Leader/Child Development Associate (CDA) Electroencephalography Technology Electronics Technology (under review) **Engineering Graphics** Architectural Drafter Mechanical Drafter AutoCAD for Mechanical or Architectural Drafting AutoCAD Upgrade for Mechanical or Architectural Drafting **Essential Skills** Community Health Worker Early Childhood Education **Financial Services** Information Technology Medical-Clerical Career Track Graphic Communication Technology Electronic Pre-press Printing Technology Graphic Design Computer Graphics Graphic Design Human Services Case Management/Residential Service Aide Information Technology CISCO Networking Associate Computer Programming Visual Basic Programming Office Applications

X

Computer Training for People with Disabilities, Computer Programmer Computer Training for People with Disabilities, Network Administration Network Administration Oracle Database Technology PC Help Desk Computer Service and Repair Telecommunications Web Page Development Windows 2000 Network Administration Massage Therapy Medical Office Technology Clinical Medical Assistant Orthopedic Assistant Subspecialty Comprehensive Medical Assistant Orthopedic Assistant Subspecialty Health Information Specialist (Medical Records) Medical Office Clerk Medical Transcriptionist Medical Unit Coordinator (Ward Clerk) Multimedia Design Paralegal — General Nursing Critical Care Nursing Nurse Aide Perioperative Nursing Practical Nursing Photography Psychiatric Technician Psychiatric Technician — Singular Emphasis, Mental Illness (under review) Psychiatric Technician — Dual Emphasis, Developmental Disabilities and Mental Illness (under review) Psychiatric Technician - Advanced Placement, Mental Illness Radiation Therapy Radiology Technology Limited Scope Radiologic Technology Recreational Assistant (under review) Surgical Technology Teacher Education, Paraeducator Special Education Emphasis **Bilingual** Emphasis Literacy Emphasis Trades and Industry Arc Welder Basic Welder CNC Machine Tool Operator Fabrication Welder Lathe Operator Machine Tool Operator Mill Operator





# DEGREE & CERTIFICATE PROGRAMS BY OCCUPATION OR EMPHASIS AREA

# Accounting

Managerial Accountant
Operational Accountant
Billing/Payroll TechnicianC
Anthropology
Anthropology (see Behavioral Sciences)
Art
Art Emphasis
Arts Management
Arts Management Emphasis
Behavioral Sciences
Anthropology Emphasis
Psychology Emphasis
Sociology Emphasis AA
Biology
Biology Emphasis
Business Administration
Business Administration AA, AAS
Business Generalist Emphasis AAS
EntrepreneurshipC
Finance Emphasis
Finance/Commercial Credit ManagementC
Insurance Emphasis
International Business Emphasis
Management Emphasis
Marketing Emphasis AAS, C
Real Estate Emphasis AAS
Supermarket Management
Travel and Tourism Associate

### Business Technology Administrative Assistant AAS, C Data Entry Clerk C

General Office Clerk
Microsoft Office Specialist
Legal Administrative Assistant
Medical Administrative Assistant
Office Manager AAS
Secretarial/Computer Applications
Executive Assistant
General Clerical
Stenographic
Chemistry
Chemistry Emphasis
Communications
Mass Communication Arts EmphasisAA
Multicultural Communications Emphasis
Computer Science
Computer Science EmphasisAS
Dental Hygiene AAS
Early Childhood Education
Early Childhood Education
Early Childhood Education Violence Prevention
AAS-ECE/VP, AGS-ECE/VP
Early Childhood Education Director
Early Childhood Education Briceton Leader
Early Childhood Education Group Leader/
Child Development Associate
Earth Science
Earth Science Emphasis
Economics
Economics EmphasisAA
Electroencephalography Technology

Electroneurodiagnostic Technology	IAS
Engineering	
Pre-Engineering Emphasis	AS
Engineering Graphics	
Architectural Drafter AAS	
Mechanical Drafter AAS	
AutoCAD for Mechanical or Architectural Drafting	C
AutoCAD Upgrade for Mechanical	-
or Architectural Drafting	C
English/Literature	
English/Literature Emphasis	AA
- a	
Electronics Technology (under review)	5, C
Essential Skills	
Community Health Worker	C
Early Childhood Education	C
Financial Services	
Information Technology	.C
Medical-Clerical Career Track	.C
General Studies	
	GS
Graphic Communication Technology	
	AS
Electronic Pre-press	C
Printing Technology	
Graphic Design	
Graphic Design	
AA, AGS-GRD (MSCD/CU-Denver), AAS	5, C
Computer Graphics	C
Health and Wellness Management	
0	AS
History	4.4
History Emphasis	AA
Humanities	
Humanities/Philosophy Emphasis	AA
Human Services	
Case Management/Residential Service Aide	C
Human Services AGS-HSE (MSCD). /	AS

CISCO Networking Associate AAS, C Computer Programming AAS, C Visual Basic Programming AAS, C Omputer Technology AAS Office Applications C Computer Training for People with Disabilities Computer Programming AAS, C Network Administration AAS, C Network Administration AAS, C Network Administration AAS, C Oracle Database Technology AAS PC Support Technology AAS PC Lelp Desk C C Computer Service and Repair C Telecommunications AAS, C Web Site Administration AAS, C Wab Page Development C Windows 2000 Network Administration AAS, C Mathematics Mathematics Emphasis AS Medical Cluster AS Pre-Dental Emphasis Pre-Medical Emphasis Pre-Medical Emphasis Pre-Medical Assistant Emphasis Pre-Physical Therapy Emphasis Pre-Physical Therapy Emphasis Pre-Veterinary Science Emphasis Medical Office Technology (under review) Pre-Pharmacy Emphasis Pre-Veterinary Science Emphasis Medical Office Clerk Emphasis Medical Unit Coordinator (Ward Clerk) Emphasis Medical Office Clerk Emphasis Medical Unit Coordinator (Ward Clerk) Emphasis Medical Unit Coordinator (Ward Clerk) Emphasis Medical Unit Coordinator (Ward Clerk) Emphasis Multimedia Design AA, C C Computer Graphics Emphasis AAS Graphic Design Emphasis AAS Photography Emphasis AAS Photography Emphasis AAS	Information Technology		
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Photography Emphasis AAS Science Degree			

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C Certificate

	Associate of
	Arts Degree

- AS Associate of Science Degree
- AGS Associate of General Studies Degree
- AAS Associate of Applied Science Degree
  - C Certificate

# Music

Music Emphasis

# Nursing

0	
Nursing	AAS
Nursing — Advanced Placement	AAS
Critical Care Nursing	C
Nurse Aide	
Perioperative Nursing	
Practical Nursing	C

# Paralegal

Paralegal	AGS-PAR (CU-Denver), AAS
Paralegal	- General C

# Photography

Photography	Emphasis	AA
Photography	AGS-PHO (MSCD/CU-Denver), AA	S, C

Physics	
Physics Emphasis	AS

# Political Science

Fontical science	
Political Science Emphasis	AA



# Psychiatric Technician

AA

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Psychiatric Technician	
Singular Emphasis, Mental Illness (under review)	
Psychiatric TechnicianC	
Dual Emphasis, Developmental Disabilities and Mental Illness (under review)	
Psychiatric Technician	
Advanced Placement, Mental Illness	
Psychology	
Psychology (See Behavioral Sciences) AA	
Radiation TherapyC	
Radiology Technology	
Radiology Technology	
Limited Scope Radiologic TechnologyC	
Recreational Assistant (under review) AAS, C	
Sociology	
Sociology (See Behavioral Sciences)AA	
Speech	
Speech Emphasis	
Surgical TechnologyC	
Teacher Education	
Elementary Education	
Paraeducator	
Special Education Emphasis	
Bilingual EmphasisC	
Literacy EmphasisC	
Theatre	
Theatre Emphasis	
Technical Theatre Track AA	
Theatre Performance Track AA	
Trades and Industry	
Airframe/Power Plant AAS	
Trades	
CNC Machine Tool Operator	
Machine Tool Operator	
Lathe Operator	
Mill Operator C	
Fabrication Welder AAS, C	
Arc Welder	
Basic Welder	
Veterinary Technology	
Veterinary Technology	



CCD offers a variety of degrees and certificates including Associate of Arts, Associate of Applied Science, Associate of General Studies and Associate of Science degrees.

#### GUARANTEE FOR JOB COMPETENCY

To graduates of certificate programs and Associate of Applied Science (AAS) degrees, Community College of Denver guarantees job skills. Within one year of graduation, if an employer finds a certificate or AAS graduate lacking in the technical job skills identified as exit competencies for his/her program, CCD will provide up to nine tuition-free credits of retraining related to the identified skill deficiencies.

The graduate must have passed the CCD Certificate or AAS capstone course. The employer must identify the job skill deficiencies in writing. The graduate, employer and program faculty must develop a written retraining plan for the student to complete within one year.

#### **GUARANTEE FOR TRANSFER**

To graduates of the Associate of Arts (AA) and Associate of Science (AS) degrees, CCD guarantees that AA and AS credits, as identified in the CCD catalog, will transfer to all Colorado public colleges and universities.

To graduates of articulated Associate of General Studies (AGS) degrees and articulated Associate of Applied Science (AAS) degrees, CCD guarantees that the articulatCOLLEGE GUARANTEES

ed AGS and articulated AAS degrees or credits, as identified in the CCD catalog, will transfer into Colorado college and university professional schools as identified in the CCD catalog.

To students who complete the CCD general education core curriculum, CCD guarantees that the general education core curriculum will fulfill the lowerdivision general education requirements for liberal arts and sciences majors at all Colorado public colleges and universities.

To students who have completed the AA, AS, articulated AGS or general education core curriculum, CCD will refund the tuition paid for any course identified in the CCD catalog as an accepted part of these curriculums that does not transfer under this guarantee.

Degrees other than AA, AS or AGS do not transfer except on a course-by-course basis with any given four-year school.





# **Excellence Through Accountability**

- From 2000 to 2001, total certificates and degrees awarded at CCD increased 28 percent.
- Between 1987 and 2001, people of color as a percent of total graduates increased from 20 percent to 47.1 percent.
- Between 1987 and 2001, CCD increased graduates of color by 378 percent (from 83 to 314 graduates).
- 91 percent of all CCD graduates between 1993 and 1997 who applied for transfer were accepted into Colorado four-year public colleges and universities.
- The average cumulative GPA of CCD transfer graduates in 1996-97 at four-year schools was 3.0 on a 4.0 scale.
- 95 percent of 1999-2000 graduates were satisfied with their CCD educational program.
- 97 percent of spring 2000 currently enrolled students and 98 percent of 1995-96 graduates were satisfied with the teaching they received.
- 100 percent of employers surveyed in 1996 were satisfied with the skills of CCD graduates.

# Of graduates who completed their educational goals at CCD in 1999-2000:

 96 percent either continued their education or were employed within one year of program completion.

# CCD ACCOUNTABILITY

- 78 percent of those who entered the job market entered directly into degree-related employment.
- 5 percent were unemployed, seeking employment.

# Of CCD students who transferred to Colorado public colleges or universities in 2001:

- 49 percent transferred to the Metropolitan State College of Denver.
- 37 percent transferred to the University of Colorado at Denver.
- 14 percent transferred to another Colorado public or private college or university.

# Of CCD AA/AS/AGS Degree graduates who transferred to Colorado public four-year colleges during academic years 1992-1995:

• 64.4 percent had either attained a bachelor's degree or were still enrolled at their transfer institutions as of fall 1997.



CCD faculty, administration and staff will get you on the right track and help you stay there, whether you are taking a few refresher courses or you are working toward a certificate or associate's degree. We're ready when you're ready! Welcome to Community College of Denver. You have taken a step in the right direction to prepare for your future.

CCD faculty, administration and staff will get you on the right track and help you stay there, whether you are taking a few refresher courses or you are working toward a certificate or associate degree. We will give you the individualized attention you need and want. CCD provides many learner-support services, including tutoring, advising, mentoring and career planning. We guarantee job competencies what you learn here will apply to your work. And we guarantee that the credits you earn here will transfer from our school to any four-year Colorado public college or university. (See College Guarantees)

Education at CCD is affordable, whether you study at CCD Auraria (the main campus), or at one of our five Denver-area branch campuses. Financial aid is available to qualified students, and we offer convenient payment options. You can choose from day, evening or weekend classes or classes over the Internet. CCD will help you learn anyway, anyplace and anytime.

CCD Auraria is in the heart of the city and within walking distance of downtown, Larimer Square, the 16th Street Mall, LoDo, the Denver Pavilions, Colorado

#### GENERAL INFORMATION

Convention Center and the Denver Center for the Performing Arts Complex. At Auraria, you're also close to Invesco Field at Mile High, home of the Denver Broncos; Coors Stadium, home of the Colorado Rockies baseball team; the Pepsi Center, home of the NHL Colorado Avalanche and NBA Nuggets; Six Flags Elitch Gardens; and the new Ocean Journey.

We know you'll get a lot out of your CCD experience, and we're glad you are here! We want you to succeed. Your success is our success!

#### CCD'S HISTORY

The Colorado Legislature created CCD in 1967. Three years later, classes began in a renovated auto showroom close to Denver's Civic Center. Enrollment increased so rapidly, the college immediately expanded into rental storefronts near the main building.

In 1975, CCD moved to the 124-acre Auraria Higher Education Center Campus in downtown Denver. It sits on the west bank of Cherry Creek, originally the site of the 1858 frontier town of Auraria. We even have the oldest-standing structure in Denver on our campus, the former Temple Emmanuel. Today, the Emmanuel Gallery is an exhibition space for student and faculty artwork.

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CCD is one of 13 institutions in the Community Colleges of Colorado System. It is the fourth largest with more than 4,000 fulltime equivalent students enrolled in its programs. CCD is the only community college in the city and county of Denver and the only truly urban community college in the state. It also is the only community college in the nation to share a campus with a four-year college and a university -Metropolitan State College of Denver and University of Colorado at Denver. They share classroom buildings, a regional library, recreational facilities and a student union. At Auraria, CCD offers all two-year programs, awards all twoyear degrees and occupational certificates, and provides basic skills instruction, adult basic skills education and GED preparation.

In 1985, CCD became responsible for the system's fast-track skills center, CCD North, at 6221 Downing St. in Adams County, six miles northeast of Auraria. CCD East, at 3532 Franklin St, in the Cole neighborhood, opened in 1993. CCD West, at 2420 W. 26th Ave, in the Diamond Hill Complex, also opened that year. These three branch campuses offer traditional general education college courses. They also are openentry/open-exit, fast-track training centers that meet the industry employment needs of the metropolitan community.

Our newest branch campus is CCD Lowry on the former Lowry Air Force Base bordering east Denver and west Aurora. CCD Lowry is home to the Health Sciences Center, the Dental Hygiene Clinic and all Health and Wellness programs. The CCD Parkway Campus is the site of CCD's Corporate Training Center and Customized and Contract Training programs, Small Business Development Center and Workforce Initiatives program.

#### **OUR PHILOSOPHY**

CCD is a comprehensive, student and learning-centered urban college. It provides open access and admission to a diverse population. CCD offers lifelong learning opportunities anyway, anyplace and anytime, along with the appropriate academic and personal support to any learner who asks for help to achieve success. CCD students are full partners in a collaborative learning experience.

Educated people make an impact on the economy, their local communities and the nation. CCD continually looks at the community and offers transfer educational and occupational programs that meet community and workforce needs and that create positive change in individual learners.

#### CCD'S MISSION STATEMENT

Community College of Denver pledges responsibility for:

- transfer programs for the baccalaureate degree.
- occupational programs for job-entry skills or upgrading.
- general education courses.
- remedial instruction and GED preparation.
- continuing education and community services.
- cooperative inter-institutional programs.

#### CULTURAL PLURALISM AT CCD

CCD believes all learners are entitled to a quality education. This education must provide the learner with an understanding and appreciation of our interdependence as individuals and nations. The education must be meaningful to multi-ethnic students. In addition, it must provide the student body, faculty and staff with an understanding of cultural pluralism. To that end, CCD provides an educational environment that fosters cultural diversity, international understanding and global awareness.

CCD recognizes that the environment can exist only with an administration, faculty and staff that reflect the cultural diversity of its students. Therefore, the administration unconditionally endorses affirmative action.

# STATEMENT OF VALUES FOR TEACHING AND LEARNING

CCD's faculty and staff are committed to a teaching/learning process that:

- enables students to become independent learners.
- demonstrates a commitment to student outcomes (job readiness, computer literacy, skill levels, mastery of subject matter).
- provides an opportunity for critical thinking and problem solving.
- demonstrates an excitement about teaching and learning.
- maintains high but realistic expectations.
- demonstrates an appreciation and an understanding of a diverse student population.
- practices an individualized, learning-centered approach to encourage growth in student self-esteem.

# STATEMENT OF VALUES FOR ADVISING EXCELLENCE

Community College of Denver's faculty, staff and administrators:

 are personally and professionally committed to helping students.

- understand the value of active listening, focusing on students' strengths and potential.
- commit the time and effort to know college policy and practice to provide students with accurate, usable information.
- view long-range planning and immediate problem solving as an essential part of effective advising.
- share advising skills with their colleagues who also are involved with advising.
- 6. improve both the style and substance of their advising roles by staying current with the trends in advising, such as developmental advising and professional development,
- respect the diverse cultural background of each person at CCD and create positive advising and communications with each CCD student.

### CAMPUS CHOICES

We offer traditional semester courses, English as a Second Language, GED preparation and a number of "enroll-anytime" courses on the main Auraria Campus. CCD's administrative offices also are located at Auraria. CCD provides fast-track job training, English as a Second Language, GED preparation, adult basic education and general education courses at its branch campuses. In addition, the college offers adult basic education, GED preparation and English as a Second Language at more than 10 community sites around the city. The college's Distance Learning program offers online courses through CCD and CCC Online. The Corporate Training Center provides employee training programs at the work site or other convenient locations. All major

CCD facilities are accessible to individuals with disabilities.

# CAMPUS POLICE AND SECURITY

The Auraria Campus Police and Security Office has prepared a report to comply with the Student-Right-to-Know and Campus Security Act of 1990. The report describes security practices and procedures at Auraria and lists crime statistics for the most recent calendar year and the two preceding calendar years. A copy of the report can be obtained from the vice president for Student and Enrollment Services in South Classroom Building 301.

#### CAMPUS CRIME INFORMATION

During the past three years, the following crimes were committed on campus at the Auraria Higher Education Center, serving CCD, the Metropolitan State College of Denver and the University of Colorado at Denver.

#### Reported criminal offenses on the Auraria campus:\*\*\*\*

Offense	1999	2000	2001
Murder	0	0	0
Sex Offenses: Forcibl	e 1*	3***	1
Sex Offenses: Non-Forcible	0	0	0
Robbery	2**	0	2**
Aggravated Assault	2	3	1
Burglary	11	3	9
Vehicle Theit	13	9	5
Hate Crimes	0	0	2*
Arson	3	0	0
Manslaughter	0	0	0

Forcible fondling

\*\* Offense, two victims, business and individual

- \*\*\* One offense, two victims, ethnic intimidation
- \*\*\*\* Includes branch campuses

#### Arrests for the following reported crimes on campus

Offense	1999	2000	2001
Liquor Law Violations	3	2	1
Drug Abuse Violations 47		28	21
Weapons possession	2	5	1

The Auraria Campus recorded zero hate offenses during 1999, 2000 and 2001.

The Auraria Campus Police and Security Department provides the above statistics in compliance with the Cleary Crime Awareness and Campus Security Act of 1990.

#### NOTICE OF NONDISCRIMINATION

CCD does not discriminate on the basis of race, color, creed, national origin, sex, sexual orientation, age or disability in admission or access to, or treatment or employment in its educational programs or activities. Inquiries concerning Title VI. TITLE IX and Section 504 may be referred to the vice president for Student and Enrollment Services. Campus Box 200, Community College of Denver, P.O. Box 173363, Denver, CO 80217-3363, 303-556-2413 or to the Office for Civil Rights, U.S. Department of Education, 1961 Stout Street, Denver, CO 80294.

### AMERICANS WITH DISABILITIES ACT

Discrimination based on disability in admission to, access to and the operation of programs, services or activities of CCD is prohibited by the Americans with Disabilities Act.

Questions, complaints and requests for additional information may be directed to Felicia Sykes, vice president for Student and Enrollment Services, Campus Box 200, P.O. Box 173363, Denver, CO 80217-3363, 303-556-2413.



# AMERICANS WITH DISABILITIES ACT COMPLIANCE

CCD is committed to providing an environment where all students have the opportunity to attain their educational goals. To accomplish these goals, both physical and programmatic access must be provided. This means reasonable accommodations will be made in instructional delivery and evaluation methods to ensure full educational opportunities.

Modifications in degree or academic course requirements will be made to ensure that such requirements do not discriminate against qualified students with disabilities (except where the modification results in a fundamental alteration of the academic program).

Modifications to requirements that are essential to the program will include classroom support, alternative format of materials, and all other services available through the Center for Persons with Disabilities and the Special Learning Support program. Requirements that are deemed essential to the academic program by the program coordinator cannot be waived. If a student has been twice unsuccessful in completing an essential skill requirement due to a disability, he or she may request a substitution. It is important to note that a substitution may not be possible in all cases. The program coordinator will have full discretion over substitutions. Students may appeal the decision through the college's grievance process as outlined on page 38.

#### APPROVAL

The operation of CCD is approved by the state of Colorado. All programs are approved by the Colorado State Board for Community Colleges and Occupational Education. In addition, the Colorado Commission on Higher Education reviews and approves all programs leading to the associate degree.

#### ACCREDITATION

Community College of Denver is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Other accreditations include:

#### Comprehensive Medical Assistant/ CCD East

 American Association of Medical Assisting

#### **Dental Hygiene**

American Dental Association

# Human Services

 Council for Standards in Human Service Education

# Nursing

Colorado State Board of Nursing

# **Radiologic Technology**

- Committee on Allied Health Education and Accreditation
- Joint Review Committee on Education for Radiologic Technology

#### Real Kids Center, Auraria Campus

 National Association for Education of Young Children (NAEYC) Center accredited

#### Surgical Technology

- American Medical Association
- Committee on Allied Health
   Education and Accreditation

#### Veterinary Technology

 American Veterinary Medical Association

CCD is a member of the American Association of Community Colleges and the Hispanic Association of Colleges and Universities.

#### **ALUMNI ASSOCIATION**

Organized in October 1991, the CCD Alumni Association encourages graduates and students who have completed at least three credit hours to become members.

CCD alumni sponsor special events and an annual meeting and reception.

Joining the Alumni Association is an opportunity to meet and network with fellow alumni while serving CCD. Sign up by calling the Alumni Office at 303-556-4089.

#### AFRICAN AMERICAN COUNCIL

CCD's African American Staff Council brings college faculty, staff, students and administrators of the same heritage together. The council provides a forum to discuss ethnicity issues and other problems, and helps the college develop programs to address diversity, collaborative sensitivity, retention of students and staff and create an accessible environment for African Americans. For more information, contact Ken Swiney, 303-556-2424.

#### HISPANIC COUNCIL

Comprised of Hispanic administrators, faculty and staff, the Hispanic Council promotes retention and recruitment of Hispanic students. For additional information, contact the vice president for Student and Enrollment Services, 303-556-2413.



#### CAMPUS VISITS

For individual and group tours of the campus or to visit classes, contact Recruitment and Student Outreach at 303-556-6089.

#### ADVISING PHILOSOPHY

Advising is critical to your success, so our integrated advising program includes the exploration of life and career goals, an examination of academic and career skills, and the selection of instructional programs and courses. You and your adviser share responsibility for the advising process.

We recommend the Educational Planning and Advising Center be your first point of contact at CCD. Our advisers can help you enroll, plan your college programs and remove barriers that may interfere with your success in school and life. You can stop by at anytime in the South Classroom Building 134, or call 303-556-2481.

After taking 12 credits of courses numbered 100 or above, you should choose a major field of study, be assigned a center educational case manager and complete a signed educational planning guide.

The Educational Planning and Advising Center staff also provides information on and interpretation of assessment programs and advises students who have not been accepted into a major area of programs and courses. Advisers also can refer you to community and campus resources. The International Student Mentor assists refugee and international students.

#### ADMISSION POLICY

As an open-door institution, CCD admits students who are 16 years of age or older. Admission to the college does not guarantee enrollment in specific programs that may have prerequisites. The college may deny admission to individuals whose backgrounds indicate their presence would endanger the health, safety, welfare or property of others, or would interfere with the function of the college. CCD has the right to deny admission or continued enrollment to persons who have misrepresented their credentials or backgrounds.

# MANDATORY BASIC SKILLS ASSESSMENT AND PLACEMENT

In accordance with Colorado House Bill 1464, fall 2001 firsttime entering college students who declare a degree or certificate program are required to place into courses based on their Basic Skills Assessment Test (BSAT) results. Also, students registering for any English or mathematics course, or any course that requires English, mathematics or reading prerequisite skills, are required to test and place into these courses based on BSAT results. This new legislative

# GETTING STARTED

regulation is to ensure that students are prepared to succeed in collegelevel courses.

CCD faculty and staff will advise and help students register for appropriate-level courses. Students will be prevented from registering for courses for which they do not have the appropriate test score, or for which they have not completed the prerequisite course(s). House Bill 1464 requires students, within their first 30 credit hours of enrollment, to complete all mandatory basic skills courses. Students who receive state financial aid may lose funding if basic skill course work is not completed within the 30-credit-hour limit. There are no exceptions to this policy.

Please see the Assessment section of the catalog for more information on the Basic Skills Assessment Test.

#### **Follow These Steps**

 If you are a new student and wish to attend one of the CCD Branch Campuses, make an appointment with a case manager at: CCD East, 303-293-8737; CCD North, 303-289-2243; CCD West, 303-477-5864; CCD Parkway, 303-226-5300; or CCD Lowry, 303-365-8300. Your case manager will assist you with all the registration and enrollment processes.

- If you are a new student and plan to attend CCD at Auraria or Lowry, submit an Application for Admission (form at the end of the catalog) to Admissions, Registration and Records. You also will receive official notification by mail of your acceptance to CCD.
- Next, take the Basic Skills
   Assessment Test. For assessment
   dates and times, check the cur rent Schedule of Classes, stop by
   room 223 in South Classroom
   Building, or call 303-556-3810.
   After you take the test, sign up
   to attend a new student orienta tion. Contact Student Life at
   303-556-2597 to register.
- 4. After you attend an orientation, stop by or call the Educational Planning and Advising Center (South Classroom Building 134, 303-556-2481) and make an appointment with an adviser or educational case manager to help you plan your educational goals and schedule classes.
- Your next step is to register for your classes, either by telephone or at the Admissions, Registration and Records Office during scheduled registration dates each semester.

Veterans using VA benefits also must submit transcripts of all previous postsecondary education and training no later than the end of the first semester of attendance.

# INTERNATIONAL STUDENT INFORMATION

This school is authorized under federal law to enroll nonimmigrant, alien students with F-1 Visas. (We are not authorized to accept students without English proficiency.)

International students on M, J, B, H or any other status visas must contact the International Student Adviser before submitting an application.

International students who want to enroll at CCD must submit the following documents.

- International Student Application for Admission.
- Official copies of a high school or college transcript from your country: not in English, a translated certified version must be submitted. See the International Student Adviser for a list of agencies.
- 3. A financial affidavit from either a United States or international bank showing that you or your parents have a minimum of \$18,000 U.S. dollars for a nine-month academic year for tuition, books and living expenses for your stay in the United States. Add another optional \$5,300 for summer semester enrollment.

#### OR

If you have an American sponsor, you may submit an Affidavit of Support with other financial statement(s) bank affidavits. You can get the Affidavit at CCD or the Office of Immigration and Naturalization Services.

4. Evidence of proficiency in the English language: a minimum score of 475 on the Test of English as a Foreign Language (TOEFL). Students are required to take the English Writing Test at CCD. If CCD assessment test scores are below English Composition level, mandatory placement in lower English classes must be pursued. OR

a Michigan score of 75 or higher and successful passage of a high/intermediate level at an English Language Center in the U.S. with English language instructor's permission. <u>Students</u> are required to take the English Writing Test at CCD. If CCD assessment test scores are below English composition level, mandatory placement in lower English classes must be pursued. OR

ELS Language Centers completion of level 109 or completion of ELS level 108 with a letter of recommendation from an ELS administrator. Please send official transcript. <u>Student are</u> required to take the English <u>Writing Test at CCD</u>. If CCD assessment test scores are below English composition level, mandatory placement in lower English classes must be pursued.

OR

Spring International Language Center completion of level 6 with letter of recommendation from a SILC administrator. Please send official transcript. Students are required to take the English Writing Test at CCD, If CCD assessment test scores are below English Composition level, mandatory placement in lower English classes must be pursued.

International students on F-1 visas DO NOT qualify for financial aid or scholarships. The college will not issue the I-20 until all the above documents are on file at the office of the International Student Adviser froom 134 in the South Classroom Building), and the student has been officially admitted. Please submit all the necessary documents to the following address by the deadline date of the semester you plan to enroll. All International Students on F-1, M-1 Visas must register and complete a full course of study (minimum of 12 semester hours per semester or

24 per year) and complete their educational objectives within a reasonable period of time (usually two to three years).

If applying from abroad, you must take the 1-20, valid passport and Financial Affidavit to the American Embassy or Consulate in your country to obtain the F-1 Visa.

If transferring from another U.S. educational institution, official transcripts and a copy (of the student copy) of the 1-20 issued by that institution must be submitted in addition to current financial statement(s), passport, I-94 and proof or purchase of health insurance upon enrollment.

During orientation, you will be asked to submit a copy of your passport, 1-94 card and proof of health insurance (or you may purchase health insurance when you enroll). International students must establish themselves in full-time status and maintain status (grade point average of at least 2.0). Internships and/or work off campus may be recommended under specific circumstances and should be discussed with an adviser prior to commencing work.

CCD does not have dormitory housing for students. Students are referred to Rocky Mountain Interactive Homestay or to postings on campus of roommates seeking international students to share apartments. Housing costs range from \$350 to \$650 monthly, depending on number of bedrooms or roommates.

Please call or write if you need more information: International Student Admissions 303-556-2430 Campus Box 201 P.O. Box 173363

Denver, CO 80217-3363

Auraria Campus Location: South Classroom Building 133

#### DIRECTORY INFORMATION

Community College of Denver designates the following items as Directory Information.

- Student name
- Permanent address
- E-mail address
- Telephone number
- Photo
- Date of birth
- Full-time or part-time status
- Most recent educational institutions attended
- · Dates of attendance
- Degrees
- · Major fields of study
- Awards received

The college may disclose this information without prior written consent, unless notified in writing to the contrary by the <u>fifth day of</u> classes each semester.

CCD complies fully with the Family Educational Rights and Privacy Act (FERPA) that protects the privacy of students' educational records. Refer questions to Admissions, Registration and Records, South Classroom Building 133, or call 303-556-2430.

#### **RELEASE OF INFORMATION**

Other than Directory Information, which may be released to the general public, the college will not permit release of educational records without the student's written consent. This consent must be signed and dated by the student and must indicate which records to release.

Parents of a dependent student can obtain release of that student's records only with written consent of the student, since the rights given to parents transfer to the student when he or she attends a postsecondary educational institution.

#### TRANSCRIPTS REQUESTS

You may request copies of your academic records accumulated while at CCD. Transcripts are available from Admissions, Registration and Records. Cost of transcripts is \$2 per copy, payable in advance. All transcripts must be requested by the student, and all requests must be made in writing.

Transcript requests cannot be honored from students whose financial and academic records at the college are not cleared.

The Colorado Community College System (CCCS) launched a common course-numbering and common-competency project to improve student transfer and to ensure curriculum quality across our system. The project will not jeopardize student credit and transfer. The college will provide an electronic addendum as it completes course numbers and course competencies within a program area.

### TRANSFERRING CREDIT TO CCD

1. Transfer of academic credit is done for current applicants and/or currently enrolled students by the academic credential evaluator in Admissions. Registration and Records on request from the student. Students may obtain an Application for Transfer of Credit from Admissions, Registration and Records or their adviser/educational case manager. Official transcripts are sent by the previous institution and received by CCD through the U.S. Postal Service, Hand-carried transcripts or transcripts issued to the student are not considered official, although they may be used for informal advising purposes.

Issuing institutions should address transcripts to CCD Admissions, Registration and Records, Campus Box 201, P.O. Box 173363, Denver, CO 80217-3363. Documents become the property of the college and will not be released to the student or transferred to other institutions.

2. CCD reserves the right to evaluate all credits according to the policies of Admissions, Registration and Records. Evaluation is done for general acceptance of all transferrable credit and is not confined to any specific degree or certificate program, unless otherwise specified. Students will need to meet with their program advisers/educational case manager to determine how accepted transfer credits will apply to their intended program.

**Note:** Credits evaluated for general acceptance may or may not be applicable to specific degree or certificate programs.

- CCD will accept transfer credit from postsecondary institutions that are accredited by one of the six regional accrediting associations. Transfer credit also may be accepted from CC of C-approved institutions with which CCD has current articulation agreements.
- 4. Credits earned by a student enrolled in another state system community college that are applicable to the AA, AS or AAS degrees or a certificate program will be accepted as meeting degree or certificate requirements in comparable or equivalent programs at CCD.
- Lower-division credits earned by students enrolled in baccalaureate-granting institutions that are

applicable to B.A. or B.S. degrees shall be accepted as meeting requirements for comparable or equivalent programs leading to an AA or AS degree at CCD.

6. Students who have attended international institutions and wish evaluation of transfer credit will need to provide official transcripts and/or other educational documents in the native language along with certified English translations. Accepted documents become the property of the college. Contact the academic credentials evaluator in Admissions, Registration and Records for additional information.

#### AUDITING CLASSES

Students may audit (take for no credit) courses at the regular tuition rate. Deadline for registering for audit is the census date. An audit cannot change after this date. The grade of AU will appear on all official transcripts.

### **CREDIT FOR PRIOR LEARNING**

Students may earn credit for college-equivalent education acquired through earlier schooling, work or other life experiences. Such prior learning must be comparable to CCD courses or curricula and must relate to the student's educational objectives.

Prior learning may be documented through standardized tests (AP, CLEP, challenge examinations, published guides [ACE-Military and ACE-Non-Collegiate]) or portfolio assessment.

Standardized Tests

 Advanced Placement
 Program (AP) — High school students can receive credit through the AP examinations.

# b. International Baccalaureate

- CCD recognizes the International Baccalaureate program and accords special consideration for students presenting I.B. credentials on an individual basis. To receive college credit, students who take the higherlevel I.B. examination(s) must request that their scores be sent to the college I.B. coordinator. On receipt of the scores, an evaluation for credit will be performed. Students will be notified of the results of that evaluation. Scores of four or better on the higher-level I.B. examinations will receive three or more credits for each examination.

- c. College Level Examination Program (CLEP) — CCD recognizes selected CLEP general examinations and subject examinations. A list of CLEP exams, their cut-off scores and their CCD course equivalents are available from the Credit for Prior Learning Office, South Classroom Building 134, 303-556-2481, The CLEP examination may be taken in the CCD Testing Center.
- d. DANTES Subject Standardized Tests (DSST) — Most of the DSSTs also are recognized by CCD as acceptable tests for college credit. Contact the Credit for Prior Learning Office for a list of tests and their cut-off scores. The DSSTs may be taken in the CCD Testing Center.
- 2. Challenge Examinations Currently enrolled students may challenge most courses by taking a comprehensive examination. Only one exam for a

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particular course may be arranged (\$25/credit) during any one semester.

# 3. Published Guides

ACE-Military — CCD uses the credit recommendation of the American Council on Education (ACE), as published in The Guide to the Evaluation of Educational Experiences In the Armed Services, to evaluate military training and learning experiences.

ACE-Non-Collegiate — CCD uses the credit recommendations from the ACE program on Non-Collegiate Sponsored Instruction, as published in The National Guide to Educational Credit for Training Programs, to evaluate industrial and corporate training programs.

4. Portfolio of Learning Outcomes Currently enrolled students may petition for credit by developing a portfolio that describes and documents pertinent learning comparable to that available in CCD courses. A faculty member in the appropriate program area evaluates the portfolio and determines commensurate credit. Only one portfolio evaluation for a particular course will be arranged during any one semester. (\$25/credit)

You may receive a maximum of 50 percent of the requirements for a degree or certificate through CLEP, Portfolio Assessment, AP, Challenge Exams or Published Guides. For more details on Credit for Prior Learning options, contact the Educational Planning and Advising Center, South Classroom Building 134, 303-556-2481.

#### ADD/DROP/WITHDRAWAL

The final date to add or drop a course is set and printed in the cur-

rent semester's Schedule of Classes. After the first week of classes, you may not add courses. Extended Campus courses require the written approval of an adviser in the Educational Planning and Advising Center or the director of these programs. This requirement does not apply to open-entry or modular classes. On, or before the census date, you may drop courses and receive a full refund. Courses you drop before the census date will not appear on your official transcript.

After the census date, you may withdraw from courses, but you will not be eligible for refunds. Courses you drop after the census date will appear on the transcript with a grade of W. You may not withdraw from courses after the date published in the Schedule of Classes (usually four to five weeks before the end of term in the fall and spring semesters).

To drop or withdraw from courses, fill out appropriate forms in Admissions, Registration and Records, South Classroom Building 133. To add courses after the first week of classes, obtain the appropriate form from Admissions, Registration and Records, South Classroom Building 133.

### DEFINITIONS

Census date — The census date for a standard or module course is that point when 15 percent of the days for the term of the class are over. The census date for standard courses is listed in the Schedule of Classes. The census date for openentry courses is that point when 15 percent of the balance of the term from the date of registration has passed.

Add — An add occurs when you enroll in a class after initial registration.

**Drop** — A drop occurs when you officially exit a class before census date.

Withdrawal — A withdrawal occurs when you exit a class after census date, but before 80 percent of the class is ended.

# TRANSFERRING TO FOUR-YEAR INSTITUTIONS

CCD's AA and AS degrees are guaranteed to transfer to Colorado public four-year colleges and universities. Students with AA and AS degrees enter four-year institutions as juniors. CCD also has programs leading to the AGS degree that transfer to Metropolitan State College of Denver or the University of Colorado at Denver. Consult the Degree and Certificate section in this catalog for more information about these transfer degrees.

On some occasions the Associate of Applied Science degree may transfer.

If you intend to transfer, famillarize yourself with the requirements of the school you wish to attend. You also should consult the transfer adviser in the Transfer Center in South Classroom Building, 134,

The Transfer Center stocks catalogs from Colorado and many U.S. four-year colleges and universities. Admissions counselors from four-year colleges and universities make regular visits to CCD. Inquire about specific visitations in the Transfer Center or call 303-556-2481. A transfer bulletin board by South Classroom 125 has postings of visits from four-year college representatives and other pertinent information.

Orientations for CCD students who intend to transfer are on the first Monday of the month at 10 a.m. and 6 p.m. in South Classroom Building, 136A.

# TRANSFER OF CREDITS FROM EMILY GRIFFITH OPPORTUNITY SCHOOL TO CCD AURARIA

Students who register for and complete programs at Emily Griffith Opportunity School can take additional academic credit hours at CCD towards an AAS degree. This program also allows students to readily transfer into a bachelor's degree program. Academic counselors can provide more information on the degrees.

Emily Griffith Opportunity School certificate programs and related instruction areas include:

- Apprenticeships and Related Activities
- Business and Computer Technology
- Consumer and Family Studies
- Health Occupation
- Marketing Education
- Technical, Trades and Industrial Education
- High School and Continuing Education
- English as a Second Language

Visit the Web site for more information: www.egos-school.com.

### VETERANS' ACADEMIC STANDARDS OF PROGRESS

The following policy applies to all students who are eligible to receive Veterans educational benefits, i.e., veterans and their dependants.

Grade Point Requirements
 Veterans must maintain a cumulative grade point average of 2.0 for all course work attempted.
 Veterans whose cumulative GPA is below 2.0 will be placed on academic probation for the following term. If the GPA is not raised to 2.0 during the probationary term, the veteran will be

suspended for one academic term. Reinstate-ment will occur only after approved counseling.

Suspension of the veteran under the Veterans' Academic Standards of Progress Policy will result in CCD's not certifying enrollment to the VA. Veterans in this status may still attend CCD; however, they will be subject to the provisions of the Academic Standards of Progress Policy requirements for continuation of enrollment.

 Other Special Grades
 AU Grade — indicates the
 student "audited" the course.
 No credit is allowed for audited
 courses, nor is the grade certifi able to the VA.

I Grade - indicates "incomplete." An incomplete or "I" grade must be made up no later than the next consecutive 15-week semester. For veterans, if an "I" grade is not completed in this required period, the "I" will revert to a NC (no credit) and the veteran's certification will be adjusted back to the beginning date of the term in which the "I" grade was received. SP Grade - indicates "satisfactory progress," which will be treated the same as an "1," incomplete grade.

 Attendance Veterans who stop attending class, but who do not officially

withdraw, may be dropped administratively. VA certification will be adjusted accordingly.

 Mitigating Circumstances

 (As defined by P.L. 94-502)
 Mitigating circumstances that directly hinder an eligible veteran's or other person's pursuit of a course are judged to be out of the student's control. Following

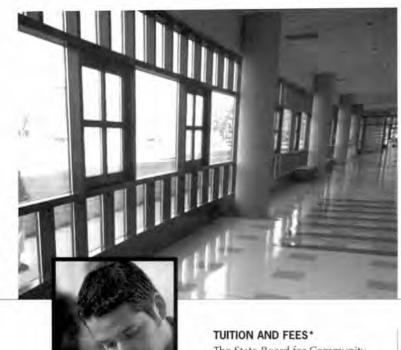
 are some general categories of mitigating circumstances (not all conclusive):

- a. serious illness of the eligible veteran or person.
- b. serious illness or death in the eligible veteran's or other person's immediate family.
- c. immediate family or financial obligations that require a change in terms or place of employment, precluding pursuit of course work.
- d. discontinuance of a course by the college.
- e. active military duty, including active duty for training.
- ŕ. withdrawal from a course or receipt of a non-punitive grade upon completion of a course due to unsatisfactory work may be considered mitigating circumstances if the student can demonstrate good faith pursuit of the course up to the point of withdrawal or completion. You must submit evidence that you applied for tutorial aid, consulted a VA counselor or consulted a CCD academic counselor or adviser in an attempt to remedy the unsatisfactory work before withdrawal or completion.

When mitigating circumstances prevail, CCD will attempt to intervene on behalf of the veteran with the VA.

# EXTRA SERVICES AVAILABLE

We encourage you to take advantage of CCD's many learner services, listed under the Learner Services section of this catalog. For all your academic, personal and career needs, you can save time by regularly talking to your advisor. Good luck!



The State Board for Community Colleges and Occupational Education determines tuition, which is subject to change annually. Fees also can change. Tuition for 2002-2003 is set at

\$63.50 per credit hour for resident students and \$313.75 per credit hour for non-resident students. A Student Fee is set at \$4.20 per credit hour. The non-refundable registration fee is \$10.05. Instructional fees, as applicable and mandated by the Colorado Community College System, are set at \$5.10 per credit hour for highand medium-cost classes. Course prefixes for these classes are: APP, APT, ART, AST, BIO, BSS, CAD, CCN, CHE, CHO, CIS, CNT, COA, COL, CSC, CST, CWB, CWE, DEH, DRF, DRI, DRM, DRP, EEG, ELT END, FAM, GBS, GCT, GEY, GNA, GRD, HSE, HWM, LPG, LPT, MAM, MIT, MOT, MRI, MST, MTO, MUM, MUS, NMT, NUA, NUR, NUT, ORN, PHO, PHY, RTE, RTH, STE, TEI, TDR, THE and WEF. Select courses also charge a special instructional fee (see Schedule of Classes). Fees are not assessed for home-study or online courses. Special fees are not refundable.

All students at the CCD Auraria Campus pay student fees. This money is for student activities and benefits, including student publicaMONEY MATTERS

tions, operation of Student Government, cultural activities, recreational activities, and clubs and organizational activities. Student fees also help pay off construction debts (Auraria Bond Fee) for the Student Union, Child Care Center, and the Physical Education and Recreation Events Center. Student Government approves expenditure of student fee monies.

Fees are charged on a four-level per-credit-hour basis:

1-3 credit hours, \$34;

4-6 credit hours, \$47.10;

7-11 credit hours, \$62.80; and

12+ credit hours, \$70.20.

Auraria Campus students also pay \$20 per semester for the Regional Transportation District (RTD) bus pass.

Updated tuition and fee information may be found on CCD's Web site at http://webcom.com/ccdadm/ tf02.html.

The college will continue to assess a "bad check" fee of \$17 for checks returned by the banking system.

Tuition rates, senior citizen and state employee discount rates and refund deadlines vary for CCC Online courses. Contact the Cashier's Office at 303-556-2075 with questions about CCC Online tuition and payment.

 Rates are subject to change without advanced notice.

CCD makes it affordable. We have the lowest tuition rate on the Auraria Campus. We don't charge application or graduation fees. With our convenient payment options and financial aid for qualified students, we can make your educational experience as inexpensive as possible.

#### **Residency Classification**

For residency classification, you must have lived in Colorado for 365 days before the first day of the semester in which you enroll. Active duty military personnel and their dependents qualify as residents. Classification of students under age 23 is determined by the residency of their parents or legal guardian. Call Admissions, Registration and Records for details at 303-556-2430.

If you are classified as non-resident and believe you qualify for resident status, you may file a petition for In-state Residency at Admissions. Registration and Records by the first day of the semester. Late petitions are not accepted.

#### Senior Citizens

In-state residents over the age of 60 may take courses for the discounted rate of 50 percent of the tuition charges. Seniors must pay 100 percent of student fees. Visit Admissions, Registration and Records, South Classroom Building 133, for a Senior Citizen Application form, or call 303-556-2430.

#### State Employee Benefit

State employees can take CCD classes and pay 50 percent of in-state tuition and 100 percent of fees. Employees must present a signed eligibility form from their employer at registration.

#### Veterans' Benefits

Veterans seeking VA educational benefits may apply for advanced payment. Veterans who have not applied for advanced payment must make full payment of tuition before applications can be forwarded to the VA. The last date to apply for VA advanced payment is 45 days prior to the first day of classes. Visit Admissions, Registration and Records, South Classroom 133, or call 303-556-3564.

#### **Tuition Refund Policy**

Students may receive a 100 percent refund of tuition and fees through the census date for any class(es) dropped and/or for any class canceled by the college. The census date for standard classes is listed in the Schedule of Classes. Call Admissions, Registration and Records for the census date of open-entry courses.

No refunds or financial credits are given after the census date of the class or for courses concentrated into one week or less. Students may obtain drop forms from Admissions, Registration and Records.

Students may receive a 100 percent refund of tuition and fees (except for the non-refundable registration fee) through the census date. Call the cashier, 303-556-2075, for the census date of continuous enrollment courses.

No refunds or financial credits will be given after the census date of the class. Students may obtain drop forms from Admissions, Registration and Records.

CCD normally mails tuition refund checks each Friday to students eligible for refunds as of the close of business Tuesday. Students owed a refund as of Tuesday will be required to pay for all classes added after refunds are issued. Please check your class schedule for any amount owed to the college. Please direct questions regarding your account balance to the Cashier's Office.

#### FINANCIAL AID Early Application

The Financial Aid Office administers federal and state programs to assist eligible students in meeting the cost of their CCD education. Financial aid funds are limited, and we encourage students to start the application process several months before enrolling. Information brochures and applications are available in Financial Aid, South Classroom Building 135, 303-556-2420, and at all branch campuses (see listing/addresses on page vii).

#### **Application Procedures**

To apply for grants, scholarships, Work-study employment, Federal Direct Loans and Federal Family Educational Loans, complete the Free Application for Federal Student Aid (FAFSA). Loans and scholarships require an additional application.

Financial aid applicants also may have to supply supporting documents, such as Federal Income Tax forms or statements of assistance from Social Services, Social Security, vocational rehabilitation benefits, unemployment, etc.

Priority in awarding financial aid goes to students who apply early. To be on time, the federal processor must have received your application by March 1, and you must complete your file and submit all documents by May 1. Applications received after the above dates will be considered based on the availability of funds.

Four to six weeks after sending your FAFSA to the federal processor, you will receive a Student Aid Report (SAR). Review it for correctness. CCD will receive the results of your financial aid status electronically if you included our school code (009542) on your application.

#### Student Budget

The cost of a CCD education includes tuition, fees, books and

supplies. Additional expenses include room and board, transportation, medical and personal items. We base our standard student budget on current estimated living costs. Budgets are adjusted for living arrangements (such as living with parents) and the length of enrollment. The standard monthly living allowances are as follow.

Living with Parents \$700 Living Away from Parents \$1,240

A child care allowance may be added if you use day care. Allowances are subject to change without advanced notice.

#### Ability to Benefit

To be eligible for financial aid, you must have a high school diploma or GED.

If you are entering CCD without a high school diploma or GED, you are not eligible for financial aid. You may, however, meet the ability to benefit requirements by:

- meeting minimum qualifications on a test approved by the U.S. Department of Education for determining eligibility to receive financial aid.
- being admitted as a regular student, seeking a degree or certificate.
- completing the regular assessment process and plan a schedule with an adviser.

Once scores high enough to meet ATB requirements have been met, you are eligible to apply for financial aid for up to 30 credits of remedial courses (numbered 099 or below). Students who have not completed successfully the required remedial courses by the end of 30-attempted remedial credit hours are no longer eligible for financial aid.

#### Eligibility

To be determined as an eligible student for financial aid, you must meet each of the following requirements: 1. be a citizen or eligible non-

citizen of the United States.

- be accepted for admission at CCD in a degree or certificate program.
- 3. have earned a high school diploma, passed the General Educational Development test, or be over the age of 16 and have obtained a passing score on a federally-approved Ability to Benefit test administered by the CCD Testing Center.
- 4. be registered with the Selective Service if you are a male between the ages of 18 and 25. Male students born during or after 1960 and who are older than 25 must have registered with Selective Service prior to age 25.
- be in good standing at the college and maintaining "satisfactory and measurable progress."
- not be in default on a student loan or owe a repayment on a federal grant.
- plan to attend classes on at least a half-time basis (6 credit hours or more). (Federal Pell Grant recipients may qualify on a lessthan-half-time basis.)
- have completed a FAFSA application form and had it processed.
- have officially calculated financial need for need-based funds. (Some scholarships and loans are NOT need based.)
- 10.have completed any remedial course work in first 30 attempted hours of enrollment to maintain eligibility for state aid. Attempted credits include transfer credits and all credits appearing on the CCD transcript. You are expected to complete any basic skills or remedial credits

during the first 30 credits. If you have extenuating circumstances, you may appeal.

- have supplied Financial Aid with any additional application material or documentation required to be considered for financial aid.
- meet other state and federal eligibility requirements.

#### **Eligible Non-Citizens**

To be eligible for federal, state and most college financial assistance, you must be a U.S. citizen, national or eligible permanent resident non-citizen. An eligible non-citizen is one who:

- has an Alien Registration Receipt Card (I-151 or I-551), or is a conditional permanent resident (I-151C);
- has an Arrival-Departure Record (I-94) from the U.S. Immigration and Naturalization Service showing any one of the following designations —

refugee, asylum granted, Cuban-Haitian entrant, or indefinite parole; is a citizen of the Freely Associated States — Republic of the Marshall Islands, Federated States of Micronesia or the Republic of Palau (may receive only Pell Grant, Federal SEOG, and federal work study); or

 can provide acceptable documentation for the INS that he or she is in the United States for other than a temporary purpose with the intention of becoming a citizen or permanent resident.

Financial need determines most types of financial aid awards. Financial need is the difference between the cost of attending college and your available resources. Resources include parents' contributions, your earnings, spouse's earnings, and veteran's, Social Security, vocational rehabilitation, welfare and unemployment benefits.

Financial aid applicants must maintain satisfactory academic and measurable progress both prior to applying and during the semester(s) aid is received. The minimum requirements are a 2.0 cumulative grade point average and 75 percent. cumulative completion rate for all attempted course work. Students may receive aid for up to 150 percent of the credits required to complete their program. All credit hours taken at CCD, as well as transfer hours, are counted to determine satisfactory/measurable progress, even if no financial aid was received.

If you have a baccalaureate, master's or other advanced degrees, you must appeal to be eligible to apply for student loans and Colorado Scholars. Contact Financial Aid for more information. Students denied aid, based on this policy, may appeal. Appeal forms and copies of the complete policy are available from Financial Aid, South Classroom Building 135.

Students enrolled in programs that require fewer than 16 credits are not eligible for financial aid.

All Colorado state financial aid programs require Colorado state residency for tuition purposes.

Students registering for CCC Online classes should check with Financial Aid about procedures for this online degree program.

#### FINANCIAL AID PROGRAMS Grants and Work-Study

 Federal Pell Grant—Federally funded Pell Grants assist with educational expenses. Award amounts range up to \$4,000 depending on student eligibility and enrollment status.

- Colorado Student Grant (CSG)

   Available to Colorado residents based on financial need.
   Awards range up to \$5,000 per academic year.
- Colorado Leveraging Educational Assistance
   Partnership Program (CLEAP) — Available on a needs basis.
   The maximum award is \$5,000 per year. Colorado and the federal government contribute to the award.
- Federal Supplemental Educational Opportunity Grant (SEOG) — Federally funded grants range from \$200 to \$5,000 depending on financial need. Pell Grant recipients with the lowest family contributions receive priority.
- Colorado Work-Study The Colorado Work-study program provides part-time employment opportunities for Colorado residents who demonstrate financial need.
- Federal Work-Study The federal Work-study program provides part-time employment for students who demonstrate financial need.
- Colorado Work-Study (No Need) — Colorado also provides limited funds to employ students part-time who do not demonstrate financial need, and who are Colorado residents for tuition purposes.

# SCHOLARSHIPS

#### Colorado Scholars Program -

Scholarships are available through the undergraduate merit programs to Colorado residents who have completed a minimum of 12 credit hours at CCD with at least a 3.0 grade point average in all courses attempted. Apply using the Free Application for Federal Student Aid (FAFSA). Scholarship awards depend on the availability of funds. Award amounts range up to resident tuition and fees.

High school graduates with a 3.0 grade point average or counselor's recommendation can apply by using a separate application available at their high schools.

Institutional and community scholarships are posted on the Financial Aid scholarship board. Other scholarship listings and information resources include the Educational Opportunity Center, 303-629-9226; and fastweb.com on the Internet.

#### Federal Family Educational Loan Programs (FFEL)/William D. Ford Federal Direct Loan Programs — Loan applicants first must complete the FAFSA form. In addition, you must have an entrance counseling experience at the beginning of each academic year and an exit counseling experience prior to graduation or leaving CCD.

Accordingly with federal law, CCD restricts first-year students' loan borrowing to \$2,625 per academic year, or \$1,313 per semester. We also restrict total student loan borrowing to a maximum of \$12,000, including any loans borrowed at other schools. Call Financial Aid, 303-556-2420, to learn more about student loan eligibility.

 Federal Direct Stafford Subsidized Loan — This program provides loans at a variable interest rate. Federal program limits allow students to borrow up to \$2,625 per year as freshmen. Sophomores who have finished 30 credit hours of college-level work may borrow up to \$3,500 per year. Loans have a six-month grace period prior to the first payment. The Federal Direct Subsidized Loan is a need-based program. The interest rate is variable and paid by the federal government until the grace period ends.

 Federal Direct/Stafford Unsubsidized Loan — The

Direct/Stafford Unsubsidized Loan program provides loans for students' remaining loan eligibility. Independent students may borrow an additional unsubsidized loan of up to \$4,000. You may borrow the cost of education minus any other aid. No family contribution is subtracted from the loan. You will pay the interest rate from the date of disbursement.

 Federal Family Education Loans to Parents/Direct Loans to
 Parents — Parents may borrow for their students from the
 Federal Direct or FFEL PLUS
 Loan program. Repayment
 begins within 60 days after disbursement. The interest rate is
 variable, and the parent has up to 10 years to repay the loan.
 A credit check is required.

#### **RETURN OF TITLE IV FUNDS**

If you do not begin attending a class, you will not receive financial aid for the class, but will be charged tuition and fees if you fail to officially withdraw by the published census date.

If you receive Title IV financial aid from CCD and then withdraw from classes or stop attending prior to the completion of 60 percent of the semester, you will be subject to repayment of a portion of the financial aid you received. The institution is required to pay back a portion to the financial aid accounts from which you were paid.

You will pay the amount owed to the federal government. CCD must report the amount that you owe to the U.S. Department of Education, and you are ineligible to receive aid at ANY school until the funds are repaid.

Title IV funds include the Federal Direct/Stafford Loan programs, Federal Pell Grant, Federal Supplemental Educational Opportunity Grant and Colorado Leveraging Educational Assistance Partnership.

The following formula is used to calculate refund by CCD and student repayment for Title IV fund recipients.

% of term prior to withdrawal	% to be refunded by CCD	% to be repaid by student
0-15	100	100
16-60	16-60	16-60
61-100	0	0

Any amount owed by the student to a grant program is reduced by 50 percent. Any amount owed by the student to a loan program will be repaid using the normal repayment schedule.

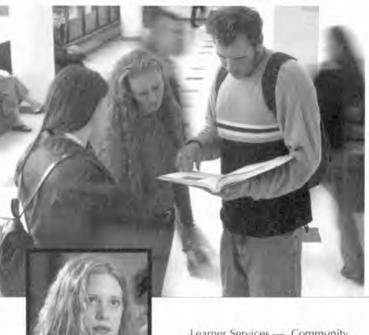
Financial aid refunds by CCD and repayments by the student will be distributed in the following order.

- 1. Unsubsidized Federal Direct Loan
- 2. Subsidized Federal Direct Loan
- 3. FFEL PLUS Loan
- 4. Federal Pell Grant
- 5. Federal Supplemental Educational Opportunity Grant
- 6. Colorado Leveraging Educational Assistance Partnership Program
- 7. Colorado State Financial Aid
- 8. Private Funds
- 9. CCD Funds
- 10.The Student

The complete policy is available from the Financial Aid Office and is included in the "guide to financial aid" mailed with award letters. This policy does not include state of Colorado funding because the return of state financial aid requirements was not determined at the time this catalog was printed.



What you learn here will apply to your work in the real world.



You can choose from more than 125 programs that prepare you for a new career or for transfer to four-year schools. Learner Services — Community College of Denver offers an array of learner services that have one goal — to increase your access to quality education and help you achieve your educational goals. Our services are listed in alphabetical order for your convenience.

#### CAREER SERVICES

On the Auraria Campus, the Educational Opportunity Center offers free career counseling services, including testing, educational planning, information and assistance. The EOC is located in the CCD Auraria Administration Building, 1201 5th St., room 325. An EOC counselor also is available in the South Classroom on set weekdays. You can call 303-629-9226 to make an appointment at either location.

The CCD West Campus Career Services Center serves all CCD students. The Career Services Center is in Room 108, at 2420 W. 26th Ave., Bldg. D. Parking is limited, but free. The center's staff offers assistance with job searches, career direction and resume development. For more information, you can contact Anne Reeder at 303-477-5864, or you may e-mail her at areeder@ccd.cccoes.edu. All CCD Auraria and branch campus advisers and educational case managers will provide some career consulting. Be sure to ask!

#### LEARNER SERVICES

#### CENTER FOR PERSONS WITH DISABILITIES

Students with disabilities should contact the Center for Persons with Disabilities (CPD) about free services to assist them at CCD. Services include academic advising and registration assistance; tutoring, classroom assistance, and curriculum and test modification; consultation with instructors; text recording, notetaking and use of adaptive equipment; accessible parking and campus orientation; sign language and oral interpreting; liaison with rehabilitation agencies and other Colorado postsecondary institutions; and housing and transportation information. CPD is in the South Classroom Building 134, 303-556-3300.

In addition to CPD, other resources useful to students with disabilities are:

- Computer Training for People with Disabilities — certificate and degree programs in computers for students with disabilities, 303-477-5864
- ROOTS customized worktraining certificate program in Financial Services, providing training and paid internships for persons with disabilities, 303-477-5864.
- Academic Support Center tutoring services available for students, 303-556-2497.

- Special Learning Support Program — services for students. with learning disabilities, 303-556-4705.
- Computer Access Center located in the Auraria Library, serves all students with disabilities, 303-556-6252.

CCD complies with and fully supports Section 504 of the Rehabilitation Act of 1973, with amendments of 1974, regarding nondiscrimination on the basis of disability (documentation required.) Inquiries concerning Title VI, TITLE IX and Section 504 may be referred to vice president for Student and Enrollment Services, Felicia Sykes, CCD Campus Box 200, P.O. Box 173363. Denver, CO 80217-3363, South Classroom Building 301, 303-556-2413, or to the Office for Civil Rights, U.S. Department of Education, 1961 Stout St., Denver, CO 80294.

#### CHILD CARE SERVICES

CCD provides quality child care at CCD Auraria. The center provides a full-day program in early childhood care and education. Children have numerous opportunities to practice being competent, creative, caring and self-sufficient. Materials, equipment and activities are nonsexist and multicultural to prepare children for a diverse society.

The Auraria Campus Child Development Center is licensed by the Colorado Department of Human Resources and accredited by the National Academy for the Education of Young Children. Center hours are Monday through Friday, 7:30 a.m. to 5:30 p.m. The center accepts children between the ages of 2 1/2 and 6 years old. The Real Kids Center is popular, so enroll early. Call for current information: 303-556-2439.

#### EDUCATIONAL OPPORTUNITY CENTER

The Educational Opportunity Center (EOC) is a community service program that provides educational planning, information and assistance, including:

- career counseling;
- college/university admission assistance;
- vocational-technical school enrollment assistance;
- academic assessment coordination;
- federal and state student financial aid application assistance; and
- educational planning workshops.

Services are free. EOC is located in the CCD Auraria Administration Building, third floor. Call 303-629-9226 for an appointment.

# EDUCATIONAL PLANNING AND ADVISING CENTER

The Educational Planning and Advising Center (EPAC) is the first contact many students have with the college. Its purpose is to help students enroll, plan their college programs, and remove barriers that interfere with their success in school and life.

EPAC helps new students with the admissions process, provides information on and interpretation of assessment programs and advises students who have not been chosen or accepted into a major. Advisers refer students to a wide range of community and campus resources.

All new students are encouraged to contact the Educational Planning and Advising Center. The center offers campus tours. Special advisers assist refugee and international students.

EPAC is located in the South Classroom Building 134, 303-556-2481.

# **EVENING SERVICES**

Students who attend college during the evening hours can obtain help and information in the Educational Planning and Advising Center in the South Classroom Building 134. The offices of Admissions, Registration and Records, Financial Aid, Educational Planning and Advising, Career Services and Business Services also are open until 6 p.m. on Tuesday and Wednesday evenings when classes are in session. Call 303-556-2600 for more information.

#### GED INSTITUTE - CCD AURARIA

The GED Institute conducts GED classes in the Academic Support Center on the Auraria Campus. It also offers GED and ESL classes at off-campus sites in the City and County of Denver. Learners who are interested in obtaining a Colorado High School Equivalency Diploma or learning English as a second language (ESL) are invited to participate. GED and pre-GED classes are self-paced labs, while ESL classes are directed by an instructor. For more information, including locations, days, times and admission requirements, please call 303-556-3805 at CCD Auraria.

#### GED BRANCH CAMPUSES

Call 303-293-8737 at CCD East; 303-289-2243 at CCD North; and 303-477-5864 at CCD West.

# HEALTH SERVICES

CCD students taking at least one credit hour are eligible for services at the Auraria Student Health Center. Student health insurance is NOT required to use the Health Center. Physicians, physician assistants, nurse practitioners, radiological technologists and medical assistants staff the facility. Students will be asked to complete a sign-in sheet and show a current ID at check in.

Services include treatment of illness and injuries, lab testing, medications, physicals, annual gynecological exams, sexually transmitted disease information/testing, birth control information/services, minor surgery, cholesterol screening, immunizations, T Band HIV testing, blood pressure checks, casting, suturing and X-ray. All services listed above are low cost. Payment is required at time of service. Health-related classes are taught each semester and are offered free to students.

Walk-in services begin at 8 a.m., Monday-Friday. Access is on a first-come, first-served basis. The daily closure time for walk-in care varies, contingent on when all patient slots have been filled. Patients are encouraged to check in as early as possible. The Student Health Center is located in the Plaza Building 150, on the lower level. Brochures with additional information are available at the Health Center. For more details, call 303-556-2525.

Students who have concerns about infectious diseases should contact Felicia Sykes, vice president for Student and Enrollment Services, SO 301, 303-556-2413.

The college will follow procedures defined by the Colorado Department of Human Services to ensure the health and safety of all students, faculty and staff.

# HEALTH INSURANCE

Students may purchase an accident and sickness insurance plan after registering. Brochures are available from the Student Health Center, Student Life (Tivoli Student Union) and the office of the vice president for Student and Enrollment Services, South Classroom Building 301, 303-556-2413.

# PLACE — PROGRAM FOR LICENSING ASSESSMENTS FOR COLORADO EDUCATORS

All candidates (whether prepared in Colorado or other states) for initial educator licenses (provisional licenses) in Colorado are required to take and pass the PLACE assessments, including basic skills, liberal arts and sciences, professional knowledge and content areas, such as elementary education. Please contact the Center for Educational Advancement for more information at 303-556-8455.

# RECRUITMENT AND STUDENT OUTREACH

Community College of Denver's Recruitment and Student Outreach (RSO) Office is located in South Classroom Building 136. RSO staff may be some of the first to greet you from the Welcome Center when you visit South Classroom. They will help get you to the right location to meet your needs.

CCD's RSO recruiting activities include on- and off-campus presentations, campus tours, counselor updates, day/night programs, high school visits, college fairs, Postsecondary Enrollment Options program, Fast-track program and APEX (achieving personal excellence) with the Denver Public Schools.

Recruitment and Student Outreach also will serve as liaison with the following associations.

- American Association of Collegiate Registrars and Admissions Officers
- Colorado Council on High School and College Relations

- Colorado Educational Services and Development Association
- Local Education Adult Resource Network
- National Association for College Admission Counseling
- Rocky Mountain Association of Collegiate Registrars and Admissions Offices
- Rocky Mountain Association for College Admission Counseling To learn more about

Recruitment and Student Outreach activities, call 303-556-6089.

#### STUDENT LIFE

Student Life develops and implements programs and activities to meet the academic, social and recreational interests of CCD students and the community. Student Life also provides crisis counseling services, referrals to legal assistance, day care, health, housing and employment services.

Programs offered through or supported by Student Life include: Student Government and student organizations, intramural and recreational activities, new student orientation, social and cultural activities, health services, student leadership training programs and student publications, including The Community News student newspaper. These activities provide constructive experiences to stimulate personal growth and social development and add to students' enjoyment of life,

In addition, Student Life operates an in-house food bank and book-lending library. Student Life is located on the third floor of the Tivoli Student Union, room 309.

For more information on our services or programs, please call Student Life at 303-556-2597, or visit our Web site at: http://ccdweb.ccd. cccoes.edu/stu\_life/.

#### STUDENT LEGAL SERVICES

Student Legal Services is a tri-institutional student-fee-funded program. It provides students with legal advice and assistance. Services are offered at no cost. They include legal counseling, document preparation, legal selfhelp workshops and related activities. Services do not include representation in court or action against the college or any state or local government entity. Legal Services is located in the Tivoli Student Union, room 308, 303-556-6061.

#### **TESTING CENTER**

The Testing Center offers a variety of testing services to CCD students and staff. Please contact the center for information about dates, times, applications and registration fees, South Classroom Building 223, 303-556-3810.

#### **Academic Profile**

The Academic Profile is a test of general education knowledge and skills. It is required of graduating students. Test data help measure institutional effectiveness and improve the quality of instruction and learning.

#### **Basic Skills Assessment**

Basic Skills Assessment is required of all first-time entering freshmen students by State Board policy. It assesses the areas of English (writing), mathematics, reading and study skills that are minimally required for student success in college-level course work. ESL (English as a second language) skills also are assessed. Advisers/case managers and instructors advise students based on the results of the assessments.

#### **Class Testing**

Self-paced and distance education course exams are administered in the Testing Center. Make-up exams can be taken with faculty permission. Students also may arrange to take exams from other colleges or universities at the Testing Center for a small fee.

#### **Credit for Prior Learning Exams**

The Testing Center offers CLEP, the College-Level Examination program tests, and DSST, the DANTES Subject Standardized tests. These nationally recognized tests give you the opportunity to receive college credit for learning acquired outside the traditional college classroom. (See page 8, Credit for Prior Learning.)

#### Official GED Testing Center

CCD North is an official, statesanctioned GED testing center. Testing times are Monday from 8 a.m. to 4 p.m., Tuesday from 8 a.m. to 11:30 a.m., and Thursday from 5 p.m. to 9 p.m.

CCD West is a satellite testing center, with testing on Fridays from 8:30 a.m. to 4:30 p.m.

CCD East is also a satellite testing center, with testing on Tuesdays from 8:30 a.m. to noon.

Test fees are \$10 for each of the five GED tests and \$10 for each test retake. Tests are available in Spanish and English. For more information, contact the CCD North GED Testing Center at 303-289-2243.

#### **Psychological Testing**

This testing is available by referral to the Special Learning Support program.

#### Workman's Compensation

A Physicians Accreditation Test is required by the State of Colorado for certain specialties. This test assesses knowledge of Workman's Compensation laws as they relate to physicians, rights and responsibilities.

#### **VETERANS AFFAIRS OFFICE**

The Veterans Affairs Office provides information about veterans' federal, state and community benefits; assistance with VA inquiries; and gives referrals for emergency food, clothing, housing, legal aid and employment. The Veterans Affairs Office is located in the South Classroom Building 133, 303-556-3564.





#### ACADEMIC SUPPORT CENTER

The Academic Support Center offers free tutorial assistance and access to both PC and MAC computers to all CCD students and MSCD and CU-Denver students in need of general and basic skills support. Other tutoring in various subjects also is available. For more information on ASC services, or to make an appointment for counseling or tutoring, call 303-556-2497.

You may request tutoring in any course at the college. For some classes, you may be referred to the academic centers for tutoring. Numerous tutoring services are available on a drop-in or appointment basis. In addition to finding help with individual courses, you are invited to use services provided in the following specialized labs.

#### LABS AND TUTORING

Lab Schedules are posted at the entrance to South Classroom Building 142, the Technology Building 104 and outside each lab.

#### Academic Technology Lab

Students can access both PC and Mac computers to complete assignments for any CCD class, access the Web or do library research. Technical and tutoring assistance is available at all times the lab is open. (Technology Building 104)

#### English as a Second Language (ESL)

ESL tutors help you with pronunciation, conversation, grammar, reading, and other subject areas such as math, biology, chemistry and computer science. Computers, language-learning software and other equipment also are available for you to use. (South Classroom Building 142M)

#### Colorado High School Equivalency Diploma (CHSED, formerly GED)

You can prepare to pass the CHSED test battery and earn a CHSED diploma (South Classroom Building 142J). For additional information, see "GED Institute," page 17.

#### Mathematics

Tutors and instructors help you gain greater experience and knowledge of mathematical principles. Practice your skills on IBM computer tutorials, watch course videos and participate in specialized workshops and study groups. (South Classroom Building 142Q, R & S)

#### **Reading and Study Skills**

Tutors and computerized assistance help you strengthen your abilities in reading, note taking, organizational skills, test taking and other techniques designed to enhance your success in college. (Open area and South Classroom Building 139)

#### Special Learning Support

Tutors help you learn compensation techniques for your special learning needs. At the same time, you also can strengthen your skills in math, reading, study skills and many other academic content areas. (South Classroom Building 142L, U & V)

#### Writing Center

Students may drop in to the Writing Center anytime during operating hours. Tutors immediately are available and can help as much or as little as a student needs. The Writing Center is open six days a week and is located in South Classroom Building 142 N, P and T. Monday through Thursday it is open 8 a.m. to 7 p.m., on Friday from 8 a.m. to 4 p.m. and on Saturday from 9 a.m. until 2 p.m.

Students receive one-to-one writing instruction with an experienced tutor. Sessions can deal with any facet of the writing process, from brainstorming to editing, and our tutors are prepared to help with writing assignments from any discipline. Tutors seek to teach students about writing and to give them tools or knowledge that they may take from a given session and then apply to other writing situations.

The Writing Center has 36 Macintosh computers that are available for word processing, Internet research or e-mail retrieval. Tutors will help with introductory and advanced word processing concerns, searching the Internet or the Auraria Media Center's Skyline system and setting up a personal e-mail account via the Web.

The Writing Center also offers online writing tutorials through its Online Writing Lab (OWL). Students may visit the Web site at www.owl.ccd.cccoes.edu/owl. Students can send a paper electronically and a tutor will read and respond to the essay within 24 hours. Students also may send in a specific writing question, such as whether to use that or which, or how to brainstorm for a topic. The OWL also provides links and resources for writing and research.

#### SPECIAL LEARNING SUPPORT PROGRAM (SLSP)

The Special Learning Support program meets the needs of adults with learning disabilities and different learning needs at CCD. It is dedicated to enhancing the quality of education for these students through innovative curricula, highly trained instructors and tutors and exemplary support. It also actively promotes community awareness of learning disability issues and is a primary resource for students, staff and faculty.

#### What SLSP offers

- · Screenings for learning disabilities
- Advising for academic, financial aid and personal needs
- Tutoring in math, writing, reading, study skills and other academic areas
- Specialized instructors
- Classroom and testing accommodations (note takers, recorded books, extended test time)
- Student advocacy
- Consulting with instructors and students about learning disabilities

#### SLSP classes

- · Spelling
- · Math
- · Reading, writing and study skills
- Learning and skills development The Special Learning Support program serves nearly 200 students per semester. Students apply for this service. For more information, please call 303- 556-4705 or stop by the Academic Support Center, South Classroom Building 142L.

#### TRIO SCHOLARS

Formerly known as Student Support Services, TRIO Scholars is a program which helps 200 low-income, first-generation college students and/or students with disabilities achieve academic success at CCD. TRIO Scholars full-time counselors help students on an individual basis with personal and academic concerns. Peer support also is provided by carefully selected and trained peer mentors and tutors. who can help students with school and everyday issues. TRIO Scholars helps students develop responsibility, self-confidence, selfawareness and college-life skills during their study at CCD, so they can complete their studies and successfully graduate and/or transfer to a four-year college or university. Eligible students receive a wide range of services, including:

- · counseling, support and advocacy;
- academic advising and course selection;
- · goal-setting;
- tutoring:
- · assistance with financial aid forms;
- transfer assistance;
- career guidance and exploration; and
- cultural event services.
   The CCD TRIO Scholars pro-

gram serves up to 200 students a semester who qualify for services. For more information on eligibility requirements and applications, call 303-556-6309, or stop by the TRIO Scholars office located in the Academic Support Center, South Classroom Building 142E.

#### VOCATIONAL TUTORING SERVICES (VTS)

Vocational Tutoring Services (VTS), housed in the Academic Support Center, is a federally funded, Carl Perkins program that serves vocational students who need extra assistance in their classes. The VTS serves more than 1,000 students a year. Vocational students are served at the Auraria Campus, CCD branch campuses and at Lowry,

In conjunction with other Academic Support Center programs, VTS is dedicated to:

- providing one-on-one tutoring assistance;
- providing lab support;
- providing student advocacy;
- · providing vocational ESL;
- providing referrals to other support programs or agencies;
- providing a point of unity and support of all programs at the college;
- helping students to clarify and attain their academic goals;
- facilitating communication between students and faculty;
- teaching students how to learn by focusing on individual needs;
- providing students with a sense of community and connection to the college; and
- serving as an entry point and learning environment for teachers. Students apply for services

through the VTS Office in Technology Building 104 or by calling 303-556-2520. Program staff interacts with the faculty and advisers to gain a complete profile of students to ensure that the most appropriate services are provided.



# SPECIAL ACADEMIC PROGRAMS

#### ACADEMIA DE COMPUTACIÓN

The Academia de Computación provides computer training to students in both English and Spanish from the Microsoft suite of programs, including Windows, Word, Excel, Access, PowerPoint and Office. Upon completing this 19credit-semester-hour program, the student will be awarded a certificate of training from CCD. The demand for computer support specialists in Colorado will number more than 8,000 new positions beyond 2000, with an average wage of \$16.55 per hour, according to the Occupational Outlook Handbook, published by the Federal Bureau of Labor Statistics. Mostly Spanish-speaking persons now have the opportunity to enter this growing and dynamic technical field by pursuing computer training that can lead to gainful employment and new career options.

For more information, please call the Center for Business and Technology at 303-556-2487.

#### CHALLENGE PROGRAM

The Challenge program is an employment and educational support program for young adult and adult ex-offenders released from the Colorado Department of Corrections. Challenge provides services to help ex-offenders successfully re-enter society as lawabiding citizens. Challenge staff coordinates with parole officers, community corrections officers and correctional facilities. Services may include preemployment and job placement assistance, basic skills development, GED preparation and testing, academic advising and vocational training. Program services meet the needs of the ex-offender. The goal of Challenge is to reduce recidivism in Colorado.

Challenge staff is located at CCD West, 303-477-5864.

#### COMPUTER TRAINING FOR PEOPLE WITH DISABILITIES

The Computer Training for People with Disabilities (CTPD) program is a nationally recognized and awardwinning computer training program. You can apply for both certificate and associate degree programs in either CTPD Computer Programming or CTPD Network Administration. If you have a disability, we encourage you to apply to the CTPD program located at CCD West. Our program offers special services, support and placement for participants.

CTPD program admission requirements include:

- 1. completed CTPD application;
- successful completion of a computer aptitude test battery;
- personal interview with CTPD director; and

 Personal interview with members of the CTPD Business Advisory Council. You can obtain application information from the Center for Persons with Disabilities, South Classroom Building 134, 303-556-3300, or from the director, CTPD, CCD West, 2420 W. 26th Ave., Ste. 100D, Denver, CO 80211, 303-477-5864.

#### COOPERATIVE EDUCATION PROGRAM

CCD's Cooperative Education program provides opportunities to supplement course work with practical work experience related to your educational and occupational objectives. You can earn credit for working part-time in an area directly related to your educational program. We encourage you to apply at least one semester prior to the semester during which you wish to work. For more information, call Student and Enrollment Services at 303-556-2413.

#### DENVER PREP/ PROYECTO ACCESS

CCD offers a summer learning opportunity for pre-high school freshmen called Denver PREP/ Proyecto Access. The enrichment program is free and open to Denver middle school students who currently have a B or better grade point average. The high school pre-freshman enrichment program is a three-summer commitment for students who are interested in engineering, science and math careers. In addition to science, math and engineering courses, Denver PREP participants learn problem solving, research and study skills, explore careers and practice for the SAT/CPT college entrance exams.

Sponsors of the program include the National Aeronautics and Space Administration, the Hispanic Association of Colleges and Universities, the United States Department of Agriculture, the Texas Pre-freshman Engineering program and CCD,

The 2003 Denver PREP/Proyecto Access program starts in June and runs eight weeks, with classes 8:30 a.m. to 2:30 p.m., Monday through Friday. Application deadline is March 24. For more information and an application, call Dr. James Weber, assistant professor of Mathematics, 303-556-2461.

#### DEVELOPMENTAL STUDIES PROGRAM

To be successful at CCD, you must be able to use your reading, math, writing and study skills. We offer a comprehensive academic program in these skill areas. It includes:

- assessment of basic academic skills;
- test results interpretation by skilled faculty and advisers:
- a variety of skill development courses in reading, mathematics, writing and study skills;
- support with computerassisted instruction;
- 5. preparation for GED; and
- English-as-a-second-language instruction and support.

For more information, contact the Center for Educational Advancement. South Classroom Building 313, 303-556-8455.

# FIRST GENERATION STUDENT SUCCESS PROGRAM

The First Generation Student Success (FGSS) program provides a model environment for first-generation students in higher education that attends to the academic. social, technological, career and life goals of students. Students enrolled in the program participate in first-year experience classes, learning community initiatives, lutoring and peer mentor programs, service learning and community service activities. First-generation students also have access to computerized classrooms and drop-in labs provided for supplemental support and/or enrichment.

The FGSS program staff works closely with other CCD faculty and staff to help students adapt to college life so that they stay in college and receive their two-year degrees, transfer to a four-year college or university, and achieve their academic and career goals.

#### HONORS PROGRAM

The Honors program allows qualified students to receive honors credit by contracting with instructors to do individual honors work within existing courses or by taking designated honors courses. Honors work can help you develop sophisticated, creative, critical thinking and research skills while enhancing your academic résumé. For more information, visit the Honors program office in South Classroom 244A, or contact the Honors program coordinator at 303-556-3861.

#### INTERNATIONAL STUDY PROGRAMS

CCD is a member of the Colorado Consortium for International Programming (CCIP). Through this organization you may find opportunities to live and study abroad while earning CCD credit. For more information about study possibilities in foreign countries, contact the Center for Language, Arts and Behaviorial Sciences dean at 303-556-2473.

#### LEARNING COMMUNITIES

You can be on the leading edge of education's future in a CCD Learning Community. Learning Communities link together courses or course work to provide you with greater meaning in what you are learning, as well as increased intellectual interaction with faculty and fellow students.

- You'll get daily personal one-toone tutoring, conversation and work evaluation.
- You will create collaborative networks, build competence and confidence and become a mentor.
- Learning Communities focus on student-led efforts.

Learning Communities have a national and CCD record of raising academic outcomes, including learning, retention, graduation and transfer. Permission is required, and you must register for both classes. For more information about this new style of learning, contact Peggy Valdez-Fergason, director of the First Generation Student Success program, South Classroom Building 244, 303-556-4964.

# NORTH LINCOLN CAMPUS OF LEARNERS PROJECT

The North Lincoln Campus of Learners project is a joint partnership between CCD and the Denver

Housing Authority. The project provides access to education, training and related services for adults who live in the North Lincoln Park Homes, Residents who enroll at CCD are provided with an Educational Case Manager, onesemester child care stipends and motivational tuition scholarships. The college's First Generation Student Success program works collaboratively with the North Lincoln Campus of Learners to transition residents into the college and help them attain their educational and career goals.

#### POSTSECONDARY ENROLLMENT OPTIONS PROGRAM

The Postsecondary Enrollment Options Act allows 11th- and 12thgrade students at Colorado public high schools to enroll in courses offered by CCD that substitute for courses required for high school graduation. These courses will appear on a CCD transcript, and credit for courses successfully completed may be applied toward a certificate or degree at CCD. For more information, contact the Educational Planning and Advising Center, South Classroom Building 134, 303-556-2481.

#### ROOTS

ROOTS (Recognizing Ongoing Opportunities Through Success) is a customized work-training certificate program in Financial Services, providing training and paid internships for persons with disabilities age 17 or older who are clients of the Colorado Division of Vocational Rehabilitation. **ROOTS** provides reasonable student accommodations, including interpreters, books on tape and adaptive equipment. Other services include learning support, advocacy, job coaching and shadowing, job search assistance, case

management, one-on-one tutoring, workshops and job fairs. Paid internships with supportive job coaching are provided to students on completion of classes.

ROOTS graduates enter the high-demand job market for entrylevel financial services workers at a starting pay averaging \$10 per hour. Entry-level positions include bank tellers, proof operators, bookkeepers, administrative assistants, customer service representatives, and accounting, mailroom and general office clerks.

ROOTS is co-located with the Computer Training for People with Disabilities program at CCD West, 2420 W. 26th Ave., Ste. 100D, Denver, CO 80211. To make an appointment for an informational meeting and tour, call CCD West at 303-477-5864. Students may apply and begin classes at any time.

#### SUMMER BRIDGE PROGRAM

The Summer Bridge program is a well-established, intensive learning program that offers participants a firm foundation on which to begin and build a successful college education.

For more than 10 years, CCD has developed the curriculum for a thorough summer program, including financial assistance, first-year experience courses, academic development courses, a computer applications course, student support services, career exploration, college program sampling and a variety of enrichment activities. The Summer Bridge program motivates students to pursue a college education, and equips them with the skills and confidence needed to complete that education.

Applications are accepted from January through April; the eightweek program begins in June. Applicants should be recent high school or Colorado High School Equivalency graduates between the ages of 18 and 22. However, any student intending to enroll in CCD's fall classes, and who can benefit from instruction is wel-comed to apply.

For more information and for specific entrance requirements, contact TRIO Scholars, formerly known as Student Support Services, South Classroom Building 142E, 303-556-6308.

#### TITLE V HISPANIC SERVING INSTITUTIONS (HSI) ACCESS AND SUCCESS PROJECT

The Title V HSI Access and Success Strengthening Institutions project is a five-year grant-funded project to strengthen the retention and success rates of degree-seeking, lowincome, first-generation and minority students. Educational Case Management (ECM) Teams in the college instructional centers provide support for students. Each ECM Team, comprised of educational case managers, program coordinators, faculty advisers and student ambassadors, provides students with holistic advising. The ECM Team helps students in refining educational and career plans, obtaining internships and making college transfer connections as they complete their academic programs.

Educational Case Management Teams, working with learning community faculty, develop instructional strategies to increase the retention and success of students. Through this project, students participate in first-year experience learning communities, pre-professional learning communities, and supplemental/enrichment activities to help ensure their success in health, math, science and information technology disciplines. The Title V staff works across disciplines, programs and centers to provide support for all students.





CCD partners with other colleges and universities on the Auraria Campus, in metropolitan Denver and across the state to offer students various educational and career opportunities.

### CENTER FOR LEARNING OUTREACH

The Center for Learning Outreach offers alternative learning options to CCD students. Open-entry/ open-exit programs are offered year-round at CCD East, North, and West. Evening and Weekend College at Auraria and the Distance Learning program offer programs for students who choose to study at times convenient for them. Online degrees and certificates can be obtained through CCC Online.

#### CCD EAST, NORTH AND WEST

These campuses offer fast-track jobtraining certificate programs and Associate of Applied Science degrees. Fast-track training permits students to complete certificate programs in as little as three months and as much as seven months, assuming full-time attendance and depending on the training program. CCD grants college credit for all courses successfully completed.

Certificate programs are open entry/open exit and operate yearround. Instruction is provided in an individualized and self-directed format that allows students to enroll at anytime throughout the year and complete a program at anytime when requirements are met. Students may attend classes

#### ALTERNATIVE LEARNING OPTIONS

an average of six hours a day, five days each week.

CCD East, North and West also provide classes in Career Exploration, GED preparation, basic academic skills and English as a Second Language (ESL). Career assessment, GED testing, case management and job placement assistance are available.

#### CORPORATE TRAINING CENTER

Customized and contract training meets our business community's training needs through credit and noncredit offerings at the work site or at CCD's Corporate Training Center.

A company may select from current college programs or from tailored courses and workshops. We develop customized training programs to meet the needs of each business. Contact the Corporate Training Center, 1391 N. Speer Blvd., Suite 200, Denver, 303-226-5313.

As part of its Corporate Training Center, CCD has a state-of-the-art, networked, Pentium-based computer lab offering beginning, intermediate and advanced computer instruction in an expanding range of software packages. The computer lab also is available for rental at competitive rates. Call the Computer Learning Services coordinator at 303-226-5311.



## The Small Business Development Center

The Small Business Development Center (SBDC) provides small business owners and would-be entrepreneurs with guidance in small business planning and start-up preparation, loan and bid package preparation, contract identification and marketing plan development. SBDC personnel work extensively with grant writing and funding for small businesses, small business computerized databases and information networking. The SBDC is at 1445 Market St., Denver, CO 80202, 303-620-8076.

#### DISTANCE LEARNING PROGRAM CCC Online

CCD is part of a consortial group of community colleges in Colorado offering an Associate of Applied Science (AAS) degree in business, advanced placement nursing and other courses. All classes are offered online. Tuition is \$129.70 per credit hour for instate and outof-state students. Information is available at: www.ccconline.org. See page 57 for CCC Online program information.

Online courses have a professor and a class of 12 to 25 learners. Online courses have specific beginning and ending dates. Week by week, learners cover specific material, and there may be due dates for assignments. On a dayto-day basis, learners retain control over their schedules; you don't need to be at your computer at a specific time on a specific day, Class participation and the exchange of ideas is the foundation of CCD's Distance Learning program; although your classmates and professors may be geographically remote, you definitely will be well-connected to them.

# EVENING AND WEEKEND COLLEGE

Evening and Weekend College courses and programs, offered through the Center for Learning Outreach, are for adult students who want the highest quality education available in a convenient evening and weekend format. Evening and weekend courses are offered during fall, spring and summer semesters.

Evening and Weekend College courses are taught by experienced, effective teachers who usually have a master's degree or higher, are committed to academic excellence and specialize in the content areas they teach. Small class sizes allow teachers to provide students with personalized attention.

Through Evening and Weekend College, students can earn certificates and/or degrees, advance their career opportunities and marketability, or prepare for transfer to other institutions of higher education. Core courses lead to the Associate of General Studies, the Associate of General Studies, the Associate of Science and the Associate of Applied Science degrees. In all, 44 certificate and degree programs in high-demand professional careers are available.

For complete listings, see the current Schedule of Classes Evening and Weekend College sections. For more information, contact Bob Fulton at 303-556-3573 or bob.fulton@ccd.cccoes.edu.

#### WORKFORCE INITIATIVES

Workforce Initiatives offers credit and noncredit courses in the areas of essential skills to businesses and cities interested in expanding and upgrading the skills of their workforce. An Essential Skills certificate in several career tracks is available, consisting of three components:

- training in workplace core courses, such as communication for the workplace, reading, writing and speaking for the workplace, English as a Second Language, math and computational skills;
- vocational core courses specific to each vocational track; and
- cooperative education involving job coaching/mentoring through placement in the student's field of interest.

For more information, contact Workforce Initiatives, 1391 N. Speer Blvd., Ste. 200, Denver, 303-226-5560 or 303-226-5561.



# AURARIA CHILD CARE CENTER

The center provides child care for children of students, faculty and staff on the Auraria Campus. It is fully licensed by the Colorado Department of Social Services. Space is available for 30 toddlers, aged 18 months to 3 years, and 120 children, aged 3 to 8 years. Professional staff provides a toddler, preschool and state-certified kindergarten program. Call 303-556-3188.

#### AURARIA LIBRARY

The Auraria Library has more than 700,000 volumes of books, microforms and bound periodicals, and more than 1,700 current periodical and newspaper subscriptions. As a member of the Colorado Alliance of Research Libraries (CARL), the Auraria Library has access to an additional six million volumes through inter-library loans.

You can take a 50-minute, selfguided, audiotape tour of the library to become familiar with its services and resources, including: computerized bibliographic searches, library orientation and instruction for groups and individuals, a depository of U.S. and Colorado government publications and media listening and viewing facilities. Rooms for individual study, group conferences and typing also are available. For information about library services and hours, call 303-556-2741.

# AURARIA CAMPUS FACILITIES

#### CAMPUS POLICE AND SECURITY

Campus Police and Security provides professional 24-hour crime prevention and law enforcement services for the Auraria Campus. For routine calls, phone 303-556-3271; for emergencies dial 911.

#### CAMPUS RECREATION

Campus Recreation offers unique opportunities to develop athletic skills, leadership abilities and team spirit. Major campus attractions include noon-hour aerobics, swimming pool, weight room and handball/racquetball courts. The outdoor adventure program offers a variety of one-day and multi-day trips for wind surfing, skiing, snowshoeing, bicycling, cross-country skiing and ice sailing. The intramural program includes touch football, basketball, racquetball, tennis, 3-on-3 basketball, floor hockey, volleyball and inner-tube water polo.

Club sports provide a high level of competition in rugby, lacrosse, Tae Kwon Do, weight lifting, soccer, football, karate, skiing and volleyball.

Stop by room 108 of the Events Center for semester schedules and to check out team sports equipment. For more information, call 303-556-3210. You can make handball/racquetball reservations and check in for these activities at room 111, 303-556-3211.



The outdoor adventure program offers a variety of one-day and multi-day trips for wind surfing, skiing, snow-shoeing, bicycling, crosscountry skiing and ice sailing.



Auraria Child Care Center provides child care for children of students, faculty and staff on the Auraria Campus. It is fully licensed by the Colorado Department of Social Services.

#### **INTERFAITH MINISTRY**

The Auraria Interfaith Ministry (AIM) is a cooperative endeavor of several church denominations. AIM provides programs and counseling and promotes individual spiritual growth. AIM offices are in the St. Francis Center. For more information, call 303-556-8591.

## PARKING AND TRANSPORTATION SERVICES

Prospective students and new students coming to the college for advising, orientation, basic skills assessment, financial aid workshops or registration may park in the Tivoli Lot at the corner of Auraria Parkway and 9th Street. Validate your parking ticket for four hours of free parking in South Classroom Building 134. Once you register, you no longer are eligible for free parking.

Parking is available in daily fee lots ranging in price from \$1.50 to \$10. The parking garage at Seventh Street, and Lawrence Way is currently \$3.25 all day. The parking fees may be paid in cash or by debit card. Debit cards may be purchased for \$1 on the second floor of the Tivoli Student Union next to the postal vending machines, or at the Parking and Transportation Center Office in the elevator lobby on the first level of the parking garage. Debit cards are good only in the garage and Lots D and K.

A student ID is required for parking in Lot R. A limited number of monthly permits are available and are sold at the beginning of each semester. Students also may park free for 20 minutes in the Tivoli Lot. Please bring your ticket for validation to the Parking Office. Four- hour parking meters are available for student use on the east side of the South Classroom Building and in Lot N. Use nickels for maximum number of minutes.

The Parking Office, located on the first floor of the parking garage, is open Monday through Friday, 7:30 a.m. to 5:30 p.m. For more information about the Parking Services listed below, call 303-556-2000.

- Free carpool-matching assistance
- · Carpool parking discounts
- Free on-campus transportation for disabled students on the wheelchair-accessible handivan
- Free campus shuttle service for evening students on the Auraria Evening Express (Monday through Thursday, dusk to 10 p.m.)

#### **REAL KIDS CENTER**

The Auraria Campus Real Kids Center provides a full-day program in early childhood care and education. The center is licensed by the Colorado Department of Human Services and accredited by the National Academy for the Education of Young Children (NAEYC). Hours are Monday through Friday, 7:30 a.m. to 5:30 p.m. The center accepts children between the ages of 2 1/2 and 6 years old. Call 303-556-2439 for current information and space availability.



COLLEGE POLICIES & ACADEMIC STANDARDS

So you'll know what you can expect of us at the Community College of Denver, and what we'll expect of you, please read this alphabetized section carefully. Your counselor, adviser, educational case manager or a staff member in Student Services, South Classroom Building 134, can help if you have additional questions.

#### ACADEMIC STANDARDS Attendance

Your regular and punctual attendance is expected, and each instructor will keep a complete record of your attendance for the entire length of each course. You will be counted absent from missed class meetings, beginning with the first official date of enrollment or the first day of classes, whichever is later.

Faculty may give a failing grade to any student who has a 15 percent or greater absence from a class, starting from the first class meeting. You are responsible for informing the instructor of the reason for an absence and for doing so in a timely fashion. You, whether present or absent, are responsible for obtaining all material presented and completing all course assignments.

The attendance policy for certain programs, such as health careers, may differ from the general policy because of clinical requirements or requirements of approving agencies.

You are responsible for properly processing a withdrawal.

#### **Course Load**

A full-time course load is 12 to 15 credits. If you are registered for fewer than 12 credits, you are classified as a part-time student.

Eighteen credits is considered a heavy load. Twenty credits is the maximum load for all students without special permission of the instructional center dean.

#### ACADEMIC STANDARDS OF PROGRESS

- You are required to maintain a cumulative grade point average of 2.0 for all course work attempted.
- If your cumulative grade point average falls below the required 2.0 on an attempted six or more credits, you will be placed on academic probation for the following semester of enrollment.
- Should you fail to raise your cumulative GPA to 2.0 by the end of the probationary instructional semester, CCD will consider suspending you academically for a minimum of one semester.
- If you are placed on academic suspension, you must meet with the vice president for Student and Enrollment Services to determine eligibility for continued enrollment.

 You may appeal your suspension to the Suspension Review Board. Decisions of the board are final.

#### APPEAL PROCEDURE

Students wishing to appeal academic suspension or seeking information about the appeal procedure, should contact the vice president for Student and Enrollment Services, 303-556-2413.

#### ASSESSMENT

The Testing Center is located in South Classroom Building 223. The phone number is 303-556-3810 and fax 303-556-8027. Some testing services also are available at the branch campuses. Our Web site is ccd.rightchoice.org/test\_cntr.

#### Basic Skills Assessment Test (BSAT)

Students who plan to earn a degree or certificate must meet the assessment requirement when they apply to the college and before they meet with an adviser to enroll in classes. This involves taking a test in reading, English, math and study skills. The purpose of assessment is to help you succeed by placing you into courses appropriate to your academic skill level.

You may be exempt from one or more of the tests if you meet one of the following criteria.

 You submit proof of an associate or higher degree. CCD has an open admissions policy. This means we do not require college entrance exam scores or high school transcripts. Anyone who is 16 years old and willing to learn is welcome.

- You submit transcripts showing that you have successfully completed basic skills instruction in reading, writing or mathematics from another institution.
- You submit transcripts showing that you have successfully completed ("C" or better or its equivalent) in a college-level course in English and/or math from another institution.
- You submit minimum ACT scores of 18 in reading, 18 in English, and 19 in math, or SAT scores of 450 in verbal and 440 in math.

Note: Submit copies of your college transcripts or test scores to the Testing Center to receive an exemption from taking all or part of the assessment test. EXCEPTION: All students applying to CCD health programs are required to take the BSAT — no exceptions are allowed.

#### English as a Second Language Test (ESLT)

If English is your second language, you will be required to take tests to assess your level of English. You will take a reading test, a grammartest and a listening comprehension test. If you score high on one or more of these tests, you also will take the BSAT.

All students will meet with an academic adviser for interpretation of their test scores. If your score is below program-entry level in reading, English and/or math, you must take review courses beginning with your first semester at CCD. You must pursue basic skills until you reach college-level competency.

#### Assessment for Distance Education Students

Students taking classes over the Internet also must meet the assessment requirement. Contact the Testing Center by phone or visit our Web site to receive instructions on how to complete your testing online.

#### Academic Profile (AP)

All degree-seeking students must take the Academic Profile test during their last semester at CCD. This test usually is given in your capstone course; however, you also may take it in the Testing Center. You must take this test before CCD will issue your diploma.

The Academic Profile test provides CCD with information about the effectiveness of its degree programs. This data is used to compare CCD to other institutions, as well as to provide the state legislature with information on the effectiveness of our programs. We encourage you to do your best on the AP exam.

#### CCD RIGHTS

CCD reserves the right to change provisions, requirements and fees in this catalog. Without notice, CCD may cancel any course or program, or change its content, description, timing, availability, location, academic credit, or any other aspect.

#### COOPERATIVE PROGRAMS WITH EMILY GRIFFITH OPPORTUNITY SCHOOL

CCD provides advanced placement status in various programs to students who have credits from many Emily Griffith programs. See your adviser for details.

#### DRUG-FREE SCHOOLS

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989, Public Law 101-226, CCD informs all students and employees about its drug and alcohol abuse prevention program.

- Standard of Conduct. Students and employees shall not engage in the unauthorized or unlawful manufacture, distribution, dispensation, possession, use/ abuse of alcohol and/or illicit drugs on college property or use as a part of college activities.
- II. Legal Sanctions for Violation of the Standards of Conduct. Any student or employee who is convicted of the unlawful manufacture, distribution, dispensation, production, use/abuse of illicit drugs or alcohol is subject to criminal penalties under local, state and federal law. These penalties range in severity from a fine of up to \$100 to life imprisonment and/or a fine of \$8,000,000.
- III. Penalties that may be imposed by the College. Students and/or employees who violate the above standard of conduct will be subject to disciplinary action under student and employee disciplinary policies. The sanctions include, but are not limited to: a requirement to complete an appropriate rehabilitation or reentry program; expulsion from college or termination of employment; referral to authorities for prosecution; and/or possible loss of financial aid.
- IV. Health Risks Associated with Use of Illicit Drugs and Alcohol Abuse. Health risks associated with drug and alcohol abuse include, but are not limited to, malnutrition, brain damage, heart disease, pancreatitis, cirrhosis of the liver, mental illness, death, low-birth-weight babies and babies with drug addictions.
- V. Available Counseling, Treatment, Rehabilitation or Reentry Programs. Information on available counseling, treatment,

rehabilitation or re-entry programs is available through the Colorado Department of Health.

For information on substance abuse, contact:

Auraria Student Health Center Plaza Building 150, 303-556-2525 Bethesda PsycHealth System 303-758-1123 (24 hours) CCD Referral Student Life, Tivoli 309-303-556-2597

For Information on treatment centers, call:

Adams Community Mental Health Center 303-287-8001 (24 hours) Arapahoe Mental Health Center 303-761-0620 Boulder County Mental Health Center 303-447-1665 (24 hours) Denver Mental Health Corporation 303-377-4300 Jefferson County Mental Health Center 303-425-0300 (24 hours)

#### ELECTRONIC COMMUNICATIONS POLICY

CCD has adopted the following policy to guide usage of all forms of electronic communication. For purposes of this policy statement, electronic communication includes, but is not limited to, electronic mail, Internet services, voice mail, audio and video conferencing, and facsimile messages that are sent or received by faculty, staff, students and other authorized users of CCD resources.

I. Ownership of Electronic Communication and Permissible Uses CCD provides various forms of electronic communication to facilitate the conduct of academic pursuits and other CCD business. The records created are the property of CCD and not of the individuals sending or receiving such messages. Individuals who are authorized to use electronic and voice mail may make incidental and occasional personal use of these facilities when such use does not generate a direct cost for CCD. In doing so, users acknowledge CCD's ownership of the systems and its rights with regard to use.

Electronic communications conduct is expected to meet the standards of conduct, laws, regulations, etc., published in official CCD, state, or federal documents including, but not limited to, the CCD catalog, CCD Student Code of Conduct, the Faculty Handbook and the Colorado State Employees Handbook.

#### II. Prohibited Uses

Prohibited uses include, but are not limited to:

- use of electronic communication for commercial purposes.
- use of electronic communication to send copies of documents in violation of copyright laws.
- transmission of information, access to which is restricted by laws or regulations.
- use of electronic communication to intimidate, threaten, or harass other individuals, or to interfere with the ability of others to conduct CCD business,
- forging of communication so it appears to be from someone else.
- obtaining or attempting to obtain unauthorized access to data, files, other electronic communication, etc. Any unauthorized attempt to breach security measures to access or acquire electronically stored information is prohibited. These acts are pro-

hibited regardless of the methods utilized. The term "access" includes reading, deleting, moving, changing access privileges, or affecting files, data, etc., in any unauthorized manner.

 sending chain letters or "jokes" of any nature.

## III. CCD Access and Disclosure

The contents of e-mail messages, backups and archives may be required to be disclosed as a result of legal discovery, writ, warrant or subpoena, or as a result of a request under the Colorado Open Records Law, CCD will not monitor electronic communication as a routine matter. E-mail will not be backed up. Message contents will be inspected as needed to protect health, safety or security.

#### IV. Disciplinary Action

If a violation of policy is suspected, computer support staff and other CCD personnel will refer the matter to the vice president for Institutional Effectiveness, Planning and Technology (IEPT). If a condition exists where IEPT staff believes there is a need for immediate action, that action (account deactivation, etc.) will be taken and the matter referred to the authorities listed above. These cases will be limited to instances involving safety. security, matters of an emergency nature, or those items described in Section II. Prohibited Uses.

#### V. E-mail Ethics and Good Practices

 E-mail is not like a phone call. More information, including copies of the content of your messages, is routinely recorded about the use of e-mail than about your use of the telephone. A broader, less controlled set of people have access to that information.

- E-mail is not like a letter in an envelope, and there is no easy way to mark a message "confidential."
- E-mail is most like a postcard. The contents of your message may be viewed during the mailing process. If there is a problem with routing, a "postmaster" may read your message to try to redirect it correctly. Your message can be forwarded or printed.
- Don't put anything in an e-mail message that you would not want posted on a bulletin board, used in a lawsuit or shared with the wrong person.
- Do use professional, courteous language that will not embarrass you later. It's much easier to edit a message before you send it, than to send an apology later. If you receive mail that was not intended for you, send an appropriate reply to the sender.
- CCD's e-mail systems are developed and maintained to accomplish the work of the college. They can be used for academic pursuits and related administrative tasks, abiding by all applicable guidelines and policies. A minimal amount of personal use is acceptable, however use good judgment and limit the amount and frequency of such use.
   CCD e-mail systems cannot be used for personal gain.
- Help conserve e-mail resources. If you flood the system with trivia, it will not be available for other, more worthwhile uses. Never send junk mail or "Who are you?" messages.
- Limit your use of lists as much as possible. Many of the global email lists are available in other forms such as the World Wide Web. If you subscribe to a list, always make sure you know how to unsubscribe from that list, and

do so when you no longer have a use for the information from the list, or when you are going to be away from CCD for an extended time.

- Be careful when sending to email lists. Sending large messages to lists that have hundreds of users can dramatically impact both the e-mail system you are using to send the message and the e-mail systems receiving the message.
- Before sending to any list or replying to any message from a list, make sure you know the guidelines and policies of that list and you are aware of where your message is going (to the whole list, or just the person that sent the original message). Let integrity and honesty guide

your use of e-mail, and it will be an effective, useful tool.

#### FAMILY EDUCATION RIGHTS AND PRIVACY ACT OF 1974

This act protects the privacy of education records, establishes the right of students to inspect and review their educational records, and provides guidelines for the correction of inaccurate or misleading data through informal and formal hearings.

Students have the right to file complaints with the Family Education Rights and Privacy Act Office (FERPA) concerning alleged failures by CCD to comply with the act.

The CCD policy explains in detail the procedures to be used by the institution for compliance with the act's provisions. Copies of the policy are available from Admissions, Registration and Records and the vice president for Student and Enrollment Services. These offices also maintain a Directory of Records that lists all educational records maintained on students by CCD.

Please refer questions about the Family Education Rights and Privacy Act to Admissions, Registration and Records, 303-556-2430.

#### GRADES

#### Grade A — A distinguished grade for superior work

- You mastered the content and objectives of the course, can apply what you learned to new situations and can relate it to other knowledge.
- You consistently distinguish yourself in examinations, reports, projects, class participation and laboratory or training situations.
- You show independent thinking in assignments and class discussion.
- Your work is consistently in proper form, shows satisfactory evidence of careful research (where required) and is submitted punctually.
- Where achievement in the course involves development of hand or body skills, you consistently demonstrate superior skills, ability and performance.
- You complied with the instructor's attendance requirements.

#### Grade B — A better-thanacceptable grade

- You consistently show mastery of the course content and objectives and usually apply what you learned to new situations or relate it to other knowledge.
- Your work is in proper form, shows satisfactory evidence of research (where required) and is submitted punctually.
- Where achievement in the course involves development of hand or body skills, you consis-

tently demonstrate above average skills, ability and performance.

 You complied with the instructor's attendance requirements.

#### Grade C — An acceptable grade permitting progress forward in course sequence

- You show evidence of a reasonable comprehension of the subject matter of the course and have an average mastery of the content sufficient to indicate success in the next course in the same field.
- You consistently make average scores in examinations, reports, projects, class participation and laboratory or training situations.
- If the subject carries transfer credit, your work indicates sufficient competence in the content to continue in the subject field upon transfer.
- You complete your assignments in good form and on time.
- Where achievement in the course involves development of hand or body skills, you consistently demonstrate average skills, ability and performance.
- You complied with the instructor's attendance requirements.

#### Grade D — A less-than-acceptable, passing grade

- You fall below the average in examinations, projects, reports, class participation and laboratory or training situations, but show some competence in the assigned subject matter of the course.
- The competence demonstrated is insufficient to indicate success in the next course in the subject field.
- Assignments are completed in imperfect form, are sometimes late, or of inconsistent quality.
- 4. Where achievement in the

course involves development of hand or body skills, you consistently demonstrate below-average skills, ability and performance.

You complied with the instructor's attendance requirements.

#### Grade F — A failing grade

- With respect to examinations, projects, reports, class participation and laboratory or training situations, you fail to perform at the "D" grade level.
- You show little or no competence in the assigned subject matter of the course.
- Where achievement in the course involves development of hand or body skills, you fail to perform at the "D" or above grade level.
- You did not comply with the instructor's attendance requirements.

#### Satisfactory/Unsatisfactory

CCD offers some courses on a satisfactory/unsatisfactory basis. Upon successful completion of such a course, unit credit is awarded. However, courses taken on a satisfactory/unsatisfactory basis are not used in the computation of a student's grade point average (GPA). Regulations for such courses follow.

- In authorized satisfactory/unsatisfactory courses, the credit grade is granted for performance equivalent to the letter grade of "C" or better.
- Satisfactory/unsatisfactory courses must be designated by the respective instructional center. Programs may require majors to obtain letter grades in that program's major subjects.

Grade SP — Satisfactory progress Some courses, designated as open entry/open exit, may extend beyond the normal end of a semester. On successful completion of such courses, CCD will award unit credits and grades. Regulations for such courses follow.

- In courses for which this grade is authorized, the SP will be given in either of the following cases.
  - You attended for a full term and show satisfactory progress, but have not yet mastered required course objectives.
- b. Under the college's continuous enrollment policy, you enrolled late in the semester and are making satisfactory progress, but have not had sufficient time to master required course objectives.
- You may be required to reregister for a course in which you received an SP grade, if you do not complete the course work by the end of the next consecutive 15-week semester. When the remaining time needed for completion is short, or when other extenuating circumstances occur, the dean may waive the requirement for re-enrollment.
- You must, before the end of the term, make arrangements with the instructor to complete the course. If you receive financial aid, you must finish the course within the semester you register. Contact Financial Aid for more information, 303-556-2420.
- An SP grade will be changed to "F" after the end of the next consecutive 15-week semester.
- Home study and online courses are open entry/open exit and must comply with the above regulations. If you receive financial aid, you must complete the class in the semester in which you enroll for the class.

#### Grade I - Incomplete

- You have not completed the course requirements due to extenuating circumstances.
- A minimum of 75 percent of the course work has been satisfactorily completed.
- You must, before the end of the term, make arrangements with the instructor to complete the course. These arrangements include a formal contract with a deadline date on or before the end of the next 15-week semester.
- You must complete the necessary course work prior to the deadline date.
- An "I" grade that is not made up becomes an "F".
- Home study and openentry/open-exit courses are not eligible for incomplete grades.

#### Grade W - Withdrawal

You officially withdrew from the class after the add/drop deadline as published in the class schedule.

#### Grade AU — Audit

You audited the course.

#### Grade AW — Administrative Withdrawal

You attended one or more class sessions, but too few to be appropriately evaluated or to receive an"1" grade.

#### GRADE CHANGES

Grade changes are made by the faculty member who administered the grade. In cases where the faculty is not available to consider a grade change, such change may be made by the instructional dean in consultation with the vice president for Learning and Academic Affairs. Grade appeals go to the dean responsible for the course, then to the vice president for Learning and Academic Affairs.

#### GRADE POINT AVERAGE

Grade points measure your achievement for the number of credits completed. To calculate your grade point average (GPA), multiply the number of grade points by the number of credits for each course. Total the credits and points, then divide the grade points by the total number of credits.

- A = 4 grade points
- B = 3 grade points
- C = 2 grade points
- D = 1 grade point
- F = 0 grade points

Note: All other grades (Satisfactory/ Unsatisfactory, SP, I, W, AU, AW) are not calculated into the CCD GPA.

The following example will help you calculate your grade point average:

Course	Credits	Grade	Points
ANT 111			
Physical			
Anthropology	5	A	12 (3 x 4)
BIO 111			
General College	B	A	20 (5 x 4)
Biology			
CIS 115			
Intro. to	.1	в	9 (3 x 3)
Computing			
ENG 121			
English Comp.	3	D	3(3x1)
Essay Writing			
PO5111			
American	.5	E	0 (3 x 0)
Government			

Total grade points divided by total credits equals the cumulative grade point average. Therefore, the grade point average for the above example is 41 divided by 17 for a 2.41 GPA.

17

41

TOTALS

#### RECOGNITION OF ACHIEVEMENT OR CONTINUING EDUCATION UNITS (CEU)

CCD offers many courses, conferences, workshops and seminars for upgrading job skills and for personal enrichment. Successful completion of courses of this type may result in the granting of a Recognition of Achievement or a CEU that may be requested from the appropriate instructional center.

#### **REPEATING COURSES**

- A. You may repeat a course only once if you receive a "D" or "F" grade.
- B. You must request a "Petition to Repeat a Course" form. Complete and submit it to Admissions, Registration and Records after you have received a higher grade for the same course.
- C. You may, while enrolled at CCD, register inter-institutionally to repeat a course originally taken at CCD, at Metropolitan State College of Denver or the University of Colorado at Denver.
- D. The GPA will be changed only once for the same class.
- E. Under extenuating circumstances, you may appeal to the dean of the instructional center responsible for offering a course for permission to retake a course and/or adjust a grade more than once.

#### STUDENT CODE OF CONDUCT

Community College of Denver has the right to protect its educational purpose and its students from the irresponsible conduct of others. To ensure this right, the following regulations have been set forth.

A violation of any one of these codes of student conduct may result in serious, appropriate consequences, ranging from a reprimand, to suspension and permanent removal from the Community College of Denver. Conduct that could subject a student to disciplinary action includes, but is not limited to, the following.

- Dishonesty, such as cheating, plagiarism or knowingly furnishing false information to the college.
- Forgery, alteration or misuse of college documents, records, identification materials, educational material, Internet access, or college property. (Students are required to present identification when requested by authorized college officials.)
- Obstruction or disruption of teaching, administration, disciplinary proceedings, or other college activities, e.g.:
  - a. deliberate interference with academic freedom of speech, including disruption of a class, or interference with the freedom of any speaker invited by any section of the college community to express his/her views.
  - b. forcible interference with the freedom of movement of any member or guest of the college.
  - c. blocking entryways to buildings, rooms, sections of buildings, hallways or stairways in such a way that people find it difficult or impossible to pass.

d. blocking vehicular traffic.

- Physical abuse or action that threatens the health and safety of any person on college-owned or college-controlled property or at college-sponsored or college-supervised functions.
- Theft, misuse, or damage to property on college premises or

at authorized college functions. (Students involved are subject to college disciplinary action, as well as to arrest and prosecution by legal authorities. Students are required to make full restitution.)

- Unauthorized entry or use of college facilities and college equipment.
- Manufacture, possession, control, sale, transmission or use of any alcohol or substance in violation of state and federal laws. (The college has the policy to cooperate fully with law enforcement agencies in such cases.) (See State Liquor Code)
- Disorderly, indecent, or obscene conduct on college-owned or college-controlled property or at college-sponsored functions.
- Failure to comply with the verbal or written directions of college employees acting in the performance of their duties.
- Condoning any act by another student that violates college policy. (Students witnessing any such acts are required to report them to the proper authorities immediately.)
- Unauthorized representation or contracting in the name of CCD. (A student may not claim to be an official representative of the college for any commercial purpose.)
- 12.Verbal or written communication that unlawfully exposes any individual or group to hatred, contempt, or ridicule, and thereby injures the person, property, or reputation of another.
- 13.Dress that fails to meet the established public safety standards in specific classes on college-owned or controlled property and at college-sponsored activities.

- 14.Engaging in any kind of hazing action or situation on or off campus that endangers the mental health, physical health, or safety of a student for the purpose of initiation or admission to any student organization.
- 15.Unauthorized distribution or sale of goods on campus.
- 16.Failure to comply with reasonable requests by authorized college officials or representatives acting on behalf of the college. (This requirement includes reasonable request for students to meet appointments in administrative offices and at disciplinary investigations and hearings.)
- 17. Violations of college policies regarding parking.
- Violation of "No Smoking" policy within any building on campus.
- 19.Violation of "Electronic Communication" policy.
- 20.Illegal possession and/or sale of college property. (Students involved are subject to college disciplinary action, as well as to arrest and prosecution by legal authorities. Students will be required to make full restitution.)
- 21.Operation of any motorized or non-motorized vehicle (including skateboards, roller skates and bicycles) on any location or at times which, at the discretion of campus officials, constitute a pedestrian or motor-traffic hazard, or which imperil the health and safety of a person or property on the campus.
- 22.Possession of weapons, fireworks or explosives. (No students, except law enforcement officers, may have weapons in their possession at anytime on college property. Weapons are defined as firearms, knives, explosives.



flammable materials, or any other items that may cause bodily injury or damage to property.) 23.Leaving children unattended or unsupervised in campus buildings or on campus grounds can constitute child abuse or child neglect (as outlined in the Colorado Child Protection Act of 1975). Children may be permitted in the class only with the instructor's permission and with the understanding that the child's presence will not be disruptive or unduly distracting.

- 24. Engaging in behavior that may constitute sexual harassment, such as sexually suggestive looks, comments or gestures, prolonged staring, stalking, sexual teasing or jokes, pressure for dates; sexually demeaning comments; pressure for sex; requests for sex in exchange for grades or favors; or to avoid poor grades or suspension; other actions of a sexual nature that interfere with school performance or create an intimidating, hostile or offensive learning environment.
- Knowingly pursuing malicious, frivolous, or fraudulent charges against a student or staff member without cause.
- 26.Aiding and/or encouraging others to commit any act of misconduct set forth in 1 through 25 above.

# STUDENT GRIEVANCE PROCEDURE

CCD has a grievance procedure for students who believe their rights have been violated. If you have a grievance, contact the vice president for Student and Enrollment Services no later than 15 days after the occurrence. The Grievance Procedure for Students begins on page 38 of this catalog. Additional copies are available from Student Life (Tivoli Student Union 309) and the vice president for Student and Enrollment Services (South Classroom Building 301).

#### STUDENT RECOGNITION President's Honors List

Students are selected for the President's Honors List during the semester preceding their graduation from CCD. To be eligible for this academic honor, you must be completing at least 30 semester credit hours in a certificate program, or be completing the requirements for one of the four associate degrees. In addition, you must have a cumulative grade point average of at least 3.85, based on all courses attempted while enrolled at CCD. Selection for the President's Honors List is printed on your permanent academic transcript.

#### Vice President's Honors List

Each semester, students who take six or more credits may be considered for the Vice President's Honors list. To be eligible for this academic honor, you must have completed at least 15 semester credit hours toward a certificate or degree program. In addition, you must have a cumulative grade point average of at least 3.5, based on all courses attempted while enrolled at CCD. Selection for the Vice President's Honors List is printed on your permanent academic transcript.

#### **Dean's Honors List**

Each semester, students who take six or more credits may be consid-

ered for the Dean's Honors List. To be eligible for this academic honor, you must have completed at least nine semester credit hours in a certificate or degree program. In addition, you must have a cumulative grade point average of at least 3.0, based on all courses attempted while enrolled at CCD. Selection for the Dean's Honors List is printed on your permanent academic transcript.

#### Phi Theta Kappa

Phi Theta Kappa, the international scholastic honorary society for two-year community and junior colleges, recognizes student academic excellence at CCD and promotes academic community at the college.

To be eligible for membership in CCD's Alpha Mu Mu Chapter, you must have a 3.5 grade point average after completing 12 or more credit hours of college-level work, and carry three or more credit hours during the current academic year. Phi Theta Kappa members are honored at graduation for their outstanding academic achievements. Eligible students are invited to join each semester.

In spring 2001, Alpha Mu Mu once again was named a five-star Distinguished Chapter. In addition they were named Distinguished Chapter in the Leadership Hallmark. CCD's Phi Theta Kappa chapter is ranked number 32 among the top 1200 chapters internationally.

For more information, interested and eligible students should contact any current executive board member or the faculty sponsors by calling 303-556-4521, or 303-620-4682.

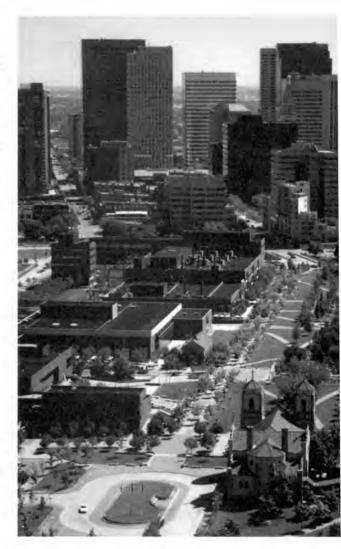
#### STUDENT RIGHTS AND RESPONSIBILITIES

CCD students have all the rights and responsibilities of other citizens and are subject to the same federal, state and local laws as non-students. As members of the college community, you also are subject to the rules and regulations of the college. If you believe your rights have been violated, you may file a grievance using the Grievance Procedure for Students that begins on page 38 of this catalog.

A detailed copy of "Students' Rights and Responsibilities" is available from Student Life Tivoli Student Union 309) and the vice president for Student and Enrollment Services (South Classroom Building 301).

#### STUDENT RIGHT-TO-KNOW INFORMATION

Of the 494 first-time, full-time, degree-seeking students who entered CCD in the fall of 1997, 36 percent had either graduated or transferred to another Colorado public postsecondary institution at the end of three academic years (by the end of summer 2000). Another 10 percent were still enrolled at CCD in fall 2000.





The objective of the grievance procedures is to provide for the prompt, fair and equitable resolution of all student grievances.

# GRIEVANCE PROCEDURE FOR STUDENTS

The objective of these procedures is to provide for the prompt, fair and equitable resolution of all student grievances. If you believe your rights or freedoms have been violated, you are advised to use the grievance procedure. This procedure is not intended to be used when the college takes disciplinary action against a student for violation of the Student Code of Conduct or related student actions. Grievance procedures could apply to college admissions, access to the college, treatment by the college in its educational programs, or college activities.

Student rights and freedoms include, but are not limited to, such things as nondiscrimination on the basis of race, color, national origin, disability, religion, age and sexual preference, as well as sexual harassment and other provisions of the Students Rights and Responsibilities College Policy.

We hope our students will attempt to resolve problems first through the informal grievance procedure (Step 1 below). If the grievance is not resolved satisfactorily through the informal procedure as detailed in Step 1, students may file a formal written grievance (Step 2). Petitions for change of grade are limited to Step 1. Where a student is uncomfortable discussing the harassment with the alleged harasser, s/he may satisfy the first step by working directly with Benita J. Olivas, Ombuds, South Classroom Building 301E, 303-556-4332. Next the student may contact Felicia Sykes, vice president for Student and Enrollment Services, South Classroom Building 301, 303-556-2413.

#### DEFINITIONS

- A. Grievant: Enrolled student, a client or volunteer who is providing a service to benefit the college under the supervision and control of a college employee. A client or volunteer may grieve only a decision that bans him or her from the campus.
- B. Grievance: A grievable offense is any alleged action that violates or inequitably applies written college policies or procedures. The grievant must be personally affected by such violation or inequitable action. A grievance must be brought to the formal stage within 20 calendar days of the date the student knew or reasonably should have known about the action.
- C. Vice President for Student and Enrollment Services: The college employee designated by the college president to administer student grievances. Grievances alleging discrimination issues may be referred to the employee responsible for ensuring equal opportunity and access.

- D. Remedy: The relief the grievant is requesting.
- E Respondent(s): Another student, volunteer, client, faculty member and/or administrator identified by the grievant as causing or contributing to the grievance.
- F. Non-grievable matters: The following matters are not grievable under this procedure except as noted: any matter over which the college is without authority to act; grades and other academic decisions unless there is an allegation that the decision was motivated by illegal discrimination; and disciplinary actions taken pursuant to SBCCOE Policy 4-30.

#### STEP 1 — INFORMAL GRIEVANCE PROCEDURE

Grievant is encouraged to resolve the issue with the respondent or his/her supervisor. The Ombuds person can assist in the informal process. In the case of grievances based on race, color, creed. national origin or ancestry, disability, age or gender, the grievant may first contact the college employee responsible for affirmative action to seek informal resolution of the issues. If the complaint alleges facts that might constitute a violation of state policy SP3-120B, concerning sexual harassment, the administrator shall investigate and process the complaint under that procedure. While the grievant is encouraged to resolve the issues through the informal process, he or she may at anytime elect to go to the formal stage by following the process outlined below.

#### STEP 2 — FORMAL GRIEVANCE PROCEDURE

A. Grievant timely files a written statement of the actions complained of and describes the remedy he or she is seeking with the vice president for Student and Enrollment Services or designee. A matter could also be referred to this process by the college president or his/her designee. Once a written grievance is filed or referred. the vice president for Student and Enrollment Services or designee will determine whether or not the situation is a grievable offense. The matter will be closed if the situation is determined not grievable and the grievant will be notified of the reasons.

B. If the matter is determined to be grievable, the vice president for Student and Enrollment Services or designee (may be an individual or a committee) shall hear the grievance. A hearing will be held that will give the grievant, respondent and others invited to appear, the opportunity to explain what they know about the issues surrounding the grievance. Considering the oral and written statements and documents, the vice president for Student and Enrollment Services or designee shall issue a decision within 10 calendar days of close of the hearing. The decision shall be served upon the grievant and the respondent personally or by certified mail to the addresses on file in Admissions, Registration and Records. The decision shall reject the grievance or grant the grievance and make recommendation(s) to resolve the issue(s). The vice president for Student and Enrollment Services or designee's decision is final unless a Petition for Review is filed with the president by either party within five (5) calendar days of service of the decision.

- C. Upon receipt of a Petition for Review, the college president will review the record and issue a written decision within 10 calendar days of receipt of the Petition for Review. The president's decision is final.
- D. The vice president for Student and Enrollment Services or designee may extend the scheduling timelines described above for good cause.
- E. If the grievance is against the vice president for Student and Enrollment Services, the vice president for Learning and Academic Affairs or other person designated by the president shall perform the duties of the vice president for Student and Enrollment Services.





CCD prepares you to graduate and transfer! Four-year schools are anxious to enroll CCD students and many of their representatives visit our campus on a regular basis.

# GRADUATION REQUIREMENTS

#### DEGREE REQUIREMENTS

All degrees and certificates will list the degree or certificate only, not the emphasis.

If you are applying for a Community College of Denver degree program, you must meet all of the following requirements. The vice president for Learning and Academic Affairs may approve exceptions.

- Complete a minimum of 60 semester hours of credit in approved course work.
- 2. Earn a cumulative grade point average of 2.0 ("C" average). Courses counting toward the general education core curriculum must be completed with a grade of "C" or higher. Some programs, as stated in the current catalog, may require a student to earn at least a "C" in specific course work. Students should check with their instructional center, case manager or adviser for information about the minimum grade point average requirement.
- Complete a minimum of 15 credits at CCD in the program area.
- Complete the Academic Profile, a general education assessment, during your final academic semester.
- Complete your program's capstone course with a "C" or better grade.

- Complete all courses taken to fulfill general education requirements with a "C" or better.
- Complete the required survey of all graduating students.

## GENERAL EDUCATION REQUIREMENTS

All associate degrees have general education requirements that meet goals for general education established by the Colorado State Board for Community Colleges and Occupational Education. They are:

- to build skills for advanced and lifelong learning.
- to expose students to the mainstream of thought and interpretation in the humanities, sciences, mathematics, social sciences, communications and the arts.
- to integrate learning in ways that cultivate a student's broad understanding and ability to think about a large and complex subject, formulate and analyze valid concepts, solve problems and clarify values.

In addition, the following rationale for the Associate of Arts (AA) and Associate of Science (AS) general education core curriculum was developed by AA/AS faculty and adopted by CCD, the Colorado Community College System and the Colorado Commission on Higher Education.

General education addresses

the needs of all students - regardless of program area; degree sought, or major - since all people share certain experiences and have certain life goals that are unrelated to any specific discipline of study. The core curriculum is that set of courses that satisfies the general education portion of the requirements for an AA, an AS, or an Associate of General Studies (AGS) degree. All courses in the core curriculum are designed to transfer to baccalaureate, degreegranting colleges and universities. Core courses are academically rigorous and of such quality that transfer students may be assured of their ability to compete successfully on transfer.

The offerings within the core curriculum are designed to stimulate students to think deeply, clearly and logically about a variety of human questions. These offerings provide a balanced, broadly-based program that will require students to develop critical thinking and problem-solving skills, to analyze, synthesize and communicate information, and to use knowledge and technology intelligently and responsibly.

These core offerings:

- expose students to the mainstreams of thought and interpretation in humanities, sciences, communications, mathematics, social sciences and arts, and develop students' understanding of the interrelationships among these fields of study.
- expand students' interpersonal, intercultural and international understanding and develop their perceptions of the evolving nature of societies and the interdependence among all peoples.
- develop students' skills in selfunderstanding, oral and written

communication, numerical calculations and reasoning to help them achieve personal independence.

- develop students' skills in leadership and in group dynamics.
- increase students' knowledge of the value of physical and environmental well-being to help them fulfill their roles as citizens within a free and changing society.

#### CERTIFICATE REQUIREMENTS

All CCD certificate program graduates must meet the following requirements. The vice president for Learning and Academic Affairs may approve exceptions.

- Complete the specified requirements of an approved vocational/ technical program.
- 2. Earn a cumulative grade point average of 2.0 ("C"). Some programs, as stated in the current catalog, may require you to earn at least a "C" grade in specific course work. Check with your instructional center and your adviser for information about the minimum grade point average required for graduation.
- Complete a minimum of 15 credits in the program area
  - at CCD.
- 4. Complete the Capstone course.

#### GRADUATION REQUIREMENTS

Degrees and certificates will be granted during the semester in which the final requirements are completed. Students need to apply for graduation by the deadline date published in the class schedule. If the deadline date is missed, the student will automatically be added to the next semester's graduating class.

If you receive an "I" grade in a course required for graduation in your final semester, you will not

graduate until the semester in which the "I" grade is replaced by a letter grade. During that semester, you must reapply for graduation. You will not need to retake the Academic Profile.

Students must take at least 15 credit hours at CCD to receive a diploma from this institution.

#### **OTHER GRADUATION POLICIES**

- You must apply for graduation one semester prior to the semester in which you wish to graduate.
- You can apply no more than six semester hours of courses numbered "299" (independent study course work) toward an associate degree program.
- There is no limit on special topics courses allowed to count toward a degree. In individual cases, the limit is determined by the program area. If you take special topic courses, consult with your advisers about how these credits apply toward a degree.
- 4. Degrees and certificates will be granted during the semester in which the final requirements are completed. For example, if you receive an "I" grade in a course required for graduation in your final semester, you will not graduate until the semester in which the "I" grade is replaced by a letter grade. During that semester, you must reapply for graduation. You will not need to retake the Academic Profile.

#### CATALOG REQUIREMENTS FOR GRADUATION

You may graduate under the catalog requirements listed for the academic year in which you were first enrolled. If you interrupt attendance for one year or more and then return, the catalog of the readmission year is the document of



authority. If graduation requirements and policies change, you may choose to follow the catalog of the year of initial entry or the current catalog. Obtain and keep a copy of the catalog published the year in which you enter or are readmitted. The instructional center or program will determine the extent to which semester credit hours previously earned will apply to degree requirements listed in the most current college catalog.

The catalog should not be considered a contract between you and CCD. The college retains the right to cancel or change programs or course offerings where enrollments are insufficient or for any other reason. Every course listed in the catalog may not be offered every semester.

#### PETITIONING FOR WAIVERS AND/ OR PROGRAM SUBSTITUTIONS

Due to extenuating circumstances, you may wish to petition for a waiver and/or substitution of program requirements.

You must complete a "Waiver/Program Substitution Request Form." The form is available in each learning center office.

Please complete the request and have it approved by the program coordinator, the center dean and the vice president for Learning and Academic Affairs. Admissions, Registration and Records will keep the form on file.

#### **GRADUATION CHECKLIST**

All students must apply for graduation one semester prior to the semester in which they wish to graduate.

Graduation deadline dates are posted in class schedules each semester and in the college catalog calendar. (No exception to deadline dates.)

- Pick up an application from Admissions, Registration and Records, South Classroom 133, at anytime during the semester.
- Go to the center in your area of study (major) and complete a program plan with your instructor or faculty adviser in the center.
- Have all official transcripts from other college(s) evaluated.
- Check with Admissions, Registration and Records to verify correct name changes to be printed on certificate or appliedfor degrees.
- Students applying for Credit for Prior Learning must have all paperwork completed.
- 6. Students with a grade of "1" or "SP" on the unofficial transcripts must have grade changes into Admissions, Registration and Records two weeks after the semester ends.
- Degree-seeking students must take the Academic Profile (AP) in the Testing Center, South Classroom Building 223.
- All financial obligations to the college must be cleared before a diploma, certificate or a transcript will be released.



# READING GUIDE TO DEGREE & CERTIFICATE PROGRAMS

#### DEFINITIONS Area of Emphasis

In the Associate of Arts (AA) and Associate of Science (AS) degree programs, the area of emphasis refers to 12 or more credit hours in a subject field in preparation for transfer and selection of a major at a baccalaureate college.

#### **Capstone Courses**

These are courses, usually taken during the final semester, in which program competencies are reviewed and assessed. All courses identified as capstone courses require a grade of C or better for graduation. Capstone courses must be taken at CCD.

#### Core Curriculum

These courses fulfill lower-division general education requirements as defined and agreed on between the State Board for Community Colleges and Occupational Education and the governing boards of all public four-year institutions in Colorado.

#### Corequisite

This is a course or requirement that must be completed during the same semester as the course that identifies the corequisite.

#### **Credit Hour**

This is the basic unit of academic credit. Generally, one-credit hour is

earned by attending a lecture class for a 50-minute period, once a week, for a full semester. In a laboratory course, one-credit hour is granted for two-to-three 50-minute periods per week in the laboratory.

#### **Credit Hours in Parenthesis**

Course options from which you may choose. These options are not individually included in the total credit hours listed below the numbers in parentheses.

#### **General Education**

General education is the liberal arts component of a baccalaureate degree that may include lowerdivision and upper-division courses as defined by each institution.

#### **Open Entry**

This course designation allows the student to start at any time prior to the last date to drop classes published in the Schedule of Classes. The student must complete all course requirements by the end of the semester, regardless of entry date.

#### **Open Entry/Open Exit**

This course designation allows students to enroll at any time prior to the last date to drop classes and progress at their own learning pace. If the student does not complete course requirements by the end of the semester, an "SP" (Satisfactory Progress) grade is given, and the student may continue in the course the following semester at no additional tuition charge.

#### Prerequisite

This is a required course that must be completed satisfactorily before registering for the course that identifies that prerequisite.

#### Speech Intensive Courses

Associate of Applied Science "Speech Intensive" courses combine the requirements of SPE 115 with the content of vocational classes. Students who transfer a course from another college that is noted as "speech intensive" at CCD may meet the SPE 115 requirements only by taking SPE 115 as a separate course.





# PROGRAM TITLES AND COURSE PREFIXES

AccountingACC
American Sign Language ASL
Anthropology ANT
Arabic ARB
Art ART
Arts Management AMG
AstronomyAST
Biology
Business Administration BUS, MAN, MAR
Business Technology BTE
Career Development Facilitator CDF
Central Service Technician CST
Chemistry CHE
Chinese
Communications
Community Health Worker CHW
Critical Care Nursing CCN
Dental Hygiene DEH
Early Childhood Education ECE
Economics ECO
Education
Electroencephalography Technology EEG
Electroneurodiagnostic Technology END
Engineering Graphics CAD, DRT
English ENG
English as a Second Language ESL
Fitness, Health and Recreation FHR
French
General Education Development GED
Geography GEO
Geology GEY
Graphic Communication Technology GCT
Graphic Design GRD
Health and Wellness HWE
Health and Wellness Management HWM
Health Occupations HOC
History
Human Services HSE

Humanities
Information Technology CIS, CNT, CSC, CWB, ELT
Japanese JPN
JournalismJOU
LiteratureLIT
Machine and CNC Tool Operator MTO
Massage Therapy MST
Mathematics MAT
Medical Office Technology MOT
Multimedia Design MUM
Music
Nurse AideNUA
NursingNUR
NutritionNUT
Operating Room Nurse ORN
Paralegal PAR
Personal Growth and Development PGD
PhilosophyPHI
Photography PHO
Physics
Political Science
Psychiatric Technician LPT
Psychology PSY
Radiation Therapy RTH
Radiology TechnologyRTE
ReadingREA
Real Estate (Emily Griffith Opportunity School) REE
Recreational AssistantRAE
Science
Sociology SOC
Spanish SPA
Special Learning Support Program SLS
SpeechSPE
Surgical Technology STE
Theatre
Travel and Tourism TRA
Veterinary TechnologyVET
Welding and Fabrication WEF



DEGREE & CERTIFICATE PROGRAMS

An Associate of Arts (AA) degree provides a learning foundation in communications, social sciences, arts or humanities. The Associate of Science (AS) degree provides a learning foundation in mathematics and the sciences. CCD offers two types of Associate of General Studies (AGS) degrees. The Associate of Applied Science (AAS) degree prepares students for entry-level employment in a given occupation or upgrades employable skills. In addition to associate degree programs, specially designed courses and sequences leading to the awarding of certificates have been designed in cooperation with business, commerce and local government.



# ASSOCIATE OF ARTS DEGREE

#### University Parallel, Transfer Program

CCD Auraria

An Associate of Arts (AA) degree provides a learning foundation in communications, social sciences, arts or humanities. Some students work toward the AA degree for purposes of personal enrichment. Many others plan to transfer to four-year colleges and universities to continue their work toward baccalaureate degrees and pre-professional training in such fields as law, education, the arts and social sciences. A student can complete this program in four semesters, going full-time and carrying the required number of hours. A student may choose, due to personal circumstances, to extend the amount of time for completion.

The AA degree sometimes is referred to as a "university parallel" or "transfer" degree. The general education core requirements, when completed at CCD, meet the lower-division general education requirements of all public baccalaureate colleges and universities in Colorado. Students graduating with the AA degree may transfer into liberal arts programs in all public baccalaureate colleges and universities with junior standing. Courses to be counted toward the general education core curriculum must be completed with a grade of C or better. Students planning to transfer should familiarize themselves with the full requirements of the school they plan to attend. These are available in the Transfer Center in South Classroom Building 134.

# Student Performance Objectives for Transfer Education (AA Degree)

Students will plan and write well-structured compositions demonstrating the writing capabilities to express, inform, analyze, evaluate, persuade, argue, conduct research, and use primary and secondary sources logically and stylistically.

Students will compose and deliver oral presentations, providing ideas and information and using delivery skills suitable to the topic, purpose and audience. Students will demonstrate an understanding of speeches and be able to evaluate speeches.

Students will read and think critically about a variety of interdisciplinary topics, demonstrating college-level reading skills in a variety of disciplines, including humanities, social sciences and the natural sciences.

Students will demonstrate orally and in writing the criticalthinking skills of analysis, synthesis and evaluation.

Students will analyze and use numerical data and qualitative reasoning skills, including applying proper formulas to mathematical data and calculating results, illustrating quantitative data graphically, rearranging general formulas to solve for any missing information, and interpreting graphic data and assessing the importance of the portrayed trends.

#### AA Degree Program Entry

Students must apply for entry to the AA degree program. Students are encouraged to apply to a program by the time they have completed 12 credits of 100-level college-transfer courses. At the time of application, students are encouraged to identify an area of emphasis. Program application forms are in South Classroom Building 134 and all academic center offices. Students should obtain an Advising Transcript from Admissions, Registration and Records and attach it to the program application.

#### **Program Admission Requirements**

Meet minimum assessment scores or prerequisites required for general education courses in the program.

 Meet with a faculty program adviser and obtain an authorized signature.

#### AA Degree Program Requirements

Within the AA degree, the college offers 16 areas of program emphasis: Art, Arts Management, Behavioral Sciences, Business Administration, Communications, Economics, English/Literature, Graphic Design, History, Humanities/Philosophy, Multimedia, Music, Photography, Political Sciences, Speech or Theatre. The same course may not count toward both general education requirements and toward an area of emphasis. An area of emphasis consists of four identified courses in one academic area. If students do not select an area of emphasis or have fewer than 60 credit hours with their core courses and area of emphasis, they should take transfer electives as needed to complete the 60 credit hours required for the AA degree. Up to 3 credits of physical education may apply toward this degree. All general education core and capstone courses must be completed with a grade of C or better. All graduates of the AA degree must meet the following program requirements.

Get	eral Education AA Core Cre	dit Hours
I.	English	6
	ENG 121, 122	
fl.	Speech	3
	SPE 115	
III.	Mathematics	3-5
	(Select any 1 of the following)	
	MAT 121, 125, 135, 201, 202	
IV.	Physical & Biological Sciences	4-5
	(Select any 1 of the following)	
	AST 101, 102	
	BIO 105, 111, 112	
	CHE 101, 102, 111, 112	
	GEY 111	
	PHY 105, 111, 112, 211, 212	
V.	Social & Behavioral Sciences (Select 9 credit hours	
	from a minimum of 2 disciplines)	9
	ANT 101, 111	
	ECO 201, 202	
	GEO 105	
	HIS 101, 102, 201, 202	
	POS 105, 111	
	PSY 101, 102	
	SOC 101, 102	
VI.	Humanities (Select 9 credit hours from a minimum of 2 disciplines)	9

ART 110, 111, 112 HUM 121, 122, 123 Any foreign language 111 or higher LIT 115, 201, 202 MUS 120, 121, 122 PHI 111, 112, 113 THE 105, 211, 212

#### **General Education Sub-Total**

34-37

Area of Emphasis (Optional)

The optional area of emphasis and/or electives must include a minimum of 6 credit hours in 200-level courses, such as HIS 201, 202, HUM 251, LIT 201, 202, THE 211, 212 and others.

Sub-	Total		23
Caps	tone C	ourse (Required in all emphases)	3
HUN	1 285	Seminar in Critical Thinking	
		or	
PSY	285	Leadership Development	
		or	
SCI	285	Critical Thinking	
Total	Hours		60-63

Approved	Electives	for	the AA	Degree

AAA -	- 0	109 (CCD and MSCD only)
ANT	- 2	all courses
ART		all courses
ASL	- 6	all courses
AST	- 6	all courses
BIO -	- (	105 and higher
CHE -	- 1	101 and higher
COM .		all courses
CIS .	- 1	118
		160, 161
ECO	- 2	201 and higher
ENG -	- 1	121 and higher
Any for	reig	n language 111 or higher
		all courses
GEY -	- 2	all courses
		all courses
HPL -	- 6	all courses (limit to 4 credits)
		all courses
		all courses
		all courses
MAT -	- 1	121 and higher
		all courses
		151, 223 (approved by CCD and MSCD only)
		all courses
		all courses
THE -	- 7	all courses

Courses in any prefix with numbers beginning in "0" will not meet requirements for the AA degree. English and math courses with numbers below 121 will not meet requirements for the AA degree.

#### **Credit Hours**

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Credit hours in parenthesis, e.g., (3), are options from which students may choose. They are not included in the total credit hours listed below. An average full-time student course load is 15 credit hours. An AA degree takes four semesters of 15 credits each semester, assuming that all courses taken count toward the degree.

# AA DEGREE AREAS OF EMPHASIS

ART	EMPH	ASIS	Credit Hours
ART	121	Drawing I	3
ART	122	Drawing II/Mixed Media (Prerequisite ART 121, Drawing I)	3
ART	131	Two-Dimensional Design — Color	3.
ART	211	Painting I	3
ART	212	Painting II	3
Total			15

#### The following may be taken as Art electives.

the fe	HIOWIN	ig may be taken as Art electives.	
AMG	280	Intro. to Arts Management	(3)
ART	132	Three-Dimensional Design - Space & Form	(3)
ART	151	Fundamentals of Photography	(3)
GRD	100	Typography I	(3)
MUM	101	Intro. to Multimedia	(3)
ART	113	Modern Art History	(3)
ART	213	Painting III	(3)
ART	214	Painting IV	(3)
ART	231	Watercolor I	(3)
ART	232	Watercolor II	(31
ART	270	Figure Drawing I	(3)
ART	271	Figure Drawing II	(3)
ART	281	The Business of Visual Arts	(3)
ART	290	Special Topics (with instructor consent)	(1-3)
ART	299	Independent Study (with instructor consent)	(1-3)
ARTS	MAN	AGEMENT EMPHASIS* Gredit	Hours
ACC	121	Accounting Principles I	4
AMG	280	Intro. to Arts Management	3
AMG	282	Grant Writing for Arts Management	3
AMG	297	Arts Management Internship	- 6
MAN	200	Human Resources Management	in in in
MAR	216	Principles of Marketing	3
CIS	118	Intro. to PC Applications	3

#### Total

23-25

\* Please note that Arts Management students have a specific humanities core requirement, Humanities menu in general education for Arts Management. Select any 3 courses or 9- credit hours from a minimum of two different disciplines that relate to Arts Management

> ART 110, ART 111, ART 112 MUS 120, MUS 121, MUS 122 THE 105, THE 211, THE 212

#### **BEHAVIORAL SCIENCES EMPHASIS**

Select 4 courses, either from one option, or from among the three options listed below. At least 3 must be 200-level courses.

Anthi	opolo	gy Emphasis	Credit Hours
ANT	101	Cultural Anthropology	(3)
ANT	107	Intro, to Archaeology	(3)
ANT	111	Physical Anthropology	(3)
ANT	203	Urban Socio-Anthropology	(3)
ANT	265	Violence & Culture	(3)
Psych	ology	Emphasis	
PSY	101	General Psychology I	(3)
PSY	102	General Psychology II	(3)
PSY	227	Psychology of Death & Dying	(3)
PSY	235	Psychology of Human Growth	
		& Development	(3)
PSY	249	Abnormal Psychology	(3)
PSY .	260	Psychology of Aging	(3)
PSY	265	Violence & Culture	(3)
PSY	285	Leadership Development (Capstone)	(3)
Socio	logy E	mphasis	
SOC	101	Intro, to Sociology	(3)
SOC	102	Intro, to Sociology II	(3)
SOC	201	Survey of Gerontology	(3)
SOC	203	Urban Socio-Anthropology	(3)
SOC	205	Sociology of Marriage & Family	(3)
SOC	215	Contemporary Social Problems	(3)
SOC	220	Race, Gender, Class, Culture	(3)
SOC	237	Death & Dying	(3)
SOC	260	Sociology of Deviance	(3)
SOC	265	Violence & Culture	(3)
Total			12

#### COMMUNICATIONS EMPHASIS Mass Communications Arts Emphasis

The Mass Communications Arts emphasis prepares students for careers in television, independent video and related industries. The program enjoys a unique 2+2 year partnership with the CU-Denver English Department Film Studies track leading to a BA degree, contingent upon acceptance into the CU-Denver program.

		Credit Hour
COM 126	Intro. to Mass Media	3
COM 225	Intro. to Film	3
COM 251	Intro. to Digital Videography/Editing	3
COM 252	Intro. to Television Studio Production	3
ENGL 2300	Documentary and Experimental Film	& Video 3
ENGL 2390	Writing the Short Script	3
Select either		
COM 257 or	Advanced Television Production	3
COM 258	Advanced Digital Field Production/ Post Production	
Recommended	d elective if the AA degree is the final deg	ree
COM 297	Communications Internship	3
Courses taugh	t at CU-Denver	
	onal registration is possible)	
Total		21-2
systems and	cultural institutions.	e
011 120	4 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Credit Hours
COM 126	Introduction to Mass Media	2
Taken togethe	r as a Learning Community class	
COM 100	Multicultural Learning Community R	ecitation 1
COM 230	Multicultural Communication	3
Taken togethe	r as a Learning Community class	
COM 290	Multiculturalism and Media	3
REA 225	Exploring Diversity Issues	3
Total		13
ECONOMIC	S EMPHASIS	Credit Hour
	Principles of Macroeconomics	3
	Principles of Microeconomics	3
Total		6
ENGLISH/I	TERATURE EMPHASIS	Credit Hour
PLANTER FOR THE PLANTER FOR TH		10
	rs, at least 2 of which are ENG	12
Select 4 course	Technical Writing I	(3)
Select 4 course ENG 131		
Select 4 course ENG 131 ENG 221	Technical Writing I	(3)
Select 4 course ENG 131 ENG 221 ENG 222	Technical Writing I Creative Writing I Creative Writing II Intro. to Literature	(3) (3)
Select 4 course ENG 131 ENG 221 ENG 222 LIT 115	Technical Writing I Creative Writing I Creative Writing II Intro. to Literature Masterpieces of Literature I	(3) (3) (3)
Select 4 course ENG 131 ENG 221 ENG 222 LIT 115	Technical Writing I Creative Writing I Creative Writing II Intro. to Literature	(3) (3) (3) (3)

HIC I	DESIGN EMPHASIS Crea	lit Hours
121	Drawing I	3
131	Two-Dimensional Design — Color	3
132	Three-Dimensional Design - Space & For	m 3
100	Typography 1	3
103	Intro. to Computer Graphics	3
105	Typography & Layout	3
200	Design & Concept	3
206	Pre-Press for Non-Printer	3
285	Portfolio Preparation (Capstone)	3
	121 131 132 100 103 105 200 206	<ul> <li>121 Drawing I</li> <li>131 Two-Dimensional Design — Color</li> <li>132 Three-Dimensional Design — Space &amp; For</li> <li>100 Typography I</li> <li>103 Intro. to Computer Graphics</li> <li>105 Typography &amp; Layout</li> <li>200 Design &amp; Concept</li> <li>206 Pre-Press for Non-Printer</li> </ul>

#### Total

HIST	ORY E	MPHASIS	Credit Hours
Select	t 4 cour	ses from the following	12
HIS	101	Western Civilization 1	(3)
HIS	102	Western Civilization II	(3)
HIS	201	United States History I	(3)
HIS	202	United States History II	(3)
HIS	225	Colorado History	(3)
Total			12
HUN	ANITI	ES/PHILOSOPHY EMPHASIS	Credit Hours
PHI	111	Intro. to Philosophy	3
"Sele	ct 1 cou	rse from the following	3
HUN	1 121	Survey of Humanities I	(3)
HUN	4 122	Survey of Humanities II	(3)
HUN	4 123	Survey of Humanities III	(3)
Select	t 2 cour.	ses from the following	6
PHI	112	Ethics	(3)
PHI	113	Logic	(3)
PHI	115	World Religions — West	(3)
PHI	116	World Religions — East	(3)
PHL	290	Topics in Philosophy	(3)
HUN	1116	Intro. to African American Studies	(3)
HUN	4 121	Survey of Humanities 1	(3)
HUN	1 1 2 2	Survey of Humanities II	(3)
HUN	1 1 2 3	Survey of Humanities III	(3)
HUN	1 185	Cultural Diversity in the Humanities	(3)
HUN	1 2 2 5	Contemporary Chicano Culture	(3)
HUN	1 290	Topics in Humanities	(3)
Total			12

\* Students wishing to take the entire sequence of HUM 121, HUM 122 and HUM 123 may do so. These three courses also are listed in the third grouping.

#### MULTIMEDIA DESIGN EMPHASIS Credit Hours MUM 101 Intro. to Multimedia 3 MUM 103 Intro. to Computer Graphics 3 MUM 207 Intro. to Digital Videography/Editing 3 MUM 209 Multimedia Animation Studio X MUM 220 Photoshop à. MUM 225 Web Page Design 3 CWB 173 Complete Web Authoring/HTML/JavaScript 3

#### MUSIC EMPHASIS Credit Hours MUS 101 Music Theory I 3 MUS 102 Music Theory II 3 Ear Training and Rhythm Drill I MUS 111 а. Ear Training and Rhythm Drill II MUS 112 3 MUS 141 Private Instruction 1 (Guitar, Piano, Voice or Woodwinds) ġ MUS 142 Private Instruction II (Guitar, Piano or Voice or Woodwinds) 2 Select 1 course from the following 3 MUS 120 Music Appreciation (3) MUS 121 Survey of Music History I (3) MUS 122 Survey of Music History II (3)

Total

Total

27

19

21

PHO	TOGR	APHY EMPHASIS	Credit Hours
ART	151	Fundamentals of Photography	3
ART	152	Fundamentals of Color Photography	3
Select	a total	of 6 credits from the following	6
ART	157	History of Photography	(3)
ART	153	Intermediate Black & White Photograph	ny (3)
ART	154	Intermediate Color Photography	(3)
ART	253	View Camera Technique	(3)
Total			12

POLI	TICAL	SCIENCE EMPHASIS	Credit Hours
POS	105	Intro. to Political Science	3
POS	111	American Government	3
POS	125	American State &	3
		Local Government	
POS	205	International Relations	3
Total			12

SPEE	CH EMP	PHASIS Credi	t Hours
SPE	125	Interpersonal Communication	3
SPE	205	Voice & Diction	3
SPE	216	Principles of Speech Communication II	3
SPE	219	Group Dynamics	3
Total			12

THEA	TRE E	MPHASIS, Technical Theatre Track	Credit Hours
ART	121	Drawing I	3
CAD	101	Computer-Aided Drafting I	3
DRT	100	Intro. to Engineering Graphics	3
THE	107	Elements of Theatrical Craft & Design	3
THE	109	Stagecraft	3
THE	118	Practicum in Technical Theatre (over a minimum of 3 semesters)	4-6
THE	297	Theatre Internship	4
Total			23-25

In addition to the Technical Theatre track, Technical Theatre students may need to take the 3-credit CIS 110, Introduction to Operating Systems, to give them the basic background in the subject.

THEA	TRE E	MPHASIS, Theatre Performance Track	Credit Hours
SPE	205	Voice & Diction	3
THE	109	Stagecraft	3
THE	111	Acting 1	3
THE	112	Acting II	3
THE	115	Stage Movement for Actors	3
THE	116	Practicum in Stage Acting	3
		(over a minimum of 2 semesters)	
THE	206	Oral Interpretation	3
THE	297	Theatre Internship	2
THE	108	Play Reading	2
		(Optional, based on the total of	
		core-curriculum credits earned.)	
Total			23-25

ASSOCIATE OF ARTS DEGREE IN BUSINESS ADMINISTRATION (AA-BUS)

CCD Auraria

This is an educational transfer agreement in Business Administration between Colorado public community colleges and Colorado public postsecondary education institutions. In accordance with Colorado Revised Statute Title 23, Article 1, Section 103.5, the state's schools of business agree to the following policies and conditions governing the transfer of credit earned at a Colorado community college into a business program offered at a participating Colorado public four-year college and university.

Specifically, community college students who complete the Colorado community college core curriculum, as certified on their community college transcript, are considered to have satisfied Colorado four-year colleges' lower-division general education requirements. All of these general education and business courses represent the CCD/Colorado Commission on Higher Education transfer agreement in Business Administration.

Students completing the listed courses will be admitted as juniors at one of the following Colorado public four-year colleges and universities that participate in this agreement: Adams

State College, Colorado State University, Fort Lewis College, Mesa State College, Metropolitan State College of Denver, University of Colorado at Denver and Western State College.

#### Program Admission Requirements

- 1. Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of ACC 121 with a grade of C or better.

#### **General Education AA Core**

	General Education AA Core General Education Core is acceptable)	Credit Hours
I.	English	6
	ENG 121, 122	
II.	Speech	3
	SPE 115	
III.	Mathematics	3-5
	(Select any 1 of the following)	
	MAT 121, *122, 135, 201, 202	
IV.	Physical & Biological Sciences	4-5
	(Select any 1 of the following)	
	AST 101, 102	
	BIO 105, 111, 112	
	CHE 101, 102, 111, 112	
	GEY 111, 121	
	PHY 105, 111, 112, 211, 212	
V.	Social & Behavioral Sciences (Select 9 cred	dit hours
	from a minimum of 2 disciplines)	9
	ANT 101, 111	
	*ECO 201, 202	
	GEO 105	
	HIS 101, 102, 201, 202	
	POS 105, 111	
	*PSY 101, 102	
	SOC 101, 102	
	*recommended for all Business majors	
VI.	Humanities (Select 9 credit hours from a	
	minimum of 2 disciplines)	9
	ART 110, 111, 112	
	HUM 121, 122, 123	
	Any foreign language 111 or higher	
	LIT 115, 201, 202	
	MUS 120, 121, 122	
	PHI 111, 112, 113	
	THE 105, 211, 212	
Ger	eral Education Sub-Total	34-37

The following Business courses are required for the AA-BUS degree. Also, these business courses will be accepted for transfer at a participating Colorado public four-year college or university.

			Creatt nours
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	226	Business Statistics	3
MAR	216*	Principles of Marketing	3
CIS	118	Intro. to PC Applications	3
Select	t 2 cou	rses from the following	6
BUS	216	Legal Environment of Business	(3)
BUS	217	Business Communications	(3)
MAN	226*	Principles of Management	(3)

\* The following courses are required before enrolling in MAN 226 and MAR 216: ACC 121, 122, ECO 202, MAT 135 (or BUS 226), BUS 115 and sophomore standing.

Total

60-63

# ASSOCIATE OF SCIENCE DEGREE

#### University Parallel, Transfer Program

#### CCD Auraria

The AS degree provides a learning foundation in mathematics and the sciences. Although some students work toward the AS degree for personal enrichment, many plan to transfer to fouryear colleges and universities to continue work toward a baccalaureate degree and professional training in such fields as engineering, medicine, mathematics, biology, chemistry and physics. A student can complete this program in four semesters, going full-time and carrying the required number of hours. A student may choose, due to personal circumstances, to extend the amount of time for completion.

The AS degree is sometimes referred to as a "university parallel" or "transfer" degree. The general education core requirements, when completed at CCD, meet the lower-division general education requirements of all public Colorado baccalaureate colleges and universities in the state of Colorado. Students graduating with the AS degree may transfer into liberal arts or sciences programs in all public baccalaureate colleges and universities with junior standing. Courses to be counted toward the general education core curriculum must be completed with a grade of C or better. Students planning to transfer should familiarize themselves with the full requirements of the school they plan to attend. These are available in the Transfer Center in South Classroom Building 134.

# Student Performance Objectives for Transfer Education (AS Degree)

Students will plan and write well-structured compositions demonstrating the writing capabilities to express, inform, analyze, evaluate, persuade, argue, conduct research, and use primary and secondary sources logically and stylistically.

Students will compose and deliver oral presentations, providing ideas and information and using delivery skills suitable to the topic, purpose and audience. Students will demonstrate an understanding of others' speeches and be able to evaluate others' speeches.

Students will read and think critically about a variety of interdisciplinary topics, demonstrating college-level reading skills in a variety of disciplines, including humanities, social sciences and the natural sciences.

Students will demonstrate orally and in writing the criticalthinking skills of analysis, synthesis and evaluation.

Students will analyze and use numerical data and qualitative reasoning skills, including applying proper formulas to mathematical data and calculating results, illustrating quantitative data graphically, rearranging general formulas to solve for any missing information, and interpreting graphic data and assessing the importance of the portrayed trends.

#### AS Degree Program Entry

Students must apply for entry into the AS degree program. Students are encouraged to apply to a program by the time they have completed 12 credits of 100-level college transfer courses. At the time of application, students are encouraged to identify an area of emphasis. Program application forms are in South Classroom Building 134 and 306. Students should obtain an Advising Transcript from Admissions, Registration and Records and attach it to the program application. To complete the program application, the student will need to meet with a designated adviser for his or her probable emphasis area.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser and obtain an authorized signature.

#### **AS Degree Program Requirements**

Within the AS degree, the college offers 13 areas of emphasis: Biology, Chemistry, Computer Science, Earth Science, Pre-engineering, Mathematics, Pre-Dental, Pre-Medical, Pre-Pharmacy, Pre-Physical Therapy, Pre-Physician Assistant, Pre-Veterinary Science, and Physics. An associate degree can be earned without completing an emphasis area. Students must complete a total of 60 credit hours for the associate degree. Of the 60 hours, 24 credit hours may come from courses within an emphasis area. The same course cannot count toward both a general education and an area of emphasis requirement. Courses shown in italics under the emphasis area meet core requirements. Any courses completed beyond those required for an associate degree may be applied toward a four-year degree program. Requirements in four-year or professional programs sometimes change yearly. Students should meet regularly with their faculty adviser to ensure satisfactory progress is being made toward completion of the AS degree and transferability of credit to a four-year institution or professional program.

Ger	neral Education AS Core	Credit Hours	Approved Electives for the AS Degree
.1	English	6	AAA - 109 (CCD and MSCD only)
	ENG 121, 122		ANT - all courses
tI.	Speech	3	ART - all courses
	SPE 115		AST - all courses
111.	Mathematics	4-5	BIO - 111 and higher
	(Select any 1 of the following)		CHE - 111 and higher
	MAT 121, 125, 201, 202		COM - all courses
IV.	Physical & Biological Sciences	8-10	CIS - 118
	(Select any 2 of the following)		CSC - 150, 160, 161, 230
	AST 101, 102		ECO - 201 and higher
	BIO 111, 112		ENG - 121 and higher
	CHE 111, 112		Any foreign language 111 or higher
	GEY 111		GEO - all courses
	PHY 111, 112, 211, 212		GEY - all courses
V	Social & Behavioral Sciences	6	HIS - all courses
	(Select 6 credit hours from 2 disciplines)		HUM - all courses
	ANT 101, 111		JOU - all courses
	ECO 201, 202		LIT - all courses
	GEO 105		MAT - 121 and higher
	HIS 101, 102, 201, 202		MUS - all courses
	POS 105, 111		PER - all courses
	PSY 101, 102		PHI - all courses
	SOC 101, 102		PHY - 111 and higher
VI.	Humanities	6	POS - all courses
	(Select 6 credit hours from 2 disciplines)		PSY - all courses
	ART 110, 111, 112		REA - 151, 223 (approved by CCD and MSCD only)
	HUM 121, 122, 123		SOC - all courses
	Any foreign language 111 or higher		SPE - all courses
	LIT 115, 201, 202		THE - all courses
	MUS 120, 121, 122		
	PHI 111, 112, 113		Any course with number beginning in a "0" in any prefix
	THE 105, 211, 212		not meet requirements for the AS degree. English and ma
			interface and means protect his percention and \$2.2.5 are also been

#### **General Education Sub-Total** 33-36

Area of Emphasis (Optional) and/or electives (12 credits must be in physical and biological sciences or math prefixes: 6 credits, in addition to the capstone course, must be in 200-level courses)

Capstone Course			3
HUN	M 285 Seminar in Critical Thinking		
		or	
SCL	285	Critical Thinking	
		(counts as 3 of 12 credits above)	

# Approved Electives for the AS Degree

An area of emphasis consists of 4 identified courses in one academic area. Students who do not select an area of emphasis or who have fewer than 60 credit hours with their core courses and their area of emphasis should take general electives as needed to complete the 60 credit hours required for the AS degree.

any prefix will ish and mathematics courses must be numbered 121 or above.

#### **Credit Hours**

24

60-63

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Credit hours in parenthesis, e.g., (3), are options from which students may choose. They are not included in the total credit hours listed below. An average full-time student course load is 15 credit hours. An AS degree takes four semesters of 15 credits each semester, assuming that all courses taken count toward the degree.

#### AS DEGREE AREAS OF EMPHASIS

Students should complete the courses listed under the emphasis area if they plan to transfer to a four-year degree program in one of these emphasis areas, or plan to enter a professional school in an area listed. An associate degree can be earned without completing an emphasis area, and associate degree requirements may be fulfilled before all the courses listed under an area of emphasis have been completed. Any courses completed beyond those required for an associate degree can be applied toward a four-year degree program. Courses shown in italics under the emphasis area meet core requirements. Students must complete

a total of 60 credit hours for the associate degree. Of these, 21 to 24 credits must be from courses listed below having science or math prefixes and not used to fulfill the core requirements. Requirements in four-year or professional programs sometimes change yearly. We recommend that students meet frequently with the appropriate adviser in the Center for Health, Math and Science, South Classroom Building 306, while completing degree requirements.

BIOLOGY	EMPHASIS	Credit Hours
BIO 111	General College Biology I	(5)
BIO 112	General College Biology II	(5)
CHE 111	General College Chemistry I	(5)
CHE 112	General College Chemistry II	(5)
MAT 121	College Algebra	(4)
MAT 122	Trigonometry	(3)
PHY 111	Physics: Algebra-Based I	(5)
PHY 112	Physics: Algebra-Based II	(5)

Total

CHEMIST	RY EMPHASIS	Credit Hours
CHE 11.	I General College Chemistry I	(5)
CHE 11.	2 General College Chemistry II	(5)
MAT 12	1 College Algebra	(4)
MAT 12.	2 Trigonometry	(3)
MAT 20	1 Calculus I	(5)
MAT 20.	2 Calculus II	(5)
PHY 11.	Physics: Algebra-Based I	(5)
PHY 11.	2 Physics: Algebra-Based II	(5)
Total	and the second	24

Total	-	and a second second second	26
T-1-1			
PHY	212	Physics: Calculus-Based II	(5)
	211	Physics: Calculus-Based T	(5)
	203	Calculus III	(4)
MAT	202	Calculus II	(5)
MAT	201	Calculus I	(5)
CSC	230	C Language Programming (C++)	(3)
CSC	161	Computer Science II	(4)
CSC	160	Computer Science I	(4)
CHE	111	General College Chemistry 1	(5)
сом	PUTE	R SCIENCE EMPHASIS	Credit Hours

LANII	1 301	LACE LAW MASIS	Steam Tiours
BIO	112	General College Biology II	(5)
GEY	111	Physical Geology	(4)
GEO	105	Geography	(3)
Select	l cour	se from the following	
BIO	118	Human Ecology & the Environment	(3)
GEO	200	Human Ecology	(3)
Total			24

PRE-ENGI	NEERING EMPHASIS	Credit Hours
MAT 201	Calculus I	(5)
MAT 202	Calculus II	(5)
MAT 203	Calculus III	(4)
CHE 111	General College Chemistry 1	(5)
PHY 211	Physics: Calculus-Based 1	(5)
PHY 212	Physics: Calculus-Based II	(5)

MATHEMATICS EMPHASIS

Total

Credit Hours

24

24

24

MAT	121	College Algebra	(4)
MAT	122	Trigonometry	(3)
MAT	135	Intro. to Statistics	(3)
MAT	201	Calculus I	(5)
MAT	202	Calculus II	(5)
MAT	203	Calculus III	(4)
MAT	265	Ordinary Differential Equations	(3)

Total

Total

24

0.000		CLUSTER	
Pre-l	Dental	Emphasis	Credit Hours
BIO	111	General College Biology I	(5)
BIO	112	General College Biology II	(5)
CHE	111	General College Chemistry 1	(5)
CHE	112	General College Chemistry II	(5)
MAT	121	College Algebra	(4)
MAT	122	Trigonometry	(3)
PHY	111	Physics: Algebra-Based 1	(5)
PHY	112	Physics: Algebra-Based 11	(5)

Pre-M	Aedica	l Emphasis	Credit Hours
BIO	111	General College Biology I	(5)
BIO	112	General College Biology II	(5)
CHE	111	General College Chemistry I	(5)
CHE	112	General College Chemistry II	(5)
MAT	121	College Algebra	(4)
MAT	122	Trigonometry	(3)
PHY	111	Physics: Algebra-Based 1	(5)
PHY	112	Physics: Algebra-Based II	(5)
Selec	2 cou	rses from the following	
LIT	115	Intro. to Literature	(3)
LIT	201	Masterpieces of Literature 1	(3)
LIT	202	Masterpieces of Literature II	(3)
Total			24

Pre-P	harma	icy Emphasis	Credit Hours
BIO	111	General College Biology 1	(5)
BIO	112	General College Biology U	(5)
BIO	201	Anatomy & Physiology 1	(4)
BIO	205	Microbiology	(4)
CHE	111	General College Chemistry I	(5)
CHE	112	General College Chemistry II	(5)
ECO	202	Principles of Microeconomics	(3)
MAT	121	College Algebra	(4)
MAT	122	Trigonometry	(3)
MAT	201	Calculus I	(5)
PHY	111	Physics: Algebra-Based I	(5)
Select	1 socie	al science course from the following	
ANT		Cultural Anthropology	(3)
PSY	101	General Psychology 1	(3)
PSY	102	General Psychology II	(3)
SOC	101	Intro. to Sociology I	(3)
SOC	102	Intro. to Sociology II	(3)
Total	-		24
Pre-P	hysica	l Therapy Emphasis	Credit Hours
BIO	111	General College Biology I	(5)
BIO	112	General College Biology II	(5)
BIO	201	Anatomy & Physiology I	(4)
CHE	111	General College Chemistry I	(5)

General College Chemistry II

College Algebra

Intro, to Statistics

General Psychology 1

General Psychology II

CHE 112

MAT 121

MAT

PSY

PSY

Total

122

101

102

# ASSOCIATE OF GENERAL STUDIES DEGREE

CCD offers two types of Associate of General Studies degrees. Both require the lower division core general education courses that transfer to all majors at all state baccalaureate colleges and universities. Only grades of C or better are acceptable for the core general education requirements. Up to three credits of physical education may apply toward this degree.

1. Associate of General Studies-Generalist Degree (AGS-G)

In addition to the general education core requirements, the degree allows students to self-select 23 credits of transfer and/or career courses. The general education core courses fully meet the general education requirements of all baccalaureate schools. Transferability of career courses is not guaranteed. If students select this option, they should consult with a faculty adviser/educational case manager. Students are encouraged to develop specific career goals and to transfer to the CCD degree program appropriate to those goals. A student can complete this program in four semesters, going full-time and carrying the required number of hours. A student may choose, due to personal circumstances, to extend the amount of time for completion.

The AGS-G degree is the only degree that does not require application for program entry. All CCD certificate and degree-seeking students are classified AGS-Generalist students until they apply and are accepted into another certificate or

		Sector	1.47
MAT	122	Trigonometry	(3)
MAT	135	Intro. to Statistics	(3)
PHY	111	Physics: Algebra-Based I	(5)
PHY	112	Physics: Algebra-Based II	(5)
PSY	235	Psychology of Human Growth	
		& Development	(3)
PSY	249	Abnormal Psychology	(3)
Total	_		24
Pre-P	hysicia	an Assistant Emphasis	Credit Hours
BIO	111	General College Biology I	(5)
BIO	112	General College Biology II	(5)
BIO	201	Human Anatomy & Physiology I	(4)
BIO	202	Human Anatomy & Physiology II	(4)
CHE	111	General College Chemistry 1	(5)
CHE	112	General College Chemistry II	(5)
MAT	121	College Algebra	(4)

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s	Pre-V	eterin	ary Science Emphasis	Credit Hours
	BIO	111	General College Biology 1	(5)
	BIO	112	General College Biology II	(5)
	CHE	111	General College Chemistry I	(5)
	CHE	112	General College Chemistry II	(5)
í.,	MAT	121	College Algebra	(4)
( . I	MAT	122	Trigonometry	(3)
	MAT	135	Intro. to Statistics	(3)
6	PHY	111	Physics: Algebra-Based I	(5)
	100			

Total

#### Pre-Medical Technology Emphasis

The AS degree in Pre-Medical Technology is under review. Please contact the Center for Health, Math and Science, 303-556-2460, for additional information.

24

24

PHYSICS E	MPHASIS	Credit Hours
MAT 121	College Algebra	(4)
MAT 122	Trigonometry	(3)
MAT 201	Calculus I	(5)
MAT 202	Calculus II	(5)
PHY 211	Physics: Calculus-Based I	(5)
PHY 212	Physics: Calculus-Based II	(5)

Total

(5)

11)

(3)

(3)

(3)

24

CCD Auraria

degree program. Any CCD career/vocational course from any CCD campus may count as an elective for the AGS-G degree. All students who pursue this degree plan are assigned a faculty adviser after completing 12 credit hours.

Program Admission Requirements None

2. All other Associate of General Studies (AGS) Degrees Most AGS degrees (with the exception of the AGS-G degree) are the result of articulation agreements and provide a transfer option for students in vocational programs. The career courses are fully transferable only into the particular program and college identified by the articulation agreement. Consult with a faculty adviser.

Students must apply for entry. Students are encouraged to apply to a program by the time they have completed 12 credits of 100-level courses. At the time of application, students must identify which Associate of General Studies degree program they want to enter. Program application forms are in South Classroom Building 134, and appropriate academic center offices. Entry requirements are the same as for the matching AAS degree.

Program Admission Requirements

See individual articulated degree options.

#### **Credit Hours**

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Credit hours in parenthesis, e.g., (3), are options from which students may choose. They are not included in the total credit hours listed below. An average full-time student course load is 15 credit hours. An AGS degree of 60 credit hours takes four semesters of 15 credits each semester, assuming that all courses count toward the degree. AGS degrees of more than 60 credit hours may take more than four semesters to complete.

#### **AGS Degree Program Requirements**

All AGS degrees require the following

	Credit Hours
General Education Core Courses	34-37
Electives or Courses Prescribed b	y .
Articulation Agreements	20-23
Capstone Course	3
Total	60

Posti Han

Courses to be counted toward the core general education requirement must be completed with a grade of C or better.

## Associate of General Studies-Generalist Degree (AGS-G)

All CCD certificate and degree-seeking students are classified as AGS-G students until they apply and are accepted into another certificate or degree program. Students remain in the AGS-G program if they want to complete a broad program of both career and transfer courses without the constraints of specialization.

The AGS-G general education core curriculum transfers to and fully meets the lower-division general education requirements of all public baccalaureate colleges and universities in Colorado. Transferability of AGS-G career courses depends on the courses taken and the receiving institution. All students who have completed 12 college-level credits should see a faculty adviser in their area of interest.

Students may take either the AA core curriculum or the AS core curriculum. The AA core follows.

Ger	neral Education AA Core Credit H	lours
Γ.	English	6
	ENG 121, 122	
11.	Speech	3
	SPE 115	
10.	Mathematics	3-5
	(Select any 1 of the following)	
	MAT 121, 125, 135, 201, 202	
IV,	Physical & Biological Sciences	4-5
	(Select any 1 of the following)	
	AST 101, 102	
	BIO 105, 111, 112	
	CHE 101, 102, 111, 112	
	GEY 111	
	PHY 105, 111, 112, 211, 212	
V.	Social & Behavioral Sciences (Select 9 credit hours	
	from a minimum of 2 disciplines)	- 9
	ANT 101, 111	
	ECO 201, 202	
	GEO 105	
	HIS 101, 102, 201, 202	
	POS 105, 111	
	PSY 101, 102	
	SOC 101, 102	
VI.	Humanities	9
	(Select 9 credit hours from a minimum of 2 disciplines	i.
	many four-year schools prefer a concentration of	
	2 classes in same prefix)	
	ART 110, 111, 112	
	HUM 121, 122, 123	
	Any foreign language 111 or higher	
	LIT 115, 201, 202	
	MUS 120, 121, 122	
	PHI 111, 112, 113	
	THE 105, 211, 212	

# General Education Sub-Total 34-37

*Elective Sub-Total	
(Must include a minimum of 6 hours in 200-level courses.)	1.000

Caps	tone C	ourse	
HUN	1 285	Seminar in Critical Thinking	
		or	
PSY	285	Leadership Development	
		or	
SCI	285	Critical Thinking	
Total			

**Please note:** Any course with a beginning number of "0" in any prefix will not meet requirements for the AGS-G degree. English and mathematics courses numbered before the core general education courses will not meet requirements for the AGS-G. All general education and capstone courses must be completed with a C grade or better for all AGS degrees.

## ASSOCIATE OF APPLIED SCIENCE DEGREE

The AAS degree prepares students for entry-level employment in a given occupation or upgrades employable skills.

While not intended for transfer to a baccalaureate degree program, all AAS degrees have limited transferability. In each AAS program, some of the courses are articulated with and accepted by at least one specific baccalaureate program. Talk with an adviser for specific details.

# Student Performance Objectives for Vocational Education (AAS degree programs)

Students who complete vocational programs will be able to perform the following.

- Basic and advanced academic skills appropriate to the profession.
  - Basic skills: reading, writing, mathematics, speaking, listening.
- b. Thinking skills: ability to learn, reason, make decisions, solve problems.
- 2. General occupational skills appropriate to the profession.
  - a. Information: ability to acquire and evaluate data, organize and maintain files, use computers to process information.
  - b. Interpersonal: ability to work on teams and with people, teach others, serve customers, lead, negotiate; value and serve, work well with and for people from diverse cultures.
  - c. Personal: responsibility, self-management, integrity; personal, professional and social ethics.
  - d. Resources: ability to allocate time, money, materials, space and staff.
  - e. Systems: understand technological, organizational and social systems; monitor
    - and correct performance; design or improve systems.
  - f. Technology: select equipment, apply technology to specific tasks.

 Specific occupational skills that involve all aspects of the profession include planning, management, finances, underlying principles of technology, technical skills, labor and community issues, health and safety and environmental issues.

Each vocational program area has identified student performance objectives. These performance objectives are given to students during the advising process. Performance objectives are collectively bound and published for general distribution and constitute the college's guarantee to the employer. Copies are available in center and counseling offices.

#### AAS Degree Program Entry

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Students must apply for entry to all AAS degree programs. Students are encouraged to apply to a program by the time they have completed 12 credits of 100-level courses. At the time of application, students must identify which Associate of Applied Science degree program they desire to enter. Program application forms are in South Classroom Building 134, and program offices.

## **AAS Degree Program Requirements**

The AAS degree requires a minimum of 60 credit hours, 15 of which must meet general education requirements (completed with a C grade or better) and 45 of which must meet specific program requirements.

Ger	eral	Education Requirements	Credit Hours	
L.		English - ENG 121 or Higher		
П.,		athematics - MAT 103 or higher	3-5	
10.	Or	ne course from 3 of the following 4 areas:	9-13	
	Α.	Speech		
		SPE 115		
		SPE 115 may be earned through		
		"Speech Intensive" programs.		
		(See specific AAS program recommendation or an adviser)	ms	
	Β.	Physical and Biological Sciences		
		AST 101, 102		
		BIO 105, 111, 112*		
		CHE 101, 102, 111, 112**		
		GEY 111		
		PHY 105, 111, 112, 211, 212		
		Nursing requires BIO 201, 202 and 205.		
	č.	Health Related programs require BIO 201 and or BIO 120	1 202,	
		Dental Hygiene requires CHE 106		
		Social & Behavioral Science		
		ANT 101, 111		
		ECO 201, 202		
		GEO 105		
		HIS 101, 102, 201, 202		
		PSY 101, 102*		
		POS 105, 111		
		SOC 101, 102		

 Nursing requires PSY 235 ECE and HSE allow PSY 235 D. Humanities
ART 110, 111, 112
CIS 118
HUM 121, 122, 123
LIT 115, 201, 202
MUS 120, 121, 122
PHI 111, 112, 113
Any foreign language 111 or higher
THE 105, 211, 212

Program-specific requirements including a Capstone Course

#### Total

60-66

Individual departments may specify particular courses that may count toward the general education requirements.

#### **Credit Hours**

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Credit hours in parenthesis, for example (3), are options from which students may choose and are not individually included in the total credit hours listed below the numbers in parentheses. An average fulltime student course load is 15 credit hours. An AAS degree of 60 credit hours takes four semesters of 15 credits each semester, assuming that all courses count toward the degree. AAS degrees of more than 60 credit hours may take more than four semesters to complete.

## CERTIFICATES

In addition to associate degree programs, specially designed courses and sequences leading to the awarding of certificates have been designed in cooperation with business, commerce and local government. These certificates provide opportunity and rewards for persons seeking to improve skills in their occupational fields. Courses in certificate sequences apply to appropriate associate degree programs.

# Student Performance Objectives for Vocational Education (Certificate Programs)

Students who complete vocational programs will be able to perform the following.

- Basic and advanced academic skills appropriate to the profession.
  - Basic skills: reading, writing, mathematics, speaking, listening.
  - b. Thinking skills: ability to learn, reason, make decisions, solve problems.
- 2. General occupational skills appropriate to the profession.
  - Information: ability to acquire and evaluate data, organize and maintain files and use computers to process information.
  - b. Interpersonal: ability to work on teams and with people,

teach others, serve customers, lead, negotiate; value and serve, work well with and for people from diverse cultures.

- c. Personal: responsibility, self-management, integrity; personal, professional and social ethics.
- Resources: ability to allocate time, money, materials, space and staff.
- Systems: understand technological, organizational and social systems; monitor and correct Performance; design or improve systems.
- f. Technology: select equipment, apply technology to specific tasks.
- Specific occupational skills that involve all aspects of the profession include planning, management, finances, underlying principles of technology, technical skills, labor and community issues, health and safety and environmental issues.

Each vocational program area has identified student performance objectives. These performance objectives are given to students during the advising process. Performance objectives are collectively bound and published for general distribution and constitute the college's guarantee to the employer. Copies are available in program and counseling offices.

## **Certificate Program Entry Requirements**

Students must apply for entry to all certificate programs. Program application forms are available in South Classroom Building 134, at branch campuses and in learning program offices.

## CCC ONLINE

CCD is a partner in the Colorado Community Colleges Online (CCC Online) program. The degrees and courses offered through CCC Online are fully accredited and recognized by all of the partner colleges. This means students can take courses anytime and anywhere at their convenience. CCC Online also has established transfer agreements for the business core and general education core courses with most four-year public and private colleges in Colorado. In addition, there are transfer agreements with colleges both in- and out-of-state that offer baccalaureate completion programs using distance/electronic technology.

For more information, go to www.ccconline.org or call 1-800-801-5040.

#### Associate Degree Programs Online

Arts-General Education Business Nursing—Advanced Placement Public Administration

Certification Programs Online Networking

#### Associate of Applied Science in Business

CCC Online

The Associate of Applied Science (AAS) degree is awarded to a student who successfully completes a program that prepares the student for immediate employment in a full-time skilled and/or paraprofessional occupation. Each of the colleges' AAS degree programs is in a specified occupational field.

Although most college credits with this AAS Business program are accepted for transfer by particular four-year colleges and universities, AAS degrees are not specifically designed to transfer. The student who anticipates transferring is encouraged to check carefully the requirements of the respective institution.

#### **Graduation Requirements and Policies**

Complete a minimum of 60 semester credits of approved course work as outlined in each college's catalog. Since each AAS program is designed for a specified career or technical field, the minimum requirements will vary with the particular program. A minimum of 15 semester credits of the total must be in general education courses. The difference of 45 semester credits must be earned either in general education or specific career courses as noted in each degree program.

Earn a minimum cumulative grade point average of 2.0 (a "C" average).

Earn at least 15 credit hours of your degree at any one of the CC of C colleges or through CCC Online.

Be recommended for graduation a faculty adviser.

File an Application for Graduation in the records office of the degree-granting college and pay the graduation fee.

Resolve all financial obligations to the college and return all college-owned materials.

#### **General Education Requirements**

The outcomes of general education and related studies are recognized as integral components of associate degree education. Increasingly, the ability to think, reason, compute and communicate are essential if citizens are to remain employable and compete with expanding knowledge. General education also includes human development in civic, consumer, environmental and social responsibilities. Related studies typically achieve a dual purpose of enhancing general human development and providing a basic foundation for the pursuit of more advanced degrees and careers.

#### Transfer of Courses and a Complete Online Degree

The degrees described here are designed for the student who wishes to complete the degree entirely over the Internet. If all courses are taken, the student will have met all the course requirements for the AAS degree and, along with the above stated requirements, be eligible to graduate from any of the CCC Online colleges. If students wish to mix their course work between online courses and campus-based courses, students may use the courses they take onsite, transfer in courses taken at other colleges, and may receive credit for prior learning to gather the necessary requirements.

Gener	al Edu	cation Requirements Credit 1	lours
ECO		Principles of Macroeconomics	3
ECO	202		3
ENG	121	English Composition 1	3
ENG	122	English Composition II	3
MAT	121	College Algebra	4
SPE	115	Speech Communications	3
Busin	ess Rec	uirements	
ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
BUS	115	Introduction to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communication and Report Writing	3
BUS	226	Business Statistics	3
MAN	216	Small Business Management	3
MAN	226	Principles of Management	3
MAR	111	Principles of Sales	3
MAR	216	Principles of Marketing	3
MAN	200	Human Resources Management	3
Inform	nation	Technology Requirements	
CIS	115	Introduction to	
		Computer Information Systems	3
CIS	118		3
CIS	155		3
Tetal			-

#### Total

## Certificate in Information Technology NETWORK TECHNOLOGY

CCC Online

This program is in partnership with CCC Online. All classes, except CNT 209, may be completed through enrollment and study at CCC Online, or enrollment and attendance at the Community College of Denver. CNT 209 must be completed at CCD or proctored on the job as a practicum experience. Enrollment at CCC Online can be started at the Web site www.ccconline.org.

This program prepares students as entry-level network specialists. Students are prepared for the CompTIA Network+ certification exam. Most program credits apply toward the AAS degree in Information Technology, Networking Administration or Telecommunications.

Requi	remen	ts	Credit Hours
CIS	118	Intro. to PC Applications	3
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	202	Wide Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	204	Intro. to Internet Technologies	3
CNT	205	Internetworking Devices	3
CNT	206	Protocol Analysis	3
CNT	207	Network Analysis & Design	3
CNT	209	Computer Networking Lab	3
(On-	ampus	s or proctored on-the-job practicum exp	perience required.)

Total

63

## Associate of Applied Science Degree in Nursing NURSING — ADVANCED PLACEMENT

CCC Online

Licensed practical nurses who are graduates of approved schools of practical nursing may enter the second year of the Nursing program to become professional nurses. Applicants are accepted for admission each fall and spring semester. The Nursing program participates in the Colorado Nursing Articulation model through which the college grants 38 practical nursing credits when the student completes articulation requirements. Educational validation through testing is required if the applicant graduated more than 10 years prior to entry into the program. Applicants must complete all general education courses and the bridge course, NUR 126, before admission into the program.

Applicants are accepted first come, first served, according to the date their completed application packet is received in the Nursing Office.

#### Program Application and Admission Requirements

Take the CCD Basic Skills Assessment Test (BSAT) in the Testing Center in South Classroom Building 223, 303-556-3810. All prospective nursing students must take the BSAT without exception. The BSAT is available online by calling 303-556-3810.

Attend the mandatory Nursing program orientation held the first Tuesday of every month at 5 p.m. in the Nursing Lab at the Health Sciences Center at Lowry, with a copy BSAT scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the minimum required BSAT scores. The assessment must be met before a student will be admitted to the program, regardless of previous course work. There are no exceptions.

Submit the completed application packet as soon as possible. The completed application packet includes the program application form, two sealed letters of reference dated within the past 12 months, and a copy of the Basic Skills Assessment Test scores. Incomplete packets will not be considered for admission.

Submit proof of successful completion of general education courses as early as possible. Proof of completion of all general education courses must be submitted to the Nursing Office before enrolling in NUR courses.

Submit copy of a valid Colorado license for practical nursing.

#### Prerequisites and/or

Gener	al Edu	cation Requirements	Credit Hours
BIO	201*	Human Anatomy & Physiology I	4
BIO	202*	Human Anatomy & Physiology II	4
BIO	205*	Microbiology	4
PSY	235*	Psychology of Human Growth & De	velopment 3
ENG	121	English Composition I	3
Huma	anities	Core Elective	
(See ?	AS cur	riculum for a list of approved courses)	3
NUR	126	Nursing Process Concepts & Skills	2

Credit awarded for Practical Nurse Education under Colorado Nursing Articulation Agreement. 31

\* Must be completed within past 10 years of entry into NUR courses

#### Major Requirements

NUR	195	Success Seminar	1	
NUR	208	Nursing Assessment & Diagnosis	3	
NUR	210	Family-Centered Nursing II	6	
NUR	211	Principles of Psychiatric Nursing	5	
NUR	212	Nursing Care of Hospitalized Client II	8	
NUR	214	Leadership & Management in Nursing	2	
NUR	285	Comprehensive Nursing Internship (Capstone)	3	

Total

## ASSOCIATE OF ARTS DEGREE IN PUBLIC ADMINISTRATION University Parallel, Transfer Program

82

CCC Online

An Associate of Arts (AA) degree provides a learning foundation in communications, social science, arts or humanities. Some students work toward the Associate of Arts degree in Public Administration for the purposes of career enrichment. Many plan to transfer to four-year colleges and universities to continue their work toward baccalaureate degrees and pre-professional training in such fields as government, law, education, the arts and social sciences.

The Associate of Arts degree in Public Administration general education core requirements meet the lower-division general education requirements of public baccalaureate colleges and universities in the state of Colorado. Students graduating with the AA degree may transfer into liberal arts programs in public baccalaureate colleges and universities with junior standing. Courses to be counted toward the general education core curriculum must be completed with a grade of "C" or higher. Students planning to transfer should familiarize themselves with the full requirements of the school they plan to attend.

# Student Performance Objectives for Transfer Education (AA Degree)

Students will plan and write well-structured compositions demonstrating the writing capabilities to express, inform, analyze, evaluate, persuade, argue, conduct research, and use primary and secondary sources logically and stylistically.

Students will compose and deliver oral presentations, providing ideas and information, and using delivery skills suitable to the topic, purpose and audience. Students will demonstrate an understanding of speeches and be able to evaluate speeches.

Students will read and think critically about a variety of interdisciplinary topics, demonstrating college-level reading skills in a variety of disciplines, including humanities, social sciences and the natural sciences.

Students will demonstrate orally and in writing the criticalthinking skills of analysis, synthesis and evaluation.

Students will analyze and use numerical data and qualitative reasoning skills, including applying proper formulas to mathematical data and calculating results, illustrating quantitative data graphically, rearranging general formulas to solve for any term, and interpreting graphic data and assessing the importance of the portrayed trends.

Gener	al Edu	cation Requirements	Credit Hours
ENG	121	English Composition I	3
ENG	122	English Composition II	3
MAT	121	College Algebra	4
SPE	115	Speech Communications	3
POS	105	Intro. to Political Science	3
POS	111	American Government	3
SOC	101	Intro. to Sociology	3
PHI	112	Ethics	3

25

Total



		60-6
_		4-5
211	Physics Calculus-Based I	5
111		5
112	0	5
111	0	5
111	General College Biology I	5
105	Science of Biology	4
102	Astronomy II	4
101	Astronomy I	4
al & B	Biological Sciences (select one of the following)	
		6
112	First-Year Spanish II	5
111	First-Year Spanish I	5
111		3
121	Music History I	3
120	Music Appreciation	3
115	Introduction to Literature	3
121	Survey of Humanities 1	3
110	Art Appreciation	3
nities	(select two of the following):	
-		25
221	Community Development and Planning	3
		3
		3
		3
		3
		3
	0	3
121	Principles of Accounting I	4
	200 226 121 125 211 215 221 211 125 221 211 110 121 115 120 121 111 112 112 102 105 111 111 112	<ul> <li>200 Human Resources Management</li> <li>226 Principles of Management</li> <li>121 Intro. to Public Administration</li> <li>125 State and Local Government</li> <li>211 Intro. to Public Finance</li> <li>215 Current Political Issues in Government</li> <li>221 Community Development and Planning</li> <li>mities (select two of the following):</li> <li>110 Art Appreciation</li> <li>121 Survey of Humanities 1</li> <li>115 Introduction to Literature</li> <li>120 Music Appreciation</li> <li>121 Music History 1</li> <li>111 Introduction to Philosophy</li> <li>112 First-Year Spanish 1</li> <li>112 First-Year Spanish 11</li> <li>112 Astronomy 1</li> <li>103 Science of Biology</li> <li>111 General College Biology 1</li> <li>112 General College Chemistry 11</li> <li>112 Physics: Algebra Based 1</li> </ul>

Life offers abundant choices. Some choices are easier to make and some are harder. Community College of Denver makes it easy when it comes to picking a degree or certificate program, even though we have more than 125 from which to choose. CCD offers Associate of Arts, Associate of Science, Associate of General Studies and Associate of Applied Science degrees in more than 100 emphases. In addition, we offer 20 certificate programs in more than 78 different areas. The following alphabetical listing tells you about program admission requirements, as well as general education, core and major course completion requirements. Your adviser or case manager also can help to answer your questions.



## DEGREE & CERTIFICATE PROGRAMS (ALPHABETICAL LISTING)

## ACCOUNTING

## Associate of Applied Science Degree in Accounting

CCD Auraria, CCD East, CCD North, CCD West

The AAS Accounting degree includes two program emphases: Managerial Accountant and Operational Accountant. There also are three certificates with emphases in Management, Operations and Billing/Payroll. If you wish to transfer to a senior institution, you may design, with assistance from an accounting adviser, an associate degree program for maximum transferability. Contact an accounting adviser early to plan your program.

## Associate of Applied Science Degree in Accounting MANAGERIAL ACCOUNTANT EMPHASIS

## CCD Auraria

Accounting, Managerial Accountant emphasis prepares students for entry-level positions such as cost accountant, accounting technician, tax examiner, accounts payable or receivable clerk, payroll clerk and the like. Students are prepared to work in managerial and managerial support positions in both the public and private sectors.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of ACC 121 with a grade of C or better.
- Or, completion of the Managerial Accountant certificate program.

General Education Requirements

CIS	118	Intro. to PC Applications	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I	3
MAT	121	College Algebra	4
SPE	115	Principles of Speech	3
Majo	Requi	irements	
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4

ACC	125	Computerized Accounting	x.	
ACC		Income Tax I	3	
1.00			2	
ACC		Intermediate Financial Accounting (Capstone)	4	
ACC	215	Accounting Systems	3	
ACC	226	Cost Accounting	3	
BUS	110	Business Math	3	
BUS	115	Intro. to Business	3	
MAN	225	Managerial Finance	3	
CIS	145	Complete PC Databases/Access	3	
CIS	155	Complete PC Spreadsheets/Excel	3	
Select	at leas	t 9 credits with adviser approval		
ACC	297	Cooperative Education	3	
BTE	102	Basic Keyboarding Applications	3	
BUS	216	Legal Environment of Business	3	
BUS	217	Business Communications	3	
MAR	216	Principles of Marketing	3	
BUS	260	Business Process Foundations	3	
CIS	135	Complete PC Word Processing/Word	3	

Total

#### Certificate in Accounting MANAGERIAL ACCOUNTANT

#### CCD Auraria

Credit Hours

This program prepares students for job entry into positions such as accounting technician, tax clerk, accounts payable or receivable clerk and the like. All program credits apply to the AAS degree in Accounting, Managerial Accountant emphasis.

Program Admission Requirements

Completion of CIS 118 with a C or better

Requi	remen	ts	Credit Hours
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4
ACC	131	Income Tax 1	3
ACC	215	Accounting Systems	3

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BUS	110	Business Math	3
BUS	115	Intro. to Business	3
MAN	225	Managerial Finance	3
CIS	118	Intro. to PC Applications	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3

#### Total

## Associate of Applied Science Degree in Accounting OPERATIONAL ACCOUNTANT EMPHASIS

#### CCD Auraria

Accounting, Operational Accountant emphasis prepares students for job-entry positions such as accounting technician I, bookkeeper, computerized accounting clerk, accounts payable or receivable clerk, billing clerk, payroll clerk and the like. Students are prepared to work in operational and applications tasks of the business cycle in both the public and private sectors.

## Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of ACC 121 with a grade of C or better.
- Or, completion of the Managerial Accountant certificate program.

# General Education RequirementsCredit HoursCIS118Intro. to PC Applications3ECO201Principles of Macroeconomics3ENG121English Composition I3MAT121College Algebra4SPE115Principles of Speech3

## Major Requirements

a miles	made	( critering
ACC	115	Payroll Accounting
ACC	116	Computerized Billing
ACC	121	Accounting Principles I
ACC	125	Computerized Accounting (Capstone)
ACC	131	Income Tax I
BUS	110	Business Math
BUS	115	Intro. to Business
MAR	160	Customer Service
BUS	260	Business Process Foundations
CIS	135	Complete PC Word Processing/Word
CIS	145	Complete PC Databases/Access
CIS	155	Complete PC Spreadsheets/Excel
Select	at leas	t 9 credits with adviser approval
ACC	101	Fundamentals of Accounting
ACC	122	Principles of Accounting II
ACC	297	Cooperative Education
BTE	102	Basic Keyboarding Applications
BUS	217	Business Communications
MAN	225	Managerial Finance

## Certificate in Accounting OPERATIONAL ACCOUNTANT

#### CCD Auraria, CCD East, CCD West

This program prepares students for job entry into positions such as computerized accounting clerk, accounts payable or receivable clerk, bookkeeper, general journal/ledger clerk and the like. All program credits apply toward the AAS degree in Accounting, Operational Accountant emphasis.

## Program Admission Requirements

Completion of CIS 118 with a grade of C or better.

Requi	remen	ts	Credit Hours
ACC	115	Payroll Accounting	3
ACC	116	Computerized Billing	3
ACC	121	Accounting Principles 1	-4
ACC	131	Income Tax I	3
BTE	102	Basic Keyboarding Applications	3
BUS	110	Business Math	3
BUS	115	Intro. to Business	3
MAR	160	Customer Service	3
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3

Total

3

3

4

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3

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32

## Certificate in Accounting BILLING/PAYROLL TECHNICIAN

CCD Auraria, CCD East, CCD North, CCD West

This program builds skills in billing and payroll applications and prepares students for job entry into positions such as billing clerk, payroll clerk and general office clerk. All program credits apply to the AAS degree in Accounting, Operational Accountant emphasis.

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#### Program Admission Requirements

1. Completion of CIS 118 with a C or better

Requi	rement	ls .	Credit Hours
ACC	101	Fundamentals of Accounting	3
ACC	115	Payroll Accounting	3
ACC	116	Computerized Billing	3
ACC	121	Accounting Principles I	4
BUS	110	Business Math	3
BTE	102	Basic Keyboarding Applications	3
MAR	160	Customer Service	3
CIS	118	Intro. to PC Applications	3
CIS	155	Complete PC Spreadsheets/Excel	3
Total			28

Total

## ANTHROPOLOGY

Associate of Arts Degree with a Behavioral Sciences Emphasis, Anthropology Emphasis

(See AA Degree, page 48)

## APPLIED TECHNOLOGY

## Associate of Applied Science Degree in Applied Technology CCD Auraria

Students desiring to complete the Associate of Applied Science degree in Applied Technology will complete the technical course work contained in a \*state-approved career and technical education program certificate at one of the four area vocational technical schools (AVTS): Delta-Montrose Area Vocational Technical Center, Emily Griffith Opportunity School, San Juan Basin Area Vocational Technical School and Pickens Tech Center.

The general education and other degree requirements will be completed at the Community College of Denver. The AAS Degree will be conferred by the Community College of Denver after these requirements have been completed.

The approved career and technical education certificate programs at the AVTS prepare students with technical, applied academic and employability skills. Credit in varying amounts from these certificate programs will be applicable to the community college's AAS Degree in Applied Technology.

Students may enroll concurrently at both institutions, an AVTS and the Community College of Denver. Students must comply with the regulations and requirements relating to admission and attendance at each institution.

 A state approved career and technical education program is a program that is approved by the State Board for Community Colleges and Occupational Education (SBCCOE) and is current.

#### Minimum Requirements

- 60 semester credits of course work (CCD will accept up to 42 credit hours of course work from an approved Certificate at an AVTS)
- 2. Cumulative GPA of 2.0 or better.
- 3. General education course credits of 15-18 semester credits
- Minimum of 15 credit hours of general education requirements earned at CCD (below).
- 5. Students completing an AVTS certificate of less than 42 hours must complete additional hours at CCD from the approved General Education list. These credit hours should be selected to complement the certificate from the AVTS and be consistent with the student's future plans. Students transferring a certificate with thirty or fewer hours will complete a minimum of twelve hours in a single technology-based discipline. The disciplines are: Engineering Graphics, Information Technology, Trades, and Welding and Fabrication.
- The specific courses must be selected in consultation with a faculty adviser and be approved by the adviser.

General Education Requirements ENG 121 or 131 MAT 103 or 121

Select 1 course from the following AAS Physical & Biological Sciences requirements 4-5 AST 101, 102; BIO 105, 111, 112\* CHE 101, 102, 111, 112; GEY 111; PHY 105, 111, 112, 211, 212

3

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3

62-65

Select 1 course from the following AAS Humanities requirements 3-5 ART 111, 112; CIS 118; HUM 121, 122, 123; LIT 115, 201, 202 MUS 120, 121, 122; PHI 111, 112, 113 Any foreign language 111 or higher; THE 105, 211, 212

Select 1 course from the following AAS Social & Behavioral Sciences requirements ANT 101, 111; ECO 201, 202; GEO 105; HIS 101, 102, 201, 202; PSY 101, 102; POS 105, 111; SOC 101, 102

SPE 115 Intro. to Speech

## ART

Total

The Arts department at CCD offers a variety of opportunities for study in the Visual Arts, along with state-of-the-art technical and studio resources, an outstanding faculty, and diversity in both the campus community and in its degree offerings.

Study areas include painting, drawing, photography, graphic and multimedia design and video production. You can pursue an Associate of Arts or Associate of Applied Science degree or a certificate in most of these areas. CCD offers associate degrees in fine art, arts management, graphic or multimedia design, photography and digital video production. Check the ART, COM, GRD, MUM and PHO degree listings for details.

You can learn more about the Arts at ccd.rightchoice.org; follow the link to the Arts department site!

Associate of Arts Degree with an Art Emphasis (See AA Degree, page 47)

## ARTS MANAGEMENT

Associate of Arts Degree with an Arts Management Emphasis (See AA Degree, page 47)

#### Certificate in Arts Management

CCD Auraria

This certificate provides the concepts and skills necessary to succeed in the business of arts management. Enrollment in this curriculum will engage students in grant writing, marketing, leadership/management and in project management as they relate to the arts.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

		Credit Hours
AMG 280	Intro. to Arts Management	3
AMG 282	Grant Writing for Arts Management	3
AMG 297	Arts Management Internship	6
MAR 216	Principles of Marketing	3
MAN 241	Project Management Organization	3

#### Total

## **BEHAVIORAL SCIENCES**

Associate of Arts Degree with a Behavioral Sciences Emphasis Anthropology Emphasis Psychology Emphasis Sociology Emphasis (See AA Degree, page 48)

## BIOLOGY

Associate of Science Degree with a Biology Emphasis (See AS Degree, page 53)

#### **BUSINESS ADMINISTRATION**

Associate of Arts Degree in Business Administration (See AA Degree, page 50)

#### Associate of Applied Science Degree in Business Administration

This program provides a broad exposure to general business functions and fundamental management concepts. On completion, students are qualified for an entry-level position in a wide variety of general business occupations such as sales managers, management trainees, supervisors and service coordinators. Students already employed are able to acquire skills necessary for personal development directed toward job security and advancement. A grade of C or better must be maintained in the business core area and capstone course. Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Overall GPA of 2.0 on all college-level work after completing 12 credit hours.

## Associate of Applied Science Degree in Business Administration BUSINESS GENERALIST EMPHASIS

CCD Auraria

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Gene	ral Edu	cation Requirements	Credit Hours
CIS	118	and the second	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I	3
		124 or 125	4
SPE	115	Principles of Speech	3
Core	Requir	ements	
ACC	100 C 100 C	Accounting Principles 1	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	-3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing (Capstone)	3
Select	2 cour	ses from the following	6
BUS	226	Business Statistics	(3)
MAN	200	Human Resources Management	(3)
MAN	225	Managerial Finance	(3)
Gener	ral Elec	tives (with adviser approval)	
	287	Cooperative Education	3
CIS	135	Complete PC Word Processing/Word	3
CIS	155	Complete PC Spreadsheets/Excel	3
ECO	202	Principles of Microeconomics	3
Electi	ve		3
Total			60

## 60

Custom programs can be designed with an adviser, or students may choose one of the following areas of program emphasis: Finance, Insurance, International Business, Management, Marketing or Real Estate. Within each emphasis, there exists multiple study options. See each specific program emphasis for available study options. All custom programs must be approved by an adviser. All general electives for custom programs must have a course number greater than 100.

All electives must be approved by your adviser. Several of the option courses of the various emphases are offered in cooperation with Emily Griffith Opportunity School and the American Institute of Banking. For more information, contact your adviser in the Center for Business and Technology, Plaza Building 262, 303-556-2487.

## Certificate in Business Administration ENTREPRENEURSHIP

## CCD Auraria

This certificate provides the concepts and skills necessary to succeed in business. Enrollment in this curriculum will engage students in entrepreneurial activities. Students will learn key concepts of various commercial disciplines that affect small businesses.

#### Program Admission Requirements

1. Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Credit Hours
ACC	101	Fundamentals of Accounting	3
BUS	115	Intro. to Business	3
BUS	180	Business Certificate (Capstone)	1
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
CIS	118	Intro. to PC Applications	3
ECO	202	Principles of Microeconomics	3.
MAN	200	Human Resources Management	3
MAN	216	Small Business Management	3
MAN	225	Managerial Finance	3
MAR	111	Principles of Sales	3
Total			31

#### Total

## Associate of Applied Science Degree in Business Administration FINANCE EMPHASIS

CCD Auraria

Gener	al Edu	cation Requirements Credit F	lours
CIS	118		3
ECO	201		3
ENG	121	English Composition 1	3
MAT	121,	124, 125	4
SPE	115	Principles of Speech	3
Core I	Requir	ements	
ACC	121		4
ACC	122	Accounting Principles II	4
BUS	115	Intro, to Business	3
BUS .	216	Legal Environment of Business	3
BUS	217	Business Communications	3
BUS	226	Business Statistics	3
MAN	200	Human Resources Management	3
MAN	225	Managerial Finance	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing (Capstone)	3
Major	requi	rements	
ACC	215	Accounting Information Systems & E-Business	3
BUS	287	Cooperative Education	3
CIS	155	Complete PC Spreadsheets/Excel	3
ECO	202	Principles of Microeconomics	3
Total	-		60

## Certificate in Business Administration FINANCE/COMMERCIAL CREDIT MANAGEMENT

## CCD Auraria

This certificate provides students with the fundamentals for success in the financial or commercial credit industry. In addition, this certificate provides specific training toward the upgrade of skills for credit managers, assistants and other commercial credit personnel.

Program Admission Requirements

1. Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Gredit Hours
ACC	121	Accounting Principles I	4
BUS	115	Intro. to Business	3
BUS	180	Business Certificate (Capstone)	1
BUS	216	Legal Environment of Business	-3
BUS	217	Business Communications	3
BUS	226	Business Statistics	3
MAN	200	Human Resources Management	3
MAN	225	Managerial Finance	3
BUS (	electiv	e	3
CIS	155	Complete PC Spreadsheets/Excel	3
Total			29

## Associate of Applied Science Degree in Business Administration **INSURANCE EMPHASIS**

CCD Auraria

The AAS degree program in Business Administration, Insurance, is offered jointly by CCD and Emily Griffith Opportunity School. An official school transcript showing completion of Emily Griffith Opportunity School's insurance courses is required for program advising. For more information about programs affiliated with Emily Griffith Opportunity School, contact your adviser in the Center for Business and Technology. Plaza Building 262, 303-556-2487.

This emphasis consists of a total of 15 credit hours of insurance-specific credits. Students may earn these credits via technical education course work at Emily Griffith Opportunity School, plus a minimum of 51 credit hours of general education and program core courses at CCD. Four study options are listed below.

Gener	al Edu	acation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I	3
MAT	121,	124, 125	4
SPE	115	Principles of Speech	3

Core 1	Require	ements	
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing	3
Select	2 cour.	ses from the following	6
BUS	226	Business Statistics	(3)
MAN	200	Human Resources Management	(3)
MAN	225	Managerial Finance	(3)
Choos		of the following four options	15
	Gene	ral Insurance	
	Chart	ered Property Casualty Underwriter (CPCU)	
	Chart	ered Life Underwriter (CLU)	
	Life (	Office Management Associate (LOMA)	
Total			60

## Associate of Applied Science Degree in Business Administration INTERNATIONAL BUSINESS EMPHASIS

CCD Auraria

The AAS degree program in Business Administration, International Business, is offered jointly by CCD and Emily Griffith Opportunity School. An official school transcript showing completion of Emily Griffith Opportunity School's international business courses is required for program advising. Contact your adviser in the Center for Business and Technology, Plaza Building 262, 303-556-2487.

This emphasis consists of a total of 15 credit hours of international business-specific credits. Students may earn 9 of these credits via technical education course work at Emily Griffith Opportunity School. A minimum of 51 credit hours of general education and program core courses, and an additional 6 credits from courses listed below, must be completed at CCD.

Gene	ral Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I	3
MAT	121,	124,125	4
SPE	115	Principles of Speech	3
Core	Require	ements	
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing (Capstone)	3

Select	2 cour	ses from the following	6
BUS	226	Business Statistics	(3)
MAN	200	Human Resources Management	(3)
MAN	225	Managerial Finance	(3)
Major	requir	rements	
BUS	203	Intro. to International Business	3
COM	230	Multicultural Communication	3
MAR	240	International Marketing	3
POS	205	International Relations	3
Emily	Griffi	th courses or approved elective	3
Total			60

## Certificate in Business Administration INTERNATIONAL BUSINESS

This program is for individuals and businesses to explore the possibilities of conducting or improving their business in international markets. Basic essentials of foreign trade and cultural understanding are necessary for an effective business relationship.

## Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Credit Hours
ACC	121	Accounting Principles 1	4
BUS	115	Intro. to Business	3
BUS	180	Business Certificate (Capstone)	1
BUS	203	Intro. to International Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
CIS	118	Intro. to PC Applications	3
ECO	201	Principles of Macroeconomics	3
MAN	200	Human Resources Management	3
MAR	240	International Marketing	3
POS	205	International Relations	3

Total

## Associate of Applied Science Degree in Business Administration MANAGEMENT EMPHASIS

32

CCD Auraria

Genet	al Edu	cation Requirements	Credit Hours	
CIS	118	Intro. to PC Applications	3	
ECO	201	Principles of Macroeconomics	3	
ENG	121	English Composition 1	3	
MAT	121,	124, 125	4	
SPE	115	Principles of Speech	3	

Core .	Requir	ements	
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing (Capstone)	3
Select	2 cour	ses from the following	6
BUS	226	Business Statistics	(3)
MAN	200	Human Resources Management	(3)
MAN	225	Managerial Finance	(3)
Choos	e one	of the following two options	
Gene	ral Ma	inagement	
BUS	287	Cooperative Education	3
MAN	216	Small Business Management	3
MAN	229	Motivation & Management	3
Emily	Griffi	th courses or approved elective	3
Total	_		57
Super	marke	et Management	
		Business Ethics	3
ECO	118	Labor Economics	3
MAN	170	Supermarket Loss Prevention	3
		Motivation & Management	3
MAR	117	Principles of Retailing (Capstone)	3
Total			60

## Associate of Applied Science Degree in Business Administration MARKETING EMPHASIS

CCD Auraria

Gener	al Edi	ication Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I	3
MAT	121,	124, 125	4
SPE	115	Principles of Speech	3
Core I	Requir	ements	
ACC	121	Accounting Principles 1	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing (Capstone)	3

Select 2 cours	rses from the following	0
BU5 226	Business Statistics	(3)
MAN 200	Human Resources Management	(3)
MAN 225	Managerial Finance	(3)
Major Requ	irements	
BUS 287	Cooperative Education	3
MAR 111	Principles of Sales	.ŝ.
MAR 117	Principles of Retailing	â
MAR 220	Principles of Advertising	3
MAR 240	International Marketing	3
Total		60

## Certificate in Business Administration MARKETING

#### CCD Auraria

This program is part of a two-year associate degree in Business Administration. All courses apply to the advanced degree.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Credit Hours
BTE	139	Professional Development	3
BUS	115	Intro. to Business	3
BUS	180	Business Certificate (Capstone)	1
BUS	217	Business Communications	3
CIS	118	Intro. to PC Applications	.3
MAR	111	Principles of Sales	3
MAR	117	Principles of Retailing	3
MAR	216	Principles of Marketing	3
MAR	220	Principles of Advertising	3
MAR	240	International Marketing	3
SPE	115	Principles of Speech	3
Total			31

## Associate of Applied Science Degree in Business Administration REAL ESTATE EMPHASIS

CCD Auraria

The AAS degree program in Business Administration, Real Estate, is offered jointly by CCD and Emily Griffith Opportunity School. An official school transcript showing completion of Emily Griffith Opportunity School's real estate courses is required for program advising. Contact your adviser in the Center for Business and Technology, Plaza Building 262, 303-556-2487.

This program emphasis consists of a total of 15 credit hours of real estate-specific credits. Students may earn 9 of these credits for the Real Estate Appraiser option, or 12 of these credits for the Real Estate Broker option, via technical education course work at Emily Griffith Opportunity School. A minimum of 51 credit hours of general education and program core, plus the courses listed below, must be completed at CCD.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I	3
MAT	121,	124, 125	.4
SPE	115	Principles of Speech	3
Core I	Require	ements	
ACC	121	Accounting Principles I	4
ACC	122	Accounting Principles II	4
BUS	115	Intro. to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing (Capstone)	3
Select	2 cour	ses from the following	6
BUS	226	Business Statistics	(3)
MAN	200	Human Resources Management	(3)
MAN	225	Managerial Finance	(3)
Choos	e one a	of the following two options	
Real I	Estate	Appraiser	
BUS e	electiv	e or Emily Griffith courses	12
BUS	287	Cooperative Education	3
Total			60
Real	state	Broker	
110100	2712.1E	e or Emily Griffith courses	12
		Cooperative Education	3
003	207	cooperative concation	2
Total	1		60

## Certificate in Business Administration SUPERMARKET MANAGEMENT

This program gives the student the necessary knowledge and skills to gain employment and/or to advance to positions of increased responsibility within the supermarket industry.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Credit Hours
ACC	121	Accounting Principles 1	4
BUS	205	Business Ethics	3
BUS	115	Intro. to Business	3
BUS	180	Business Certificate (Capstone)	1
BUS	216	Legal Environment of Business	3
MAN	170	Supermarket Loss Prevention	3
MAN	200	Human Resources Management	3
MAN	226	Principles of Management	3
MAN	229	Motivation & Management	3

MAR 117	Principles of Retailing (Capstone)	3
MAR 216	Principles of Marketing	3
ECO 118	Labor Economics	3
Total		35

## Associate of Applied Science Degree in Business Administration TRAVEL AND TOURISM ASSOCIATE

## CCD Auraria

The Travel and Tourism Associate degree program prepares students for entry-level positions such as travel agent, reservations agent, cruise specialist, tour manager, and meeting and convention planner. CCD is licensed by the Institute of Certified Travel Agents (ICTA) and is an ICTA-approved Travel Agent Proficiency (TAP) test site. Destination Specialist program courses prepare students for ICTA Destination Specialist certification exams.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of CIS 118 with a grade of C or better.
- 3. Or, completion of the Travel and Tourism certificate program.

Gener	al Edu	cation Requirements	Credit Hour.
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition I	3
MAT	103	Contemporary College Mathematics	3
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core 1	Require	ements	
BTE	100	Intro. to Keyboarding	3
BUS	115	Intro. to Business	3
BUS	217	Business Communications	3
MAR	111	Principles of Sales	3
MAR	160	Customer Service	3
MAR	216	Principles of Marketing	3
PAR	101	Legal Writing	3
Major	Requi	irements	
TRA	110	The Travel Industry	3
TRA	111	Domestic Destinations	3
TRA	112	International Destinations	3
TRA	113	Selling Cruises & Leisure Travel	4
TRA	150	Destination Specialist — Latin America	2
TRA	152	Destination Specialist — Special Interes	st Travel 2
TRA	153	Destination Specialist - Western Europ	be 2
TRA	210	Travel Sales & Customer Service	3
TRA	211	Corporate Travel & Conference Plannin	g 2
TRA	212	Computer Reservations (Capstone)	2
Total			62

## Certificate in Business Administration TRAVEL AND TOURISM ASSOCIATE

## CCD Auraria

The Travel and Tourism Associate certificate program prepares students for entry-level positions such as travel agent, reservations agent, cruise specialist, tour manager, and meeting and convention planner. CCD is licensed by the Institute of Certified Travel Agents (ICTA) and is an ICTA-approved Travel Agent Proficiency (TAP) test site. Destination Specialist program courses prepare students for ICTA Destination Specialist certification exams. All program credits apply toward the AAS degree in Business Administration, Travel and Tourism Associate emphasis.

#### Program Admission Requirements

Completion of CIS 118 with a grade of C or better.

Requi	remen	ls G	edit Hours
BTE	100	Intro. to Keyboarding	3
BUS	217	Business Communications	3
CIS	118	Intro. to PC Applications	3
TRA	110	The Travel Industry	3
TRA	111	Domestic Destinations	3
TRA	112	International Destinations	3
TRA	113	Selling Cruises & Leisure Travel	4
TRA	150	Destination Specialist - Latin America	2
TRA	152	Destination Specialist - Special Interest	Travel 2
TRA	153	Destination Specialist - Western Europe	2
TRA	210	Travel Sales & Customer Service	3
TRA	211	Corporate Travel & Conference Planning	2
TRA	212	Computer Reservations	2
Total			35

## BUSINESS TECHNOLOGY

## Associate of Applied Science Degree in Business Technology

These Business Technology program options prepare students for entry-level positions and advancement in business, governmental and medical agencies, and other institutions that employ persons in secretarial and administrative support areas.

Occupational opportunities and salaries vary by skill, educational training, level of work experience and geographic location. As businesses increase the use of word processing and as electronic and voice message systems improve and expand, secretaries and administrative assistants will continue to increase their efficiency. While these modernizations reduce demand for some secretarial services, there is a trend toward delegating some administrative and managerial work to secretaries. Given the many technological advances, there are many personal skills, such as scheduling meetings and conferences, training other office-support workers and making travel arrangements that cannot be automated. The Bureau of Labor Statistics projects nearly 514,000 openings per year in the future, primarily from replacement needs. Highly qualified secretaries and administrative assistants with the ability to integrate software systems in today's workforce will be in demand.

## Associate of Applied Science Degree in Business Technology ADMINISTRATIVE ASSISTANT EMPHASIS

CCD Auraria, CCD East, CCD West

The Administrative Assistant program prepares students to use and understand personal computers; use e-mail, the Internet and the World Wide Web; use office software that includes word processing, database, spreadsheet, graphic presentation and Web page development applications; write business letters; and input data. Graduates are prepared to enter positions as word processors, office assistants, office specialists, administrative assistants, receptionists and data-entry clerks.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

Gener	al Edu	cation Requirements Credit	Hours
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition I	3
MAT	103	Contemporary College Mathematics	3
Select	I cour	se from the following	2-3
ECO	201	Principles of Macroeconomics	(3)
POS	105	Intro. to Political Science	(3)
PSY	115	Psychology of Adjustment	(2)
Core	Require	ements	
BTE	101	Keyboarding 1	4-5
BTE	104	Keyboarding SpeedBuilding	4
BTE	139	Professional Development (Speech Intensive)	3
BTE	288	Model Office	3
BUS	217	Business Communications (Speech Intensive)	3
MAR	160	Customer Service	3
CIS	135	Complete PC Word Processing/Word	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	218	Advanced PC Applications —	
		Integration Software	3
Majo	Requi	irements	
BTE	160	Data Entry I	3
CIS	145	Complete PC Databases/Access	3
CIS	165	Complete PC Presentation Graphics/	
		PowerPoint	3
CIS	201	FrontPage	3
Select	an ada	ditional 12 or more credit hours of courses with	
BTE a	advîser	approval	12

Total	64-66

## Certificate in Business Technology ADMINISTRATIVE ASSISTANT

#### CCD Auraria, CCD East, CCD West

The Administrative Assistant prepares students to use and understand personal computers; use e-mail, the Internet and the World Wide Web; use office software that includes word processing, database, spreadsheet, graphic presentation and Web page development applications; write business letters; and input data. Graduates are prepared to enter positions as word processors, office assistants, office specialists, administrative assistants, receptionists and data-entry clerks.

All Administrative Assistant certificate program credits apply toward the requirements of the AAS degree in Business Technology, Administrative Assistant.

#### Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060, MAT 030 and/or ENG 060.

			Credit Hours
BTE	101	Keyboarding I	4
BTE	104	Keyboarding SpeedBuilding	4
BTE	160	Data Entry I	3
BTE	288	Model Office	3
BUS	217	Business Communications	3
MAR	160	Customer Service	3
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	165	Complete PC Presentation Graphics/	
		PowerPoint	3
CIS	201	FrontPage	3
CIS	218	Advanced PC Applications —	
		Integration Software (Capstone)	3
PSY	115	Psychology of Adjustment	2
Sec. 1.7			

#### Total

## Certificate in Business Technology DATA-ENTRY CLERK

#### CCD North, CCD East, CCD West

Data-Entry Clerk is a program designed for completion in one, 15-week semester. It prepares students to perform general office functions, input data and use word processing applications. Graduates are prepared to enter positions as data-entry and office clerks.

All Data-Entry Clerk certificate program credits apply toward the Administrative Assistant certificate program requirements.

#### Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

			Credit Hours
BTE	101	Keyboarding I	4
BTE	104	Keyboarding SpeedBuilding	4
BTE	160	Data Entry I (Capstone)	3
BTE	288	Model Office	3
CIS	135	Complete PC Word Processing/Word	3
Total			17

## Certificate in Business Technology GENERAL OFFICE CLERK

## CCD Auraria, CCD North, CCD East, CCD West

General Office Clerk is a program designed for completion in one, 15-week semester. It prepares students to perform general office functions; use and understand personal computers; use word processing applications; and use e-mail, the Internet and the World Wide Web. Graduates are prepared to enter positions as receptionists and office clerks.

All General Office Clerk certificate program credits apply toward the Administrative Assistant certificate program requirements.

#### Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060, MAT 030 and/or ENG 060.

			Credit Hours
BTE	101	Keyboarding I	4
BTE	288	Model Office	3
MAR	160	Customer Service	3
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
Total			16

## Certificate in Business Technology MICROSOFT OFFICE SPECIALIST

43

CCD Auraria, CCD North, CCD East, CCD West

Microsoft Office Specialist is a program designed for completion in one, 15-week semester. It prepares students to use and understand personal computers; use Microsoft Office Word, Access, Excel, PowerPoint and FrontPage; and use e-mail, the Internet and the World Wide Web. Graduates are prepared to enter positions as Microsoft applications specialists and office specialists.

All Microsoft Office Specialist certificate program credits apply toward the Administrative Assistant certificate program requirements.

#### Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

			Credit Hours
BTE	101	Keyboarding I	4
MAR	160	Customer Service	3
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	165	Complete PC Presentation Graphics/	
		PowerPoint	3
CIS	201	FrontPage	3
CIS	218	Advanced PC Applications -	
		Integration Software (Capstone)	3
PSY	115	Psychology of Adjustment	2
Total			30

## Associate of Applied Science Degree in Business Technology LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS

CCD Auraria

The Legal Administrative Assistant program prepares students for entry-level positions in an attorney's office, law firm, or legal aid organization. The student will be trained to understand and use legal terminology, gain knowledge of business law, write business letters, maintain a filing system of law cases and legal records, use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web, and use office software that includes word processing, spreadsheets and software integration applications. Graduates are prepared to enter positions as legal administrative assistants with both private-sector and public-sector law offices and nonprofit legal aid organizations.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition I	3
MAT	103	Contemporary College Mathematics	3
Select	1 cour	se from the following	2-3
ECO	201	Principles of Macroeconomics	(3)
POS	105	Intro. to Political Science	(3)
PSY	115	Psychology of Adjustment	(2)
Core	Require	ements	
BTE	101	Keyboarding	4-5
BTE	104	Keyboarding SpeedBuilding	4
BTE	139	Professional Development	3
		(Speech Intensive)	
BTE	288	Model Office	3
BUS	217	Business Communications (Speech Intensive)	Ē

CIS	135	Complete PC Word Processing/Word	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	218	Advanced PC Applications -	
		Integration Software	3
Majo	r Requi	rements	
BTE	120	Records Management	4
BTE	121	Alpha Speedwriting I	-4
BTE	133	Word Processing Communications	
		& Applications	3
BTE	139	Professional Development (Speech Intensive	3
BTE	209	Legal Terminology	2
BTE	230	Machine Transcription	5
BTE	297	Cooperative Education	3
BUS	216	Legal Environment of Business	3
PAR	124	Legal Research	3
Total	÷		67-69

## Associate of Applied Science Degree in Business Technology MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS

CCD Auraria

The Medical Administrative Assistant program prepares students for entry-level positions in a doctor's office, medical clinic, or hospital. The student will be trained to understand and use medical terminology, write business letters, maintain medical records, code and submit medical insurance claims; use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web; and use office software that includes word processing, spreadsheets and software integration applications. Graduates are prepared to enter positions as medical administrative assistants with private and public medical offices, clinics and hospitals.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition 1	3
MAT	103	Contemporary College Mathematics	3
Select	1 cour	se from the following	2-3
ECO	201	Principles of Macroeconomics	(3)
POS	105	Intro. to Political Science	(3)
PSY	115	Psychology of Adjustment	(2)

Core	Require	ements	
BTE	101	Keyboarding I	4-5
BTE	104	Keyboarding SpeedBuilding	4
BTE	139	Professional Development (Speech Intensive)	3
BTE	288	Model Office	3
BUS	217	Business Communications (Speech Intensive)	3
MAR	160	Customer Service	3
CIS	135	Complete PC Word Processing/Word	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	218	Advanced PC Applications —	
		Integration Software	3
Major	Requi	irements	
ACC	101	Fundamentals of Accounting	3
BTE	120	Records Management	4
BTE	121	Alpha Speedwriting I	-4
BTE	133	Word Processing Communications	
		& Applications	3
BTE	139	Professional Development (Speech Intensive)	
BTE	230	Machine Transcription	5
BTE	297	Cooperative Education	3
MOT	102	Intro. to Medical Terminology	2
MOT	120	Medical Office Financial Management	3
MOT	130	Insurance Billing & Coding	3
Total			73-75

## Certificate in Business Technology MEDICAL ADMINISTRATIVE ASSISTANT

CCD Auraria, CCD East

Prepares students for jobs such as medical records clerks, medical secretaries, etc.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Major	Requi	irements	Credit Hours
ACC	101	Fundamentals of Accounting	3-4
		or	
ACC	121	Accounting Principles I	
BTE	101	Keyboarding I	5
		or	
BTE	202	Keyboarding II	
BTE	104	Keyboarding SpeedBuilding	4
BTE	108	Business Machines: 10-Key by Touch	2
BTE	120	Records Management	4
BTE	133	Word Processing Communications	
		& Applications	3
BTE	139	Professional Development	3
BTE	230	Machine Transcription	5
BTE	288	Model Office	3
BTE	297	Cooperative Education (Capstone)	3
CIS	135	Complete PC Word Processing/Word	3
MOT	102	Intro. to Medical Terminology	2
MOT	120	Medical Office Financial Management	t 3
Total			43-44

## Associate of Applied Science Degree in Business Technology OFFICE MANAGER EMPHASIS

#### CCD Auraria

The Office Manager emphasis prepares students for entrylevel to mid-level office administrative and supervisory positions. The student will be trained to write business letters, maintain records, manage projects, administer bookkeeping data, supervise a clerical staff and coordinate events; use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web; and use office software that includes word processing, spreadsheets and software integration applications. Graduates are prepared to enter positions as office managers or program assistants with business/industry, government agencies and nonprofit organizations.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

Gene	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition I	3
MAT	103	Contemporary College Mathematics	3
Select	1 cour	se from the following	2-3
ECO	201	Principles of Macroeconomics	(3)
POS	105	Intro. to Political Science	(3)
PSY	115	Psychology of Adjustment	(2)

#### Core Requirements

BTE	101	Keyboarding I	4-5
BTE	104	Keyboarding SpeedBuilding	4
BTE	139	Professional Development (Speech Intensive)	3
BTE	288	Model Office	3
BUS	217	Business Communications (Speech Intensive)	3
MAR	160	Customer Service	3
CIS	135	Complete PC Word Processing/Word	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	218	Advanced PC Applications	
		Integration Software	3
Major	Requi	rements	
ACC	101	Fundamentals of Accounting	3
BTE	108	Business Machines: 10-Key by Touch	2
BTE	120	Records Management	4
BTE	133	Word Processing Communications	
		& Applications	3
BTE	297	Cooperative Education (Capstone)	3
BUS	115	Intro. to Business	3
MAN	226	Principles of Management	3
Total			61-63

## Associate of Applied Science Degree in Business Technology SECRETARIAL/COMPUTER APPLICATIONS EMPHASIS

## CCD Auraria

The Secretarial/Computer Applications emphasis prepares students for entry-level positions in a general office environment characterized by technological change. The student will be trained to administer office records, write business letters, take dictation and use and understand personal computers; use email, conduct basic searches on the Internet and the World Wide Web; and use office software that includes word processing, spreadsheets, database management and software integration applications. Graduates are prepared to enter positions as secretarial/computer applications assistants with business/industry public-sector agencies and nonprofit organizations.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

Credit Hours General Education Requirements CIS 118 Intro. to PC Applications 3 English Composition I 3 ENG 121 MAT 103 Contemporary College Mathematics 3 Select 1 course from the following 3 Principles of Macroeconomics ECO 201 (3)POS 105 Intro. to Political Science (3)Core Requirements BTE 101 Keyboarding I 4-5 Keyboarding SpeedBuilding BTE 104 4 Professional Development (Speech Intensive) BTE 139 3 288 Model Office 3 RTF 217 Business Communications (Speech Intensive) BUS 3 **Customer Service** MAR 160 3 CIS 135 Complete PC Word Processing/Word 3 Complete PC Spreadsheets/Excel CIS 155 3 Advanced PC Applications -CIS 218 Integration Software з Major Requirements Business Machines: 10-Key by Touch BTE 108 2 BTE 120 **Records Management** 4 Alpha Speedwriting I BTE 121 4 Word Processing Communications BTE 133 & Applications 3 BTE **Cooperative Education** 297 4 Complete PC Databases/Access CIS 145 3 Total 61-62

## Certificate in Business Technology EXECUTIVE ASSISTANT

#### CCD Auraria

This program enhances and upgrades the skill level of those individuals currently working as office managers or other administrative support personnel.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Major	Requi	irements	Credit Hours
BTE	139	Professional Development	3
BUS	217	Business Communications	3
MAN	226	Principles of Management	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	218	Advanced PC Applications -	
		Integration Software	÷.
Total			15

## Certificate in Business Technology GENERAL CLERICAL

#### CCD Auraria

This certificate prepares students for jobs in offices where general clerical opportunities exist (filing, word processor, clerk, etc.).

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Optic	in I - 1	Semester	Credit Hour.
(with	permis	ssion of BTE faculty adviser)	
BTE	104	Keyboarding SpeedBuilding	4
BTE	108	Business Machines: 10-Key by Touch	2
BTE	120	Records Management	4
BTE	297	Cooperative Education (Capstone)	3
CIS	135	Complete PC Word Processing/Word	3
Total			16
	1.1	2 Semesters	16
Optic	on II - 2	2 Semesters ssion of BTE faculty adviser)	16
Optic (with	on II - 2	ssion of BTE faculty adviser)	3-4
Optic (with	on II - 2 permis 101	ssion of BTE faculty adviser) Fundamentals of Accounting or	
Optic (with ACC	on II - 2 permis 101 121	ssion of BTE faculty adviser) Fundamentals of Accounting or Accounting Principles 1	
Optic (with ACC	on II - 2 permis 101	ssion of BTE faculty adviser) Fundamentals of Accounting or	
Optic (with ACC ACC BTE	on II - 2 permis 101 121	ssion of BTE faculty adviser) Fundamentals of Accounting or Accounting Principles I Keyboarding I or	
Optic (with ACC	on II - 2 permis 101 121 101	ssion of BTE faculty adviser) Fundamentals of Accounting or Accounting Principles I Keyboarding I	

3

3

3

30-31

## Certificate in Business Technology STENOGRAPHIC

#### CCD Auraria

This program prepares students for jobs such as a secretary, stenographer, word processor and office assistant/specialist.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Majo	r Regu	irements	Credit Hours
BTE	101	Keyboarding 1	5
		or	
BTE	202	Keyboarding II	
BTE	104	Keyboarding SpeedBuilding	4
BTE	108	Business Machines: 10-Key by Touch	2
BTE	120	Records Management	4
BTE	121	Alpha Speedwriting I	4
BTE	133	Word Processing Communications	
		& Applications	3
BUS	217	Business Communications	3
BTE	288	Model Office	3
BTE	297	Cooperative Education (Capstone)	3
CIS	135	Complete PC Word Processing/Word	3

#### Total

## CHEMISTRY

Associate of Science Degree with a Chemistry Emphasis (See AS Degree, page 53)

## COMMUNICATIONS

Associate of Arts Degree with a Communications Emphasis (See AA Degree, page 48)

## COMPUTER SCIENCE

Associate of Science Degree with a Computer Science Emphasis (See AS Degree, page 53)

## DENTAL HYGIENE

#### Associate of Applied Science Degree in Dental Hygiene CCD Lowry

This program prepares the student to practice as a professional dental hygienist following successful completion of two semesters of pre-professional prerequisites and four semesters of professional study. Completion of the prerequisites and the full, two-year Dental Hygiene program curriculum with a grade of C or better results in an AAS degree. After receiving the AAS degree and a grade of B or better in the capstone course, students are eligible to take the licensure exam to become registered dental hygienists. Dental hygienists are licensed preventive oral health professionals who provide educational, clinical and therapeutic services in dentistry. Dental hygienists perform procedures such as oral prophylaxis, application of preventive agents, exposure of dental radiographs, patient education and nutritional counseling. Career opportunities for hygienists are available in a variety of settings, including private dental practices, community dental health clinics, public schools, clinical and basic science research laboratories, state and federal health facilities and management positions. Licensure by national and state examination is required.

Application materials must be submitted no later than February 1 to be considered for admission into the class beginning fall of the next academic year. Eligible applicants are selected according to overall GPA, GPA for prerequisite science courses, prior experience in health care, a commitment to a health care career and interpersonal skills. Because of the competitive admissions process, all prerequisite courses must be taken for a letter grade. Applicants not accepted are considered for the following year; however, reapplication is necessary. Graduate exit competency is measured by successful completion of the capstone course, DEH 252, Clinic Care III.

## Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Submit the CCD application to Admissions, Registration and Records, South Classroom Building 133, on the Auraria Campus.
- Submit a completed Dental Hygiene application form and packet. Dental Hygiene application packets can be requested by calling 303-365-7771. Applications will be available mid October.
- 4. Complete the following general education prerequisites with a grade of C or better, or a cumulative GPA of 2.8 or better. Science courses must show cumulative GPA of 3.0 or better prior to the beginning of the fall semester of the intended year of entry. Courses in progress will be considered. Proof of successful completion of these courses must be submitted to both the CCD registrar and the CCD Dental Hygiene program at the end of each semester in which they are taken. An official, final transcript must be forwarded to Admissions, Registration and Records and the CCD Dental Hygiene program as soon as it becomes available.
- 5. All prerequisite courses must be taken for a letter grade. Foreign students must take the Anatomy and Physiology I and II, Microbiology and Chemistry courses in an accredited institution within the United States or Canada to prepare them with medical terminology/nomenclature skills.
- A personal interview with the Dental Hygiene Admissions Committee is required. The interview will be scheduled by the Dental Hygiene program following a preliminary applicant screening.
- Following acceptance into the program, the student must present documentation of health insurance, CPR certification,

and dental, medical and vision examination that includes upto-date immunization records. More information on this subject will be sent to the applicant following acceptance into the program.

General Education Requirements

1. Must be completed with a grade of C or better.

Science courses must show cumulative GPA of 3.0 or better prior to enrollment date.

			Credit Hours
BIO	201	Human Anatomy & Physiology I	4
BIO	202	Human Anatomy & Physiology II	4
BIO	205	Microbiology	4
CHE	106	General, Organic & Biochemistry	4
ENG	121	English Composition	3
MAT	121	College Algebra	4
SOC	101	Intro. to Sociology	3
		ot	
PSY	101	General Psychology 1	
		or	
PSY	235	Psychology of Human Growth & De	evelopment
SPE	115	Principles of Speech	3
NUT	100	Foundations of Nutrition	3

Total

First S	Semeste	er .	Credit Hours
DEH	101	Pre-Clinic Dental Hygiene Science	2
DEH	102	Pre-Clinic Care	2
DEH	103	Embryology & Histology	2
DEH	105	Dental Radiology	3
DEH	109	Dental Anatomy	3
DEH	111	Medical & Dental Emergencies	3
DEH	116	Preventive Dentistry	3
DEH	195	Success Seminar	1
Secon	d Seme	ester	
DEH	144	Periodontics I	2
DEH	150	Dental Hygiene Clinic Science I	2
DEH	152	Dental Hygiene Clinic Care 1	3
DEH	156	Applied Pharmacology	3
DEH	158	General & Oral Pathology	3
DEH	160	Head & Neck Anatomy	2

#### **Total First Year**

Third	Semes	ter	Credit Hours
DEH	201	Dental Hygiene Clinic Science II	2
DEH	203	Dental Hygiene Clinic Care II	4
DEH	205	Dental Materials	3
DEH	209	Local & Regional Dental Anesthesiolog	y 3
DEH	211	Community Dental Health	3
DEH	264	Periodontics II	2

#### Fourth Semester

Total	for Pr	ogram	101
Total	Secon	d Year	34
DEH	294	National Board Review	(2)
Optio		and the second second	
DEN	294	National Board Review	2
DEH	284	Advanced Periodontics	2
DEH	260	Practice Management	2
DEH	258	Ethics & Issues in Dental Hygiene	2
DEH	256	Community Field Experience	3
DEH	252	Clinic Care III (Capstone)	4
DEH	250	Clinic Science III	2

(Includes General Education Courses)

## EARLY CHILDHOOD EDUCATION

# Associate of General Studies Degree in Early Childhood Education EARLY CHILDHOOD EDUCATION (AGS-ECE)

CCD Auraria

32

34

The following courses represent the CCD/MSCD Early Childhood Education (ECE) Teacher Education 2-plus-3 transfer agreement. Students completing degree requirements will be admitted to Metropolitan State College of Denver as juniors in the ECE Teacher Education program. A grade of C or better is required in all degree classes. Students completing the degree requirements will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate.

Graduate exit competency is measured by successful development (80 percent) of ECE capstone portfolio. Any student not completing CCD's capstone course must successfully develop a portfolio prior to approval for graduation.

Students must apply to the Teacher Education program with an Early Childhood Education major for course work and take all mandatory prerequisites.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Ger	ieral Education Core	Credit Hours
L.	English	6
	ENG 121**, 122**	
11.	Speech	3
	SPE 115**	
	Mathematics	3-5
	(Select any 1 of the following)	
	MAT 121, 125, 135, 201, 202	

IV.	Physical & Biological Sciences
	(Select any 1 of the following)
	AST 101, 102
	BIO 105, 111, 112
	CHE 101, 102, 111, 112
	GEY 111
	PHY 105**, 111, 112, 211, 212
V.	Social & Behavioral Sciences (Select 6 credit hours
	from a minimum of 2 disciplines)
	ANT 101, 111
	ECO 201, 202
	GEO 105
	HIS 101, 102, 201, 202

POS 105, 111 PSY 101, 102 SOC 101, 102

VI. Humanities

(Select any 1 of the following)
ART 110, 111, 112
HUM 121, 122, 123
Any foreign language 111 or higher
LIT 115, 201, 202
MUS 120, 121, 122
PHI 111, 112, 113
THE 105, 211, 212

\*\* Required courses to complete MSCD ECE Teacher Education requirements

<b>General Education</b>	on Sub-Total	

Teacher Education majors will need to declare an academic major when they transfer to MSCD. Courses from the CCD core may be used for lower-division major or minor courses.

#### Major Requirements

The MSCD courses that will substitute for CCD courses are listed in parentheses.

ECE	101	Intro. to Early Childhood Education	
		(MSCD 234-3)	3
ECE	102	Intro. to Early Childhood Education Lab	
		(MSCD 235-2)	3
ECE	236	Child Growth & Development	
		(MSCD PSY 180-4)	4
EDU	216	Children's Literature	3
Recon	imende	d	
MAT	155**	Math for Elementary Educators I	(4)
May l	e subst	ituted for Humanities	
ASL	101	American Sign Language I	(3)

Course 11 Admi total	inistration: Human Relations	34
	inistration: Human Relations	
Course		3
50 The E	Exceptional Child	(3)
	culum: Language and Literacy	(3)
	tivity & the Young Child	(3)
	t & Toddler Theory & Practice	(3)
rom the foll	lowing CCD electives	3
Com	munity Systems	3
	king with Parents, Families &	
	ation Programs	3
10 Admi	inistration of Early Childhood Care	
Meth	ods/Techniques	3
	culum Development:	
5 Nutri	ition, Health & Safety	3
	ance sublected for simulati	
3 Guid		ourses.
O NOT su 3 Guid	/ be used as electives or contract m ubstitute for MSCD-ECE licensure c lance Strategies for Children	
r	02 000	03 Guidance Strategies for Children

## Associate of General Studies Degree in Early Childhood Education EARLY CHILDHOOD EDUCATION/VIOLENCE PREVENTION (AGS-ECE/VP)

CCD Auraria

4-5

6

3

25-28

The following courses represent the CCD/MSCD Early Childhood Education/Violence Counseling (ECE/VC) 2-plus-3 transfer agreement. Students completing degree requirements will be admitted to MSCD as juniors in the ECE Teacher Education program. A grade of C or better is required in all degree classes. Students completing the degree requirements will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate. The student completes a 12-credit emphasis in Violence Prevention.

Graduate exit competency is measured by successful development (80 percent) of the ECE capstone course portfolio. Any student not completing CCD's capstone course must successfully develop a portfolio prior to approval for graduation.

Students must apply to the Teacher Education program with an Early Childhood Education major for subsequent course work.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

(	seneral Education Core	Credit Hours	Recon	nmend	ed
1	English ENG 121**, 122**	6	MAT	155**	Math for Elementary
1	. Speech	3	May	be subs	tituted for Humanities
	SPE 115**		ASL	101	American Sign Lang
1	I. Mathematics	3-5			
	(Select any 1 of the following)		MSC	D Elect	ives or Contract Minor
	MAT 121, 125, 135, 201, 202		These	cours	es may be used as ele
P	V. Physical & Biological Sciences	4-5	es, b	ut DO	NOT substitute for M
	(Select any 1 of the following)		ECE	103	Guidance Strategies
	AST 101, 102		ECE	205	Nutrition, Health &
	BIO 105, 111, 112		ECE	220	Curriculum Develop
	CHE 101, 102, 111, 112				Methods/Technique
	GEY 111		ECE	240	Administration of Ea
	PHY 105**, 111, 112, 211, 212				Education Programs
1		redit hours	ECE	256	Working with Paren
	from a minimum of 2 disciplines)	6			Community Systems
	ANT 101, 111	10 A	ECE	260	The Exceptional Ch
	ECO 201, 202		ECE	267	Curriculum: Bias Fi
	GEO 105		ECE	268	Curriculum: Violen
	HIS 101, 102, 201, 202				
	POS 105, 111		Caps	tone Co	urse
	PSY 101, 102		ECE	241	Administration: Hu
	SOC 101, 102	6.1			
1	1. Humanīties	3	ECE S	Subtota	ป
	(Select any 1 of the following)				
	ART 110, 111, 112		Total		
	HUM 121, 122, 123				
	Any foreign language 111 or higher				
	LIT 115, 201, 202				General Studies Degr
	MUS 120, 121, 122				DHOOD EDUCATION
	PHI 111, 112, 113		2.2.0	Aurari	
	THE 105, 211, 212				gram meets the vocati I in the care and educ
14	* Required courses to complete MSCD ECE Ter	rehar			ears) and all Colorado
	ducation requirements	ACTICI-			ensing academic requ
1	aucusion requirements		ter is	require	ed in all degree classe

#### **General Education Sub-Total**

25-28

CCD Teacher Education majors will need to declare an academic major when they transfer to MSCD. Courses from the CCD core may be used for lower-division major or minor courses.

#### Major Requirements

The MSCD courses that will substitute for CCD courses are listed in parentheses.

ECE	101	Intro. to Early Childhood Education	
		(MSCD 234-3)	3
ECE	102	Intro. to Early Childhood Education Lab	
		(MSCD 235-2)	3
ECE	236	Child Growth & Development	
		(MSCD PSY 180-4)	4
EDU	216	Children's Literature	3

Total	d		65-68
ECE	Subtota	0	40
ECE	241	Administration: Human Relations	3
	tone Co		
ECE	200	curriculum, violence Prevention	3.
0.00	268	Curriculum: Violence Prevention	3
	267	Curriculum: Bias Free	3
ECE	260	Community Systems The Exceptional Child	3
FCE	256	Working with Parents, Families &	
		Education Programs	3
ECE	240	Administration of Early Childhood Care	&
		Methods/Techniques	3
ECE	220	Curriculum Development:	
ECE	205	Nutrition, Health & Safety	3
ECE	103	Guidance Strategies for Children	3
es, b	ut DO	NOT substitute for MSCD-ECE licensure c	ourses.
These	e cours	es may be used as electives or contract m	inor cours-
MSG	D Elect	ives or Contract Minor	
ASL	101	American Sign Language I	(3)
		tituted for Humanities	
MAT	155**	Math for Elementary Educators I	(4)
	nmend	The second	

## ree in Early Childhood Education (AAS-ECE)

onal training needs for personcation of young children (birth Department of Human irements. A grade of C or betes. Students completing the degree requirements will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate.

Graduate exit competency is measured by successful development (80 percent) of the ECE capstone course portfolio. Any student not completing CCD's capstone course must successfully develop a portfolio prior to approval for graduation.

Students must apply to the Teacher Education program with an Early Childhood major for subsequent course work.

#### Program Admission Requirements

1. Meet minimum assessment scores or prerequisites required for general education courses in the program.

Gene	ral Edu	cation Requirements Cred	it Hours	G	raduate	e exit competency is measured by suc
MAT	090	or higher	3-5			percent) of the ECE capstone course
	121	English Composition I	3			completing CCD's capstone course m
	115	Principles of Speech	.3.			ortfolio prior to approval for graduati
		from AAS Humanities requirement	3			must apply to the Teacher Education
		from AAS Social & Behavioral		an Ea	rly Ch	ildhood major for course work.
Scier	ices re	quirement	3	1000		
						mission Requirements
Total			15-17			nimum assessment scores or prerequi
				fo	r gene	ral education courses in the program.
1.1.1.2.1	1.1.1.1.1.1.1.1.1	rements				
	101	Intro. to Early Childhood Education	3			ecation Requirements
ECE	102	Intro. to Early Childhood Education Lab	3	1		or higher
ECE	103	Guidance Strategies for Children	3	ENG	121	English Composition I
ECE	188	Supervised Student Practicum/Seminar I	3	SPE	115	Principles of Speech
ECE	205	Nutrition, Health & Safety	3	One	course	from AAS Humanities requirement
ECE	208	Children's Assessment Systems	1	One	course	from AAS Social & Behavioral
ECE	209	Observing & Utilizing Young		Scien	ces re	quirement
		Children's Assessment Instruments	1	1000		
ECE	220	Curriculum Development:		Total		
		Methods/Techniques	3			
ECE	236	Child Growth & Development	4	Majo	r Requ	irements
ECE	240	Administration of Early Childhood Care &		ECE	101	Intro. to Early Childhood Education
		Education Programs	3	ECE	102	Intro. to Early Childhood Education
ECE	241	Administration: Human Relations (Capston	e) 3	ECE	103	Guidance Strategies for Children
ECE	256	Working with Parents, Families &		ECE	188	Supervised Student Practicum/Semi
		Community Systems	3	ECE	205	Nutrition, Health & Safety
ECE	288	Supervised Student Practicum/Seminar II		ECE	208	Children's Assessment Systems
		(Capstone)	3	ECE	209	Observing & Utilizing Young Childr
				4.4.4	242	Assessment Instruments
Select	9 cred	its from the following curriculum electives	9	ECE	220	Curriculum Development:
ECE	111	Infant & Toddler Theory & Practice	(3)	202		Methods/Techniques
ECE	226	Creativity & the Young Child	(3)	ECE	236	Child Growth & Development
ECE	267	Curriculum: Bias Free	(3)	ECE	240	Administration of Early Childhood (
ECE	260	The Exceptional Child	(3)	Lee	+70	& Education Programs
ECE	268	Curriculum: Violence Prevention	(3)	ECE	241	Administration: Human Relations (
ECE	227	Curriculum: Music/Movement			256	Working with Parents, Families
		& the Young Child	(3)	LCL	230	& Community Systems
ECE	228	Curriculum: Language and Literacy	(3)	ECE	260	The Exceptional Child
				ECE	260	Curriculum: Bias Free
Total			60-62	1000	267	Curriculum: Violence Prevention
				ECE	200	cumculum. violence rievenuon

## Associate of General Studies Degree in Early Childhood Education EARLY CHILDHOOD EDUCATION/VIOLENCE PREVENTION (AAS-ECE/VP)

#### CCD Auraria

This program meets the vocational training needs for personnel involved in the care and education of young children (birth through 8 years) and all Colorado Department of Human Services licensing academic requirements. A grade of C or better is required in all degree classes. Students completing the degree requirement will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate. The student completes a 12-credit emphasis in Prevention Counseling.

cessful develportfolio. Any nust successfully on.

program with

ites required

Gener	al Edu	cation Requirements	Credit Hours
MAT	090 0	or higher	3-5
ENG	121	English Composition I	3
SPE	115	Principles of Speech	3
One	course	from AAS Humanities requirement	3
One	course	from AAS Social & Behavioral	
Scien	ces re	quirement	3

15-17

#### 3 3 Lab 3 3 nar I 3 1 en's ъ 3 4 lare 3 3 Capstone) 3 3 3 3. 288 Supervised Student Practicum/Seminar II ECE (Capstone) 3 Select 1 of the following electives 3 ECE 111 Infant & Toddler Theory & Practice (3)Creativity & the Young Child (3)ECE 226 Curriculum: Art & the Young Child ECE 245 (3)Curriculum: Music/Movement ECE 227 & the Young Child (3)Curriculum: Language and Literacy ECE 228 (3)Total 63-65

## Certificate in Early Childhood Education EARLY CHILDHOOD EDUCATION DIRECTOR

## CCD Auraria

This program prepares graduates for director-qualified positions in early childhood care and education settings. A grade of C or better is required in all certificate and degree programs. Students completing the degree requirements also will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate.

This curriculum meets Colorado Human Services licensing education requirements. In addition to this academic requirement, the Colorado Department of Human Services requires 24 months (3,640 hours) of work experience.

Graduate exit competency is measured by successful development (80 percent) of the Early Childhood Education (ECE) capstone course portfolio. Any student not completing CCD's capstone course must successfully develop a portfolio prior to approval for graduation.

Students must apply to the Teacher Education program with an Early Childhood major for course work.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

		Credit F	lours	į
ECE	101	Intro. to Early Childhood Education	3	
ECE	102	Intro. to Early Childhood Education Lab	3	
ECE	103	Guidance Strategies for Children	3	
ECE	205	Nutrition, Health & Safety	3	
ECE	220	Curriculum Development:		
		Methods/Techniques	3	
ECE	236	Child Growth & Development	4	
ECE	240	Administration of Early Childhood Care &		
		Education Programs	3	
ECE	241	Administration: Human Relations (Capstone)	3	
ECE	256	Working with Parents, Families &		
		Community Systems	3	
Select	1 cour	se from the following	3	
ECE	111	Infant & Toddler Theory & Practice	(3)	
ECE	226	Creativity & the Young Child	(3)	
ECE	228	Curriculum: Language and Literacy	(3)	
ECE	260	The Exceptional Child	(3)	

#### Total

## Certificate in Early Childhood Education GROUP LEADER

## CCD Auraria

This program prepares graduates for group leader positions in early childhood care and education settings. A grade of C or better is required in all certificate and degree programs. Students completing this sequence will receive a Colorado Group Leader certificate from CCD. In addition to this academic requirement, the Colorado Department of Human Services requires nine months (1,392 hours) of work experience.

All Early Childhood Education Group Leader certificate program credits apply toward the requirements of the AGS and AAS degrees in Early Childhood Education.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

## Choose one of the following two options

PRES	CHOC	)L	Credit Hours
ECE	101	Intro, to Early Childhood Education	3
ECE	102	Intro. to Early Childhood Education La	b 3
ECE	103	Guidance Strategies for Children	3
ECE	220	Curriculum Development:	
		Methods/Techniques	3
ECE	236	Child Growth & Development	-4

16

INFA	NT/TO	DDDLER	redit Hours
ECE	101	Intro. to Early Childhood Education	3
ECE	102	Intro. to Early Childhood Education Lab	3
ECE	103	Guidance Strategies for Children	3
ECE	111	Infant & Toddler Theory & Practice	E
ECE	236	Child Growth & Development	4
Total			16

## Certificate in Early Childhood Education GROUP LEADER/CHILD DEVELOPMENT ASSOCIATE (CDA)

CCD Auraria

31

Total

This program prepares graduates for group leader positions in early childhood care and education settings. A grade of C or better is required in all certificate and degree programs. Students completing this sequence will receive a Colorado Group Leader certificate from CCD.

In addition to this academic requirement, the Colorado Department of Human Services requires nine months (1,392 hours) of work experience. Students desiring a CDA will need to contact the Council for Early Childhood Professional Recognition prior to beginning the process.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

	Presch	of the following two options tool Cred	it Hours
ECE	101	Intro. to Early Childhood Education	3
ECE	102	Intro. to Early Childhood Education Lab	3
ECE	103	Guidance Strategies for Children	3
ECE	220	Curriculum Development:	
		Methods/Techniques	3
ECE	236	Child Growth & Development	4
ECE	275	CDA Assessment	3

#### Total

CDA	-Infant	/Toddler	Credit Hours
ECE	101	Intro. to Early Childhood Education	3
ECE	102	Intro. to Early Childhood Education Lal	b 3
ECE	103	Guidance Strategies for Children	3
ECE	111	Infant & Toddler Theory & Practice	3
ECE	236	Child Growth & Development	4
ECE	275	CDA Assessment	3
Total			19

#### EARTH SCIENCE

Associate of Science Degree with an Earth Science Emphasis (See AS Degree, page 53)

## ECONOMICS

Associate of Arts Degree with an Economics Emphasis (See AA Degree, page 48)

## ELECTROENCEPHALOGRAPHY TECHNOLOGY

Certificate in Electroencephalography Technology

CCD Lowry

This program prepares the student for an entry-level position as an electroencephalography (EEG) technologist. Graduates are eligible for certification examination in EEG.

Electroencephalography is a recording of the ongoing electrical activity of the brain. EEG technologists assist in the diagnosis of various brain disorders and evaluate the effects of head trauma or the consequences of severe infectious disease.

The EEG certificate articulates directly into the Electroneurodiagnostic (END) Technology Associate of Applied Science program. Students completing a second year of study in END are qualified for examination by ABRET in evoked potential (EP) and polysomnography (PSG).

#### Program Admission Requirements

- Take the CCD Basic Skills Assessment in the Testing Center in South Classroom Building 223, 303-556-3810. Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Contact the program admission assistant at 303-365-8300 to obtain program application

- Submit a completed Electroencephalography Technology program application and official transcripts of previous college course work (if applicable) to the program coordinator.
- 4. Acceptance into the Electroencephalography certificate program is on a first-come, first-served basis.

#### **Fall Semester**

19

EEG	102	Electroencephalography I	.4
EEG	103	Instrumentation/Principles	3
EEG	105	Patient Care & Safety	3
CIS	118	Intro. to PC Applications	3
Spri	ng Sem	ester	
EEG	111	Neuroanatomy and Physiology I	3
EEG	112	Electroencephalography II	3
EEG	184	Clinical Internship I	5
Sum	mer Se	mester	
EEG	120	Clinical Neurology	3.
EEG	185	Clinical Internship II	7

34

Total

#### ELECTRONEURODIAGNOSTIC TECHNOLOGY Associate of Applied Science Degree in

Electroneurodiagnostic Technology

CCD Lowry

This program prepares the student for an entry-level position as an Electroneurodiagnostic (END) technologist in a variety of clinical settings, including the hospital. The program consists of five semesters of course work that include classroom, laboratory and clinical internship experience. Graduates earn an AAS degree and are eligible to apply for registration by the American Board of Registration of Electroencephalographic and Evoked Potential Technologists Inc. (ABRET).

Applicants are accepted first-come, first-served and are placed on the acceptance list according to the date their application packet is received. Once the class is filled for the current year, students are placed on a waiting list.

#### Program Admission Requirements

- Submit the CCD application to Admissions, Registration and Records, South Classroom Building 133 on the Auraria Campus.
- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Attend the mandatory Electroneurodiagnostic program orientation.
- 4. Submit a completed Electroneurodiagnostic application form and packet. The completed application packet includes the Electroneurodiagnostic program application form, immunization forms, a copy of the high school diploma or GED and an official transcript from any other college attended.
- Complete the following general education requirements with a grade of C or better.

Gener	al Edu	cation Requirements are shown in italics.	
Fall S	emest	er First Year: Credit	Hours
BIO	201	Human Anatomy & Physiology I	4
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition I	3
MAT	103	Contemporary College Mathematics or higher	3-5
Spring	g Sem	ester First Year:	
BIO	202	Human Anatomy & Physiology II	4
PSY	235	Psychology of Human Growth & Development	3
		or	
SOC	100.0	8/	
EEG	102	Electroencephalography I	4
EEG	103	Instrumentation/Principles	3
Sumn	ner Se	mester First Year:	
EEG	105	Patient Care & Safety	3
EEG	112	Electroencephalography II	3
EEG	184	Clínical Internship I	3
Fall S	emest	er Second Year:	
EEG	111	Neuroanatomy & Physiology	3
END	207	Evoked Potential	6
		Clinical Internship II	7
Spring	g Sem	ester Second Year:	
EEG			3
		Clinical Internship III	8
		Electroneurodiagnostic Technology Capstone	3
Total			68-70

## ELECTRONICS TECHNOLOGY

The Electronics Technology program is under review. Please contact the Center for Business and Technology, 303-556-2487, for additional information.

## ELEMENTARY EDUCATION

Associate of General Studies Degree in Elementary Education (AGS-EE)

(See Teacher Education)

## PRE-ENGINEERING

Associate of Science Degree with a Pre-Engineering Emphasis (See AS Degree, page 53)

## ENGINEERING GRAPHICS

## Associate of Applied Science Degree in Engineering Graphics CCD Auraria

The AAS Engineering Graphics degree includes two program emphases: Architectural and Mechanical Drafter. There also are certificates in Architectural and Mechanical Drafter. All drafting exit competencies in programs are measured by portfolio review at the end of the program. Students may request advanced standing via various transfer agreements that are in place with Denver Public Schools and other local high school drafting programs; or, students may request course waiver based on proof of experience in the field of drafting.

## Associate of Applied Science Degree in Engineering Graphics ARCHITECTURAL DRAFTER EMPHASIS

## CCD Auraria

Engineering Graphics, Architectural Drafter emphasis, prepares students for job-entry positions on drafting teams for local, state and federal agencies, architectural companies, and various planning and development companies.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Completion of DRT 100 and CAD 101 with a grade of C or better.

Gener	General Education Requirements		
ENG	131	Technical Writing I	3
MAT	103	Contemporary College Mathematics	3
PHY	105	Conceptual Physics	4
SPE	115	Principles of Speech	3
CIS	118	Intro. to PC Applications	3

#### Major Requirements

WIHIO.	negu	rements	
CAD	101	Computer-Aided Drafting I	3
CAD	102	Computer-Aided Drafting II	3
CAD	201	Computer-Aided Drafting Customized	3
CAD	202	Computer-Aided Drafting - 3-D	3
CAD	225	Architectural Desktop	3
CAD	278	Projects in 3-D - Architectural Desktop	3
DRT	100	Intro. to Engineering Graphics	3
DRT	101	Pictorial Drawing	3
DRT	102	Descriptive Geometry/Auxiliary Views	3
DRT	174	Architectural Dimensioning	3
DRT	176	Intro. to Architectural Drafting	3
DRT	274	Architectural Codes and Style	3
DRT	276	Advanced Architectural Drafting	6
DRT	290	Graduation Portfolio Architectural Project	
		(Capstone)	6

#### Total

## Certificate in Engineering Graphics ARCHITECTURAL DRAFTER

#### CCD Auraria

Engineering Graphics, Architectural Drafter, prepares students for job-entry positions on drafting teams for local, state and federal agencies, architectural companies, and various planning and development companies. All program credits apply toward the AAS degree in Engineering Graphics, Architectural Drafter emphasis. Program Admission Requirements

 Completion of DRT 100 and CAD 101 with a grade of C or better.

Requi	remen	ts (	Credit Hours
CAD	101	Computer-Aided Drafting I	3
CAD	102	Computer-Aided Drafting II	3
CAD	201	Computer-Aided Drafting - Customize	ed 3
CAD	202	Computer-Aided Drafting - 3-D	3
CAD	225	Architectural Desktop	3
CAD	278	Projects in 3-D - Architectural Deskto	p 3
DRT	100	Intro. to Engineering Graphics	3
DRT	101	Pictorial Drawing	3.
DRT	102	Descriptive Geometry/Auxiliary Views	3
DRT	174	Architectural Dimensioning	3.
DRT	176	Intro, to Architectural Drafting	3
DRT	274	Architectural Codes and Style	3

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Total
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Associate of Applied Science Degree in Engineering Graphics MECHANICAL DRAFTER EMPHASIS

#### CCD Auraria

Engineering Graphics, Mechanical Drafter emphasis, prepares students for job-entry positions on drafting teams in Industrial plants, engineering and manufacturing firms and various governmental agencies.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Completion of DRT 100 and CAD 101 with a grade of C or better.

Gener	Credit Hours		
ENG	131	Technical Writing I	3
MAT	103	Contemporary College Mathematics	3
PHY	105	Conceptual Physics	4
SPE	115	Principles of Speech	3
CIS	118	Intro. to PC Applications	3

#### Major Requirements

CAD	101	Computer-Aided Drafting I
CAD	102	Computer-Aided Drafting II
CAD	201	Computer-Aided Drafting - Customized
CAD	202	Computer-Aided Drafting - 3-D
CAD	254	Mechanical Desktop
CAD	258	Projects in 3-D - Mechanical Desktop
DRT	100	Intro. to Engineering Graphics
DRT	101	Pictorial Drawing
DRT	102	Descriptive Geometry/Auxiliary Views
DRT	164	Dimensioning and Tolerancing
DRT	166	Intro. to Mechanical Drafting
DRT	264	Geometric Tolerancing
DRT	266	Advanced Mechanical Drafting
DRT	280	Graduation Portfolio Mechanical Project (Capstone)

## Certificate in Engineering Graphics MECHANICAL DRAFTER

#### CCD Auraria

36

3

3

3

3

3.

n n n n n n o o

6

64

Engineering Graphics, Mechanical Drafter, prepares students for job-entry positions on drafting teams in industrial plants, engineering and manufacturing firms and various governmental agencies. All program credits apply toward the AAS degree in Engineering Graphics, Mechanical Drafter emphasis.

#### Program Admission Requirements

1. Completion of DRT 100 and CAD 101 with a grade of C or better.

Requi	remen	ts Crea	lit Hours
CAD	101	Computer-Aided Drafting I	3
CAD	102	Computer-Aided Drafting II	3
CAD	201	Computer-Aided Drafting - Customized	3
CAD	202	Computer-Aided Drafting - 3-D	3
CAD	254	Mechanical Desktop	3
CAD	258	Projects in 3-D — Mechanical Desktop	3
DRT	100	Intro. to Engineering Graphics	3
DRT	101	Pictorial Drawing	3
DRT	102	Descriptive Geometry/Auxiliary Views	3
DRT	164	Dimensioning and Tolerancing	3
DRT	166	Intro. to Mechanical Drafting	3
DRT	264	Geometric Tolerancing	3
Total	1.		36

## Certificate in Engineering Graphics AUTOCAD FOR MECHANICAL OR ARCHITECTURAL DRAFTING

CCD Auraria

This two-semester certificate provides currency and skill upgrade training for individuals working in the field, individuals in a related field wishing to obtain AutoCAD skills and/or mechanical/architectural drafting graduates whose skills are dated. Students with little or no background in AutoCAD should select this program that includes two introductory courses.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser to plan course work. Call 303-556-8393 to schedule an appointment.

Requireme	nts C	redit Hours
CAD 101	Computer-Aided Drafting I	3
CAD 102	Computer-Aided Drafting II	3
CAD 201	Computer-Aided Drafting - Customized	d 3
CAD 202	Computer-Aided Drafting - 3-D	3

## Total

Total

## Certificate in Engineering Graphics AUTOCAD UPGRADE FOR MECHANICAL OR ARCHITECTURAL DRAFTING

## CCD Auraria

This one-semester certificate provides currency and skill upgrade training for individuals working in the field, individuals in a related field wishing to update AutoCAD skills and/or mechanical/architectural drafting graduates whose skills are dated. Students with knowledge and familiarity with AutoCAD should select this program and should work with their adviser to select the correct second course.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser to plan course work. Call 303-556-8393 to schedule an appointment.

Requi	Requirements Credi		
CAD	201	Computer-Aided Drafting - Customized	3
CAD	258	Projects in 3-D — Mechanical Desktop or	3
CAD	278	Projects in 3-D — Architectural Desktop	

**Note:** To receive a certificate, students are required to pass a capstone test by taking the AutoCAD 2002 Assessment Exam on completion of course work.

Total

6

## ENGLISH/LITERATURE

Associate of Arts Degree with an English/Literature Emphasis (See AA Degree, page 48)

## **ESSENTIAL SKILLS**

The Essential Skills certificate is a collaboration that addresses the need of employers for entry-level workers with a baseline of skills and the need to provide skills training in the context of a "work-first" format. The program combines vocational and workplace core requirements with practical work experience or internships, for which students receive cooperative education credit.

Each student's educational plan will have a minimum of 16 credit hours, not to exceed a maximum of 29 credit hours. All participants will complete a minimum of 12 credit hours of core course work. This includes at least 9 credit hours of workplace core courses (communication, computer and reading/writing courses), which includes no fewer than 2 credit hours of cooperative education. The remaining minimum of 7 credit hours (depending on the vocational track) will include a combination of vocational core courses and electives.

For more information on the Essential Skills certificate program, call the Workplace Learning Project at 303-226-5561.

## Certificate in Essential Skills COMMUNITY HEALTH WORKER

#### CCD Lowry

This program, offered spring only, prepares students to work in a position as a community health worker. Community health workers provide health education, such as how to access health care, information about health plans and resource referrals. Community health workers may find employment in hospitals, clinics and community-based organizations.

The program is offered as a one-semester program that combines academics and an internship in one of the above settings. A high school diploma or GED is necessary to enter the program and to obtain employment in the field.

ional	Core Requirements Credit	Hours
100	Intro to Community Health Work	2
120	Community Health Issues	3
130	Community Health Resources	3
place	Core Requirements	
297	Community Health Worker Field Experience	2
118	Intro. to PC Applications	3
100-	level course or higher	3
113	Communication for the Workplace or	2
115	Psychology of Adjustment	2
_		18
	100 120 130 <b>place</b> 297 118 100- 113	<ul> <li>120 Community Health Issues</li> <li>130 Community Health Resources</li> <li>place Core Requirements</li> <li>297 Community Health Worker Field Experience</li> <li>118 Intro. to PC Applications</li> <li>100-level course or higher</li> <li>113 Communication for the Workplace</li> </ul>

## Certificate in Essential Skills EARLY CHILDHOOD EDUCATION

#### CCD Auraria

The Essential Skills certificate in Early Childhood Education program prepares students to become teachers of young children. It is a two-semester program that combines academics with internships in a supervised child-care setting. To become Group Leader certified (see page 79 of the catalog), you must receive a grade of C or better in all ECE courses.

Vocat	ional	Core Requirements	Credit Hours
ECE	101	Intro, to Early Childhood Education	3
ECE	102	Intro. to Early Childhood Education La	b 3
Work	place	Core Requirements	
ECE	297	Cooperative Education	2-7
CIS	118	Intro. to PC Applications	3
REA	100-	level course or higher	3
COM	113 or	Communication for the Workplace	2
PSY	115	Psychology of Adjustment	-2
Total			18-23

## Certificate in Essential Skills FINANCIAL SERVICES

#### CCD West

The Essential Skills certificate in Financial Services prepares students for entry-level positions in a bank, including teller, phone bank operator, or wire transfer operator. It also provides training for financial-related industries, such as accounting, insurance investment or title firms. Students typically complete the program in one semester.

On the Auraria campus, the program is offered by semester and includes internships. At CCD West, the program is open entry, open exit and provides additional support for people with disabilities.

Vocati	onal (	Core Requirements	Credit Hours
BUS	110	Business Math	3
BUS	240	Customer Service for the Retail &	
		Financial Industries	3
Work	lace C	Core Requirements	
BUS	287	Cooperative Education	2-7
BTE	100	Intro. to Keyboarding	3
BTE	108	Business Machines: 10-Key by Touch	2
REA	100-	level or higher	2
СОМ	113	Communication for the Workplace	2
PSY	115	or Psychology of Adjustment	2
Total			20-25

## Certificate in Essential Skills INFORMATION TECHNOLOGY

CCD Auraria, CCD East

The Essential Skills certificate in Information Technology trains students for computer support positions (such as help desk) in the field of information technology. The capstone course, CIS 261, A+ Certification Preparation, prepares students to pass the A+ certification examination sponsored by CompTIA.

Voca	Vocational Core Requirements Credit F		redit Hours
BTE	100	Intro, to Keyboarding	3
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	180	Microcomputer Hardware	3
CIS	250	Computer Diagnosis & Repair	3
CIS	261	A+ Certification Preparation	3
Work	place C	ore Requirements	
	1 113	Communication for the Workplace	2
REA	080	Workshop in Reading, Writing & Speak	ing 3

**Cooperative Education** 

#### Electives

		es are above and beyond the Essential Skills equirements.	
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	204	Intro. to Internet Technologies	3

25 - 30

Total

## Certificate in Essential Skills MEDICAL-CLERICAL CAREER TRACK

## CCD East

This track prepares students to work in an administrative capacity in a medical setting. Entry-level occupations include patient account representative, admissions clerk, medical receptionist and medical clerk. The program is offered in an individualized, self-directed format that allows students to enroll at various times throughout the year. Assistance with job placement is provided once certain core classes have been completed. Additional classes in academic skills and GED also are available simultaneously while students are enrolled in the medical-clerical career track.

Vocati	onal C	Core Requirements	Credit Hours
MOT		Intro. to Medical Terminology	2
MOT	110	Medical Office Administration	4
MOT	297	Cooperative Education	3
Work	place C	ore Requirements	
COM	113	Communication for the Workplace	2
		or	
PSY	115	Psychology of Adjustment	
BTE	102	Basic Keyboarding Applications	3
REA	100-	level course or higher	3
Electiv	e Cou	<b>TSES</b>	
MOT	120	Medical Office Financial Managemen	t 3
MOT	130	Insurance Billing & Coding	3
Total	_		23

#### **GOLF COURSE MANAGEMENT**

The Golf Course Management Program has been discontinued. Please contact the Center for Health, Math and Science, 303-365-8300, for additional information.

## GRAPHIC COMMUNICATION TECHNOLOGY

## Associate of Applied Science Degree in Graphic Communication Technology (Printing)

CCD Auraria

7-7

The field of Graphic Communication Technology encompasses all phases of the graphic communication process from origination of the idea through reproduction, finishing and distribu-

CIS

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tion of two-dimensional products or electronic transmissions. It comprises the evolving technologies of computer-age pre-press. image generation, data repurposing, posting to Internet Web pages, digital photography, electronic digital imaging and desktop publishing. It includes all of the printing methods of offset, inkjet, direct digital, laser printing and other electronic imaging or specialty image reproduction methods.

The curriculum prepares graduates for positions of responsibility in the printing, publishing and allied professions.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser and obtain an authorized signature.

Gener	al Educ	ation Requirements Credit	Hours
ENG	131	Intro. to Technical Writing	3
MAT	103	Contemporary College Mathematics	3
PSY	101	General Psychology I	3
Selec	t T Hun	nanities course from the following	
AAS	general	education requirements:	3
	ART	151; any modern language 101:	
	LIT	115, 201, 202; SPA 101, 111	
Majo	Requir	ements	
GCT	101	Intro. to Graphic Technology	3
GCT	102	Electronic Composition Art & Copy Prep	3
GCT	103	Intro. to Visual Communications	3
GCT	104	Intro. to Web & Home Page	3
GCT	105	Resume & Portfolio (Capstone)	3
GCT	111	Line & Halftone Photography	3
GCT	112	Beginning Offset Press	3
GCT	113	Intermediate Offset Press	3
GCT	114	Paper Management & Estimating	3
GCT	185	Bindery & Portfolio (Capstone)	3
GCT	201	Electronic Graphics	3
GCT	202	Electronic Page Layout	3
GCT	203	Electronic Scan & Color Theory	3
GCT	204	Electronic Pre-press	3
GCT	205	Digital Photography & Portfolio (Capstone)	3
GCT	285	Printing Production Management (Capstone)	3
GCT	297	Graphic Communication	
		Technology Internship	3-6
GRD	299**	Independent Study	(1-3)
-			

#### Total

\*\* Students may arrange independent study for credit for special projects; not included as requirements or counted toward the degree

## Certificate in Graphic Communication Technology ELECTRONIC PRE-PRESS

#### CCD Auraria

The electronic publishing and imaging concentration emphasizes computerization of the printing and publishing processes. This concentration covers traditional print media and emerging digital media such as Internet publishing and direct, on-demand digital printing. This concentration leads to careers in management of electronic imaging and publishing systems, and beginning positions in pre-press, scanning, customer service, scheduling, estimating, sales and preflight.

Students in this program also pursue careers with hardware and software manufacturers that service the graphic communication technology industry.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

		Credit	Hours
GCT	101	Intro. to Graphic Technology	3
GCT	102	Electronic Composition Art & Copy Prep	3
GCT	103	Intro. to Visual Communications	3
GCT	104	Intro. to Web & Home Page	3
GCT	105	Resume & Portfolio (Capstone)	3
GCT	201	Electronic Graphics	3,
GCT	202	Electronic Page Layout	3
GCT	203	Electronic Scan & Color Theory	3
GCT	204	Electronic Pre-press	3
GCT	205	Digital Photography & Portfolio (Capstone)	3
Total			30

## Certificate in Graphic Communication Technology PRINTING TECHNOLOGY

#### CCD Auraria

63-66

The printing concentration is a flexible program for the student interested in pursuing employment as a printer, quality control specialist, production scheduler, customer service representative, print buyer, print broker, estimator, or sales representative.

The program also prepares students for management of technology-related graphic communication businesses, including newspapers, commercial printing, magazines, books, business forms and documents, service bureaus and specialized printing operations.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

		Credit Hours
GCT 111	Line & Halftone Photography	3
GCT 112	Beginning Offset Press	3
GCT 113	Intermediate Offset Press	3
GCT 114	Paper Management & Estimating	3
GCT 185	Bindery & Portfolio (Capstone)	3
GCT 201	Electronic Graphics	3
GCT 202	Electronic Page Layout	3
GCT 203	Electronic Scan & Color Theory	3
GCT 204	Electronic Pre-press	3
GCT 205	* Digital Photography & Portfolio (Capsto	one) 3

\* Speech intensive capstone; substitutes for SPE 115

Total

30

## **GRAPHIC DESIGN**

Associate of Arts Degree with a Graphic Design Emphasis (See AA Degree, page 49)

## Associate of General Studies Degree: MSCD/CU-Denver **GRAPHIC DESIGN (AGS-GRD)**

CCD Auraria

The following courses represent CCD/MSCD and CCD/CU-Denver Fine Arts transfer agreements. Students completing these degree requirements will have completed their lower-division general education requirements and will be admitted to MSCD or CU-Denver as juniors in Fine Arts.

#### Program Admission Requirements

- 1. Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Meet with a faculty program adviser and obtain an authorized signature.

eral Education AA Core	Credit Hours
English	6
ENG 121, 122	
Speech	3
SPE 115	
Mathematics (Select any 1 of the following)	3-5
MAT 121, 125, 135, 201, 202	
Physical & Biological Sciences	
(Select any 1 of the following)	4-5
AST 101, 102	
BIO 105, 111, 112	
CHE 101, 102, 111, 112	
GEY 111	
PHY 105, 111, 112, 211, 212	
	English ENG 121, 122 Speech SPE 115 Mathematics (Select any 1 of the following) MAT 121, 125, 135, 201, 202 Physical & Biological Sciences (Select any 1 of the following) AST 101, 102 BIO 105, 111, 112 CHE 101, 102, 111, 112 GEY 111

	V.	Social & Behavioral Sciences (Select 9 credit hours	
		from a minimum of 2 disciplines)	
ų		ANT 101, 111	
		ECO 201, 202	
		GEO 105	
		HIS 101, 102, 201, 202	
		POS 105, 111	
		PSY 101, 102	
		SOC 101, 102	
	VI.	Humanities (Select 9 credit hours from a minimum	
1		of 2 disciplines)	
1		ART 110, 111, 112	
l		HUM 121, 122, 123	
		Any foreign language 111 or higher	
		LIT 115, 201, 202	
		MUS 120, 121, 122	
		PHI 111, 112, 113	
		THE 105, 211, 212	

## **General Education Sub-Total**

34-37

3

9

ART	111*	Art History I	3
ART	112*	Art History II	3
ART	121	Drawing I	3
ART	131	Two-Dimensional Design — Color	3
ART	132	Three-Dimensional Design - Space & Form	3
GRD	100	Typography I	3
GRD	103	Intro. to Computer Graphics	3
GRD	105	Typography & Layout	3

GRD 285 Portfolio Preparation

\* Students who take ART 111 and ART 112 as general education should add ART 122 and GRD 200

Arts Subtotal			30	
Total Major Requirements (CU-Denver ONLY)			61-64	
ART	121	Drawing	3	
ART	131	Two-Dimensional Design — Color	3	
ART	211	Painting I	3	
GRD	100	Typography 1	3	
GRD	103	Intro. to Computer Graphics	3	
GRD	105	Typography & Layout	3	
GRD	200	Design & Concept	3	
GRD	206	Pre-Press for Non-Printer	3	
Capste	one Co	urse		
GRD	285	Portfolio Preparation	3	
Arts Subtotal			30	
Total			61-64	

#### Associate of Applied Science Degree in Graphic Design CCD Auraria

This program provides the skills necessary for entry into the field of graphic design. The graphic design profession involves graphic and advertising design, illustration and pre-press. The Graphic Design program allows students to develop basic skills common to all three specialties, while developing an emphasis in one.

Successful students may enjoy careers in book/publication design, Web page design, package design, ad/promotional design, and where creative typography and image are needed to move ideas and information.

Students are expected to buy their own tools and materials. The beginning program courses require an original investment of between \$100 and \$300, and students are expected to add needed tools and materials as the program progresses.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser and obtain an authorized signature.

Gener	al Edu	cation Requirements Credit	Hours
SPE	115	and the second	3
ENG	121	English Composition 1	3.
MAT	103	Contemporary College Mathematics	3
Select	2 AAS	general education courses	
from	the foll	owing 3 areas:	6
	Arts a	and Humanities	
	Physi	ical and Biological Sciences	
		and Behavioral Sciences	
Majo	r Requi	irements	
ART	121	Drawing I	3
ART	131	Two-Dimensional Design - Color	3
GRD	100	Typography I	3 3
GRD	103	Intro. to Computer Graphics	3
GRD	105	Typography & Layout	3
GRD	107	Illustration	3
GRD	200	Design & Concept	3
GRD	203	Adobe Illustrator	3
GRD	206	Pre-Press for Non-Printer	3
GRD	209	QuarkXpress	3
GRD	220	Photoshop	3
GRD	285	Portfolio Preparation (Capstone)	3
GRD	297	Graphic Design Internship	3
Select	3 cour	ses from the following	9
ART	122	Drawing II/Mixed Media	(3)
ART	132	0	
ART	151	Fund. of Black & White Photography	(3)
ART	211	Painting I	(3)
GRD	225	Web-Page Design	(3)

MUM 101	Intro. to Multimedia	(3)
MUM 207	Intro. to Digital Videography/Editing	(3)

Total 63

## Certificate in Graphic Design COMPUTER GRAPHICS

#### CCD Auraria

Courses in the certificate sequence are applicable to the AAS degree and normally can be completed in two semesters. On completion of major requirements, students may choose one of three emphases, each of which will prepare students for a career in graphic design. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Major	requir	ements:	Credit Hours
ENG	090	Basic Composition	3
ART	121	Drawing I	3
ART	131	Two-Dimensional Design - Color	3
GRD	100	Typography I	3
GRD	103	Intro. to Computer Graphics	3
GRD	105	Typography & Layout	3
GRD	220	Photoshop	3
GRD	209	QuarkXpress (Capstone)	3

Select 2 cour	ses with adviser approval:	6
GRD 107	Illustration	(3)
GRD 200	Design & Concept	(3)
GRD 203	Adobe Illustrator	(3)
GRD 225	Web-Page Design	(3)
MUM 101	Intro. to Multimedia	(3)
MUM 210	3-D Modeling & Animation	(3)
Total		30

## Certificate in Graphic Design GRAPHIC DESIGN

CCD Auraria

Total

Courses in the certificate sequence are applicable to the AAS degree and normally can be completed in two semesters. On completion of major requirements, students may choose one of three emphases, each of which will prepare students for a career in graphic design. GRD 103 is prerequisite to all computer classes.

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#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Major	requit	rements:	Credit Hours
ENG	090	Basic Composition	3
ART	121	Drawing I	3
ART	131	Two-Dimensional Design — Color	3 3
GRD	100	Typography I	3
GRD	103	Intro. to Computer Graphics	3
GRD	105	Typography & Layout	3
GRD	200	Design & Concept	3
GRD	285	Portfolio Preparation (Capstone)	3
Total			24
Select	2 cour	ses with adviser approval:	6
ART	122	Drawing II/Mixed Media	(3)
GRD	206	Pre-Press for Non-Printer	3
GRD	209	QuarkXpress	(3)
GRD	220	Photoshop	(3)
GRD	225	Web Page Design	(3)
GRD	285	Portfolio Preparation (Capstone)	3
Total			33

#### **GRIEF AND BEREAVEMENT SPECIALIST**

The Grief and Bereavement Specialist program has been discontinued. Please contact the Center for Health, Math and Science, 303-365-8300, for additional information.

## HEALTH AND WELLNESS MANAGEMENT

The Health and Wellness Management degree program is under review. Please contact the Center for Health, Math and Science, Health Sciences Center, 303-365-8300, for additional information.

#### HISTORY

Associate of Arts Degree with a History Emphasis (See AA Degree, page 49)

#### HUMANITIES/PHILOSOPHY

Associate of Arts Degree with a Humanities/ Philosophy Emphasis (See AA Degree, page 49)

## HUMAN SERVICES

## Associate of General Studies Degree: MSCD HUMAN SERVICES (AGS-HSE)

#### CCD Auraria

The following courses represent the CCD/Metropolitan State College of Denver Human Services transfer agreement. Students completing these degree requirements will be admitted to MSCD as juniors in Human Services.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Signature authorization on program application from HSE faculty adviser.

Get	eral Education AA Core	Gredit Hours
1.	English	6
	ENG 121, 122	
11.	Speech	3
	SPE 115	
111.	Mathematics (Select any 1 of the following)	3-5
	MAT 121, 125, 135, 201, 202	
IV.	Physical & Biological Sciences	
	(Select any 1 of the following)	4-5
	AST 101, 102	
	BIO 105, 111, 112	
	CHE 101, 102, 111, 112	
	GEY 111	
	PHY 105, 111, 112, 211, 212	
V.	Social & Behavioral Sciences (Select 9 credit ho	urs
	from a minimum of 2 disciplines)	9
	ANT 101, 111	
	ECO 201, 202	
	GEO 105	
	HIS 101, 102, 201, 202	
	POS 105, 111	
	PSY 101, 102	
	SOC 101, 102	
VI.	Humanities (Select 9 credit hours from a minim	um
	of 2 disciplines)	9
	ART 110, 111, 112	
	HUM 121, 122, 123	
	Any foreign language 111 or higher	
	LIT 115, 201, 202	
	MUS 120, 121, 122	
	PHI 111, 112, 113	
	THE 105, 211, 212	
Ger	neral Education Sub-Total	34-37

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Major Requirements HSE 106 Survey of Human Services

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Offer	ed Fal	I Semester Only	
HSE	107	Interviewing Principles & Practices	3
HSE	205	Human Services for Groups	3
HSE	206	Human Services for Families	3
HSE	211	Human Services Practicum II	4
Offer	ed Spr	ing Semester Only	
HSE	108	Intro. to Therapeutic Systems	3
HSE	115	Human Services Practicum I	4-
HSE	285	Human Services Practicum III (Capstone)	1-
Total			58.

# Associate of Applied Science Degree in Human Services HUMAN SERVICES

CCD Auraria

This program prepares students for entry-level employment in communities and institutions that serve clients with a variety of human needs. Students may choose to focus on specific skill areas, such as social service agencies, health care centers, youth services, substance abuse programs, geriatric centers, child abuse programs, community corrections facilities, crisis centers and domestic violence programs.

With the exception of MAT 103, the AAS in Human Services degree at CCD may be transferred to the Human Services Department at MSCD. Students who wish to meet the MSCD Human Services Department's mathematics requirement while at CCD are advised to take MAT 135. AAS students in Human Services must earn a grade of C or better in all general education and major course requirements.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Signature authorization on program application from Human Services faculty adviser.

General Education Requirements Cre		cation Requirements Credit	Hours
ENG	131	Technical Writing J	3
		or	
ENG	121	English Composition I	
MAT	103	Contemporary College Mathematics or higher	3-5
5PE	115	Principles of Speech	3
PSY	101	Intro. to Psychology	3
		or	
SOC	101	Intro. to Sociology	
		or	
PSY	235	Psychology of Human Growth & Developme	nl
AAS	Humar	nities requirement	3
Majo	r Requi	rements	
HSE	105	Intro. to Social Welfare	3

HSE 106 Survey of Human Services

HSE	107	Interviewing Principles & Practices	3
HSE	109	Social Issues in Human Services	3
HSE	205	Human Services for Groups	3
HSE	206	Human Services for Families	3
HSE	207	Community Organization	3
HSE	211	Human Services Practicum II	4
Offer	ed Spr	ing Semester Only	
HSE	108	Intro. to Therapeutic Systems	3
HSE	115	Human Services Practicum I	4-6
HSE	208	Social Welfare Policy	3
HSE	209	Crisis Theory & Intervention	3
HSE	285	Human Services Practicum III (Capstone)	1-7

Certificate in Human Services CASE MANAGEMENT/RESIDENTIAL SERVICE AIDE

#### CCD Auraria and Regional Assessment and Training Center, Fort Logan

This program prepares students for entry-level positions as case management aides or residential aides. The certificate program is transferable to the AAS and AGS in Human Services. Students must complete all certificate course work with a C grade or better.

Program Admission Requirements

Total

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

		Cre	dit Hours
Elect	ves	Basic Skills	6
HSE	106	Survey of Human Services	3
HSE	107	Interviewing Principles & Practices	3
Elect	ve	HSE or Core	5
Offer	ed Spr	ing Semester Only	
HSE	209	Crisis Theory & Intervention	3
HSE	115	Human Services Practicum I (Capstone)	4-6
Total			24-26

## INFORMATION TECHNOLOGY

3

#### Associate of Applied Science Degree in Information Technology INFORMATION TECHNOLOGY

CCD Auraria, CCD East, CCD North, CCD West

The Information Technology degrees and certificates prepare students for positions supporting an organization's technical environment. The diverse curriculum enables students to develop the knowledge and skills necessary to succeed as entry-level computer programmers, database administrators, network administrators, network and computer security administrators, XP configuration technicians, Microsoft wireless network technicians, Web developers, computer support and help desk technicians, office application specialists and telecommunication technicians.

CCD is a member of the Computing Technology Industry Association (COMPTIA) and is a CISCO Systems Networking Academy, as well as a Microsoft Regional IT Academy. The cutting-edge programs offered in Information Technology at CCD can lead to industry certifications such as the MCSE, MCP, CCNA, CIW, A+, Network+, CNA, MOUS, and various other certifications that will increase employability and add to the students' professional credentials.

Completion of CIS 118 with a C or better is required for all Associate of Applied Science degrees and certificates in Information Technology.

## Associate of Applied Science Degree in Information Technology CISCO NETWORKING ASSOCIATE

CCD Auraria

CCD, in partnership with CISCO Systems, is a certified CISCO Regional Academy. This program prepares students as entry-level CISCO network associates with skills to design, build and maintain CISCO networks. Students are prepared for the CISCO Certified Network Associate (CCNA) certification exam, as well as the CompTIA Network+ certification exam.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the CISCO Networking Associate certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core 1	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Major	Requi	rements	
CIS	250	Computer Diagnosis & Repair	3
CNT	160	Basic Telecommunications	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	.3
CNT	260	CISCO Network Associate I	5

CNT	261	CISCO Network Associate II	5
CNT	262	CISCO Network Associate III	5
CNT	263	CISCO Network Associate IV (Capstone)	5

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## Certificate in Information Technology CISCO NETWORKING ASSOCIATE

Total

#### CCD Auraria, CCD North and CCD West

CCD, in partnership with CISCO Systems, is a certified CISCO Regional Academy. This program prepares students as entry-level CISCO network associates with skills to design, build and maintain CISCO networks. Students are prepared for the CISCO Certified Network Associate (CCNA) certification exam. All program credits apply toward the AAS degree in Information Technology, CISCO Networking Associate emphasis.

Core .	Require	ements	Credit Hours
CIS	118	Intro. to PC Applications	3
CNT	200	Intro. to Networking	3
CNT	260	CISCO Network Associate	5
CNT	261	CISCO Network Associate II	5
CNT	262	CISCO Network Associate III	5
CNT	263	CISCO Network Associate IV (Capstone	e) 5
Total	1		26

## Associate of Applied Science Degree in Information Technology COMPUTER PROGRAMMING

CCD Auraria

This program prepares students as entry-level programmers with an emphasis in CTT, Java and Visual Basic. Students are prepared for the Microsoft Certified Professional (MCP) examination, #70-176. This AAS degree is articulated with Colorado Technical University and transfers into their Bachelor of Science degree in Information Technology.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Computer Programming certificate program.

General Education Requirements		Credit Hours	
CIS 1	18	Intro. to PC Applications	3
ENG 1	31	Technical Writing I	3.
MAT 1	21	College Algebra	.4
PSY 1	101	General Psychology I	3
SPE 1	115	Principles of Speech	3

Total	_		61	
MAT	135	Intro. to Statistics	3	
CSC	240	Java Programming	3	
CSC	231	Advanced C Language Programming (C++)	3	
CSC	230	C Language Programming (C++)	3	
CSC	153	Visual Basic Certification Preparation	3	
CSC	152	Database Programming with Visual Basic (Capstone)	3	
CSC	151	Advanced Visual Basic Programming	3	
CSC	150	Visual Basic Programming		
CWB	173	Complete Web Authoring/HTML/JavaScript	3	
CIS	145	Complete PC Databases/Access	3	
Major	Requi	rements		
CNT	204	Intro. to Internet Technologies	3	
CNT	200	Intro. to Networking	3	
CIS	180	Microcomputer Hardware	3	
CIS	119	Intro. to Programming	3	
CIS	110	Intro. to Operating Systems	3	
Core I	Require	ements		

## Certificate in Information Technology COMPUTER PROGRAMMING

CCD Auraria

This program prepares students as entry-level programmers with an exposure to today's most popular programming languages. All program credits apply toward the AAS degree in Information Technology, Computer Programming.

#### Program Admission Requirements

1. Meet minimum assessment scores or prerequisites required for general education courses in the program.

Requi	iremen	ts Crea	lit Hours
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CSC	150	Visual Basic Programming	3
CSC	151	Advanced Visual Basic Programming	3
CSC	230	C Language Programming (C++)	3
CSC	231	Advanced C Language Programming C++	3
CSC	240	Java Programming	3
MAT	121	College Algebra	4
CIS	285	Capstone Project	1
Total			26

## Certificate in Information Technology VISUAL BASIC PROGRAMMING

#### CCD Auraria, CCD North

This program prepares students as entry-level programmers in the Visual Basic programming language. Students are prepared for the Microsoft Certified Professional (MCP) examination, #70-176. All program credits apply toward the AAS degree in Information Technology, Computer Programming.

Requirements Cred			it Hours
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CIS	145	Complete PC Databases/Access	3
CSC	150	Visual Basic Programming	3
CSC	151	Advanced Visual Basic Programming	3
CSC	152	Database Programming with Visual Basic	
		(Capstone)	3
CSC	153	Visual Basic Certification Preparation	3
Total			21

## Associate of Applied Science Degree in Information Technology COMPUTER TECHNOLOGY

## CCD Auraria

This program provides students with a variety of information technology skills. Students may select from a wide variety of courses, with written approval by their information technology adviser, to design a program that meets their individual needs and interests.

## Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Office Applications certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology 1	3
SPE	115	Principles of Speech	3
Core	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Majo	Requi	rements	
BTE	100	Intro. to Keyboarding	3
		or	
Electi	ve wit	h written approved by Information	
Techr	nology	adviser	
CIS	135	Complete PC Word Processing/Word	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	285	Capstone Project	1

#### Additional Requirements

Select at least 18 additional credits, with Information Technology adviser written approval, from courses with ACC, BTE, BUS, CIS, CNT, CWB, CSC, or ELT prefixes.

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#### Certificate in Information Technology OFFICE APPLICATIONS

#### CCD Auraria, CCD East, CCD North, CCD West

This program prepares students for job entry into positions such as office specialist, office communications specialist and office data processor. All program credits apply toward the AAS degree in Information Technology, Computer Technology.

Requirements		Credit Hours	
BTE	100	Intro, to Keyboarding	3
		or	
Electi	ve app	roved by Information Technology advise	er.
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Addit	ional R	Requirements	3
		st 3 additional credits, with Information	
		adviser written approval, from courses v	
		BUS, CIS, CNT, CSC, CWB, or ELT prefix	

Total	30

### Associate of Applied Science Degree in Information Technology CTPD COMPUTER PROGRAMMING

### CCD West

This program serves the general population, but is designed and operated by the Computer Training for People with Disabilities (CTPD) program. The major requirements of the program begin each quarter (January 1, April 1, July 1 and October 1) and are specifically designed to train selected disabled persons as entry-level programmers with an emphasis in Visual Basic applications. Students are prepared for the Microsoft #70-176 (MCP) certification exam.

Admissions information may be obtained from the director, CTPD, CCD West, 303-477-5864. Students are selected into this program based on screening, selection and assessment criteria.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

- 2. Successful completion of a computer aptitude test battery.
- 3. Personal interview with members of the Business Advisory Council.
- Students who require adaptive equipment must be functioning at a proficient level as determined and evaluated by the Center for Persons with Disabilities coordinator.

CSC	297	Cooperative Education (Capstone)	3
CSC	231	Advanced C Language Programming (C++)	
CSC	230	C Language Programming (C++)	3
CSC	152	Database Programming with Visual Basic	3
CSC	151	Advanced Visual Basic Programming	3
CSC	150	Visual Basic Programming	3
CIS	145	Complete PC Databases/Access	3
Major	Requi	rements	
MAN	244	Intro. to MS Project 2000	3
CNT	204	Intro. to Internet Technologies	
CNT	200	Intro. to Networking	3
CIS	180	Microcomputer Hardware	*****
CIS	119	Intro. to Programming	3
CIS	110	Intro. to Operating Systems	3
BUS	115	Intro. to Business	3
ACC	101	Fundamentals of Accounting	3
Core I	Reauire	ments	
SPE	115	Principles of Speech	3
PSY	101	General Psychology I	3
MAT	121	College Algebra	
		OF	
MAT	135	Intro. to Statistics	3-4
ENG	131	Technical Writing I	3
CIS	118	Intro. to PC Applications	3

### Certificate in Information Technology CTPD COMPUTER PROGRAMMING

CCD West

This program serves the general population, but is designed and operated by the Computer Training for People with Disabilities (CTPD) program. The upper-level courses in the curriculum begin each quarter (January 1, April 1, July 1 and October 1) and are specifically designed to train selected disabled persons as entry-level programmers with an emphasis in Visual Basic applications. Students are prepared for the Microsoft #70-176 (MCP) certification exam. All program credits apply toward the AAS degree in Information Technology, CTPD Computer Programming.

Admissions information may be obtained from the director, CTPD, CCD West, 303-477-5864. Students are selected into this program based on screening, selection and assessment criteria.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Successful completion of a computer aptitude test battery.
- Personal interview with members of the Business Advisory Council.
- Students who require adaptive equipment must be functioning at a proficient level as determined and evaluated by the Center for Persons with Disabilities coordinator.

Requi	rement	ts Credi	Hour
ACC	101	Fundamentals of Accounting	3
BUS	115	Intro. to Business	3
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CIS	145	Complete PC Databases/Access	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
CSC	150	Visual Basic Programming	3
CSC	151	Advanced Visual Basic Programming	3
CSC	152	Database Programming with Visual Basic	3
CSC	230	C Language Programming (C++)	3
CSC	231	Advanced C Language Programming (C++)	3
MAN	244	Intro. to MS Project 2000	3
CSC	297	Cooperative Education	3
Total			48

### Associate of Applied Science Degree in Information Technology CTPD NETWORK ADMINISTRATION

### CCD West

This program serves the general population, but is designed and operated by the Computer Training for People with Disabilities (CTPD) program. The major requirements of the program begin each quarter (January 1, April 1, July T and October 1) and are specifically designed to train selected disabled persons as entry-level network administrators. Students are prepared for the CompTIA Network+ certification exam, the Windows 2000 #70-210 and #70-215 certification exams and the Certified Novell Administrator (CNA) certification exam.

Admissions information may be obtained from the director, CTPD, CCD West, 303-477-5864. Students are selected into this program based on screening, selection and assessment criteria.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Successful completion of a computer aptitude test battery.
- 3. Personal interview with members of the Business Advisory Council.
- Students who require adaptive equipment must be functioning at a proficient level as determined and evaluated by the Center for Persons with Disabilities coordinator.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core I	Requir	ements	
ACC	101	Fundamentals of Accounting	3
BUS	115	Intro. to Business	3
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
MAN	244	Intro. to MS Project 2000	3
Major	Requi	rements	
CIS	250	Computer Diagnosis & Repair	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	212	UNIX/Linux Administration	3
CNT	225	Web Server Management	3
CNT	230	Windows 2000 Professional	3
CNT	231	Windows 2000 Server	3
CNT	297	Cooperative Education (Capstone)	3
Total			60-61

### Certificate in Information Technology CTPD NETWORK ADMINISTRATION

#### CCD West

This program serves the general population, but is designed and operated by the Computer Training for People with Disabilities (CTPD) program. The program begins each quarter (January 1, April 1, July 1 and October 1) and is specifically designed to train selected disabled persons as entry-level network administrators. Students are prepared for the CompTIA Network+ certification exam, the Windows 2000 #70-210 and #70-215 certification exams and the Certified Novell Administrator (CNA) certification exam. All program credits apply toward the AAS degree in Information Technology, CTPD Network Administration.

Admissions information may be obtained from the director, CTPD, CCD West, 303-477-5864. Students are selected into this program based on screening, selection and assessment criteria.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Successful completion of a computer aptitude test battery.
- Personal interview with members of the Business Advisory Council.

 Students who require adaptive equipment must be functioning at a proficient level as determined and evaluated by the Center for Persons with Disabilities coordinator.

Requi	remen	Credit Hours	
ACC	101	Fundamentals of Accounting	3
BUS	115	Intro. to Business	3
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CIS	250	Computer Diagnosis & Repair	3
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	212	UNIX/Linux Administration	3
CNT	225	Web Server Management	3
CNT	230	Windows 2000 Professional	3
CNT	231	Windows 2000 Server	3
MAN	244	Intro. to MS Project 2000	3
CNT	297	Cooperative Education	3
Total			48

#### Associate of Applied Science Degree in Information Technology NETWORK AND COMPUTER SECURITY

#### CCD Auraria

This program provides students with a variety of information technology skills for use in the security industry. This program will develop the necessary skills to implement and configure security systems both on work stations and servers. Students will be prepared for jobs in the computer security field, including security administrator for stand-alone work stations connected to networks and network servers.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	203	Intro, to TCP/IP	3

Major I	Requi	rements	
CNT 1	170	Novell Network Administration I	3
CNT 2	201	Local Area Networks	3
CNT 2	212	UNIX/Linux Administration	3
CNT 2	211	Microsoft Windows XP Configuration	3
		or	
CNT 2	230	Windows 2000 Professional	
CNT 2	251	Anti-Virus Concepts	3
CNT 2	252	Security Modeling	3
CNT 2	253	Fire Walls and How They Work	3
CNT 2	254	Data Encryption	3
CNT 2	260	CISCO Network Associate I	5
CNT 2	261	CISCO Network Associate II	5
Total			64-65

### Associate of Applied Science Degree in Information Technology NETWORK ADMINISTRATION

CCD Auraria

This program prepares students as entry-level network administrators. Students are prepared for the CompTIA Network+ certification exam, the Windows 2000 #70-210 and #70-215 certification exams and the Certified Novell Administrator (CNA) certification exam.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Network Administrator certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro, to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro, to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3.
CIS	180	Microcomputer Hardware	3
CNT	200	Intro, to Networking	3
CNT	204	Intro. to Internet Technologies	3
Majo	r Requi	irements	
CIS	250	Computer Diagnosis & Repair	3
CNT	170	Novell Network Administration	3
CNT	171	Novell Network Administration II	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3

CNT	207	Network Analysis and Design	3
CNT	212	UNIX/Linux Administration	3
CNT	225	Web Server Management	3
CNT	211	Microsoft Windows XP Configuration	3
		or	
CNT	230	Windows 2000 Professional	
CNT	231	Windows 2000 Server	3
CIS	285	Capstone Project	1

Total

#### 61-62

#### Certificate in Information Technology NETWORK ADMINISTRATION

#### CCD Auraria

This program prepares students as entry-level network administrators. Students are prepared for the CompTIA Network+ certification exam, the Windows 2000 #70-210 and #70-215 certification exams and the Certified Novell Administrator (CNA) certification exam. All program credits apply toward the AAS degree in Information Technology, Network Administration.

Requ	iremen	ts C	redit Hours
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CNT	160	Basic Telecommunications	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	204	Intro, to Internet Technologies	3
CIS	285	Capstone Project	1
Select	one tri	ack from the following	6
CNT		Novell Network Administration I	(3)
CNT	171	Novell Network Administration II or	(3)
CNT	211	Microsoft Windows XP Configuration	(3)
CNT	224	Microsoft Wireless Network Administration	
CNT	212	UNIX/Linux Administration	(3)
CNT	225	Web Server Management	(3)
CNT	230	Windows 2000 Professional	(3)
CNT	231	Windows 2000 Server	(3)
Addit	ional F	Requirement	
Solor	12 ade	litional credits with Information Technolog	11/

Select 3 additional credits, with Information Technology adviser written approval, from courses with CIS, CNT, CWB, or CSC prefixes.

Total

34

3

### Associate of Applied Science Degree in Information Technology ORACLE DATABASE TECHNOLOGY

### CCD North

This program prepares students as entry-level Oracle database specialists. Students are prepared for the CompTIA Network+ certification exam. Graduates are prepared to perform basic Oracle database administrative tasks.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Oracle Technology certificate program.

Gener	al Edu	cation Requirements Credit	Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro, to Programming	2 2 2
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Majo	Requ	irements	
CIS	145	Complete PC Databases/Access	3
CIS	243	Intro. to SQL	3
CIS	244	SQL PL/SQL	3
CIS	245	Data Modeling & Relational Databases	3
CIS	246	Oracle Database Administration I	4
CIS	247	Oracle Database Administration II (Capstone	4
CSC	150	Visual Basic Programming	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	230	Windows 2000 Professional	3
Total			62-63

### Certificate in Information Technology ORACLE DATABASE TECHNOLOGY

CCD North

This program prepares students as entry-level Oracle database specialists. Students are prepared for the CompTIA Network+ certification exam. Graduates are prepared to perform basic Oracle database administrative tasks. All program credits apply toward the AAS degree in Information Technology, Oracle Database Technology.

Requi	iremen	ts	Credit Hours
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CIS	145	Complete PC Databases/Access	3
CIS	243	Intro. to SQL	3
CIS	244	SQL PL/SQL	3
CIS	245	Data Modeling & Relational Database	5 3
CIS	246	Oracle Database Administration I	4
CIS	247	Oracle Database Administration II	4
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	230	Windows 2000 Professional	3
Total	1		38

#### Total

#### Associate of Applied Science in Information Technology PC SUPPORT TECHNOLOGY

#### CCD Auraria

This program prepares students as entry-level computer specialists. Students are prepared for certification in CompTIA Network+ and CompTIA A+. Graduates can configure and repair personal computers and peripherals, install and use office software applications, and manage communications and networks.

#### Program Admission Requirements

- 1. Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- 3. Or, in place of the above, have completed the PC Help Desk Specialist certificate program or the Computer Service and Repair certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Majo	Requi	irements	
BTE	100	Intro. to Keyboarding	3
		or	
Electi	ve app	proved by Information Technology advise	er
CI5	135	Complete PC Word Processing/Word	3

CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	-3
CIS	165	Complete PC Presentation Graphics/	
		PowerPoint	3
CIS	250	Computer Diagnosis & Repair (Capstone)	3
CIS	261	A+ Certification Preparation	3
CNT	160	Basic Telecommunications	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3

60-61

Total

#### Certificate in Information Technology PC HELP DESK

#### CCD East, CCD North, CCD West

This program prepares students as entry-level computer specialists. Students are prepared for certification in CompTIA A+. Graduates can configure and repair personal computers and peripherals, install and use office software applications, and function in a help desk environment for external and internal customers. All program credits apply toward the AAS degree in Information Technology, PC Support Technology.

#### Requirements

BTE	100	Intro. to Keyboarding	3
		or	
Electi	ive app	roved by Information Technology adviser	
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
CIS	145	Complete PC Databases/Access	3
CIS	155	Complete PC Spreadsheets/Excel	3
CIS	180	Microcomputer Hardware	3
CIS	250	Computer Diagnosis & Repair	3
CIS	251	PC Help Desk Skills (Capstone)	3
CIS	261	A+ Certification Preparation	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Total			36

### **Certificate in Information Technology** COMPUTER SERVICE AND REPAIR

CCD Auraria, CCD East, CCD North, CCD West

This program prepares students as entry-level computer service technicians. Students are prepared for certification in CompTIA A+. Graduates can configure and repair personal computers and peripherals and install software applications. All program credits apply toward the AAS degree in Information Technology, PC Support Technology.

Requi	rement	ts C	redit Hours
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CIS	250	Computer Diagnosis & Repair (Capstone	e) 3
CIS	261	A+ Certification Preparation	3
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	204	Intro. to Internet Technologies	3
Total			27

### Associate of Applied Science in Information Technology TELECOMMUNICATIONS

CCD Auraria

This program prepares students as entry-level telecommunications technicians. Students are prepared for the CompTIA Network+ and TIA Certified Convergent Network Technologies certification exams.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Telecommunications certificate program.

Gener	al Edu	cation Requirements Credit H	ours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		OF	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	.3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Majo	Requi	rements	
CIS	250	Computer Diagnosis & Repair	3
CNT	160	Basic Telecommunications	3
CNT	161	Advanced Telecommunications	3
CNT	162	Strategic Solutions in Telecommunications	3
CNT	163	Emerging Technologies in Telecommunications	3
CNT	164	Project Analysis and Design	3
CNT	165	Convergent Technologies	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3

lotal	-		63-64
Total			10.14
ELT	109	Fiber Optics	1
ELT	102	AC Fundamentals	3
ELT	101	DC Circuits	2

#### Certificate in Information Technology TELECOMMUNICATIONS

#### CCD Auraria

This program prepares students as entry-level telecommunications technicians. Students are prepared for the CompTIA Network+ and TIA Certified Convergent Network Technologies certification exams. All program credits apply toward the AAS degree in Information Technology, Telecommunications.

Requi	remen	ts	Credit Hours
CIS	110	Intro. to Operating Systems	3.
CIS	118	Intro: to PC Applications	3
CIS	180	Microcomputer Hardware	3
ELT	101	DC Circuits	.2
ELT	102	AC Fundamentals	3
ELT	109	Fiber Optics	1
CIS	250	Computer Diagnosis & Repair	3
CNT	160	Basic Telecommunications	3
CNT	161	Advanced Telecommunications	3
CNT	165	Convergent Technologies	3
CNT	200	Intro, to Networking	3
Total			30

### Associate of Applied Science Degree in Information Technology WEB SITE ADMINISTRATION

CCD North

This program prepares students as entry-level Web site administrators. Students are prepared for the Certified Internet Webmaster (CIW) Foundations and the Macromedia Website Developers exams, and the CompTIA Network+ or CompTIA inet+ certification exams.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Web Page Development certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		or	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3

Core 1	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Majo	Requi	rements	
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CWB	101	Mastering the Web	3
CWB	110	Web Layout & Design Concepts	3
CWB	135	Complete Web Editing/Dreamweaver	3
CWB	136	Advanced Web Editing/Flash	3
CWB	140	Intro. to Multimedia/Director (Capstone)	3
CWB	160	Graphics Technology I /PhotoShop	3
CWB	161	Graphics Technology II /Premier	3
CWB	173	Complete Web Authoring/HTML/JavaScript	3

### Certificate in Information Technology WEB PAGE DEVELOPMENT

CCD East, CCD North

Total

This program prepares students as entry-level Web page developers. Students are prepared for the Certified Internet Webmaster (CIW) Foundations and Macromedia Website Developers exams, and CompTIA Network+ or CompTIA I-net+ certification exams. All program credits apply toward the AAS degree in Information Technology, Web Site Administration.

Requi	remen	15 (	redit Hours
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
CWB	101	Mastering the Web	3
CWB	110	Web Layout & Design Concepts	3
CWB	135	Complete Web Editing/Dreamweaver	3
CWB	136	Advanced Web Editing/Flash	3
CWB	140	Intro. to Multimedia/Director (Capstone	) 3
CWB	160	Graphics Technology I /PhotoShop	3
CWB	161	Graphics Technology II /Premiere	3
CWB	173	Complete Web Authoring/HTML/JavaSc	ript 3

#### Total

### Associate of Applied Science in Information Technology WINDOWS 2000 NETWORK ADMINISTRATION

CCD Auraria

This program prepares students as entry-level Microsoft 2000 Network Administrators. Students are prepared for the CompTIA Network+ certification exams and the Windows 2000 #70-210, #70-215, #70-216, #70-217, #70-219, #70-220 and #70-221 (MCSE) certification exams. Program Admission Requirements

60-61

36

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Completion of 6 credit hours of college-level work.
- Or, in place of the above, have completed the Microsoft 2000 Network Administrator certificate program.

Gener	al Edu	cation Requirements Credi	t Hours
CIS	118	Intro. to PC Applications	3
ENG	131	Technical Writing I	3
MAT	135	Intro. to Statistics	3-4
		OF	
MAT	121	College Algebra	
PSY	101	General Psychology I	3
SPE	115	Principles of Speech	3
Core I	Require	ements	
CIS	110	Intro. to Operating Systems	3
CIS	119	Intro. to Programming	3
CIS	180	Microcomputer Hardware	3
CNT	200	Intro. to Networking	3
CNT	204	Intro. to Internet Technologies	3
Major	Requi	rements	
CIS	250	Computer Diagnosis & Repair	3
CNT	160	Basic Telecommunications	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	211	Microsoft Windows XP Configuration	3
CNT	230	or Windows 2000 Professional	
CNT	231	Windows 2000 Server	3
CNT	232	Windows 2000 Network Infrastructure	4
Sec.	4.74	Administration	3
CNT	233	Windows 2000 Active Directory Services	3
CNT	234	Windows 2000 Directory Services	-
		Infrastructure Design	3
CNT	235	Windows 2000 Network Security Design	3
CNT	236	Windows 2000 Network Infrastructure Desig	
		(Capstone)	3
Total			63-64

### Certificate in Information Technology WINDOWS 2000 NETWORK ADMINISTRATION

CCD Auraria, CCD North

This program prepares students as entry-level Microsoft 2000 Network Administrators. Students are prepared for the CompTIA Network+ certification exam, and the Windows 2000 #70-210, #70-215, #70-216, #70-217, #70-219, #70-220 and #70-221 (MCSE) certification exams. All program credits apply toward the AAS degree in Information Technology, Windows 2000 Network Administration.

Requi	remen	s Credit H	lours
CIS	110	Intro. to Operating Systems	3
CIS	118	Intro. to PC Applications	3
CNT	200	Intro. to Networking	3
CNT	201	Local Area Networks	3
CNT	203	Intro. to TCP/IP	3
CNT	204	Intro. to Internet Technologies	3
CNT	211	Microsoft Windows XP Configuration or	3
CNT	230	Windows 2000 Professional	
CNT	231	Windows 2000 Server	3
CNT	232	Windows 2000 Network Infrastructure	
		Administration	3
CNT	233	Windows 2000 Active Directory Services	3
CNT	234	Windows 2000 Directory Services	
		Infrastructure Design	3
CNT	235	Windows 2000 Network Security Design	3
CNT	236	Windows 2000 Network Infrastructure Design	3
Total			39

### INTERGENERATIONAL STUDIES

#### Associate of Science Degree in Intergenerational Studies

The Intergenerational Studies program has been discontinued. For more information, please call the Center for Language, Arts and Behavioral Sciences at 303-556-2473.

### MASSAGE THERAPY

#### Certificate in Massage Therapy

CCD Lowry

The Massage Therapy program is a full-time evening program that provides students with the knowledge and skills necessary to practice in a primary health care setting. Graduates are prepared for the national licensure exam.

The Massage Therapy certificate consists of 42 credit hours of course work. The certificate prepares the student to sit for the certification exam for massage therapists. Information and requirements can be obtained at a Massage Therapy advising and information meeting held monthly at the Health Sciences Center at CCD Lowry.

CCD has a particular emphasis on recruiting, admitting and retaining qualified minority students into the Massage Therapy program. The college wants its graduates to reflect the rich diversity of the region.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Submit a completed Massage Therapy program application to the Health Sciences Center at CCD Lowry, 1070 Alton Way, Building 849. The application packet includes: the completed CCD application form, completed Massage Therapy program application, copies of completed college course work (if applicable) and a copy of the applicant's Basic Skills Assessment scores.

 Meet with the program adviser to plan course work. Call the Massage Therapy program at 303-365-8300 to schedule an appointment.

Gener	al Edu	cation Requirements	Credit Hours
ENG	121	English Composition I	3
(musi	be con	npleted before receiving certification)	
Fall/S	pring	First Semester	
Fall/S MST	•	First Semester Self Care for Massage Professionals	Ť.
	•		1 4

 MST
 114
 Massage for the Elderly
 2

 MST
 118
 Massage Therapy Clinic I
 2

 MST
 195
 Success Seminar
 1

 MOT
 102
 Intro. to Medical Terminology
 2

#### Summer Semester

MST	112	Ethics of Massage Therapy	2	
MST	211	Pathophysiology for Massage Therapists	2	
MST	208	Massage Therapy Clinic II	2	
MST	216	Craniosacral Therapy	3	
MOT	141	First Aid/CPR: Emergency Response	2	
Fall/S	pring	Third Semester		
MST	116	Neuroanatomy	3	
MST	212	Neuromuscular Massage	3	

MST	212	Neuromuscular Massage	3
MST	215	Business for Massage Therapists	3
MST	218	Massage Therapy Clinic III	2
MST	222	Prenatal/Neonatal Massage	2

### Total

#### MATHEMATICS

Associate of Science Degree with a Mathematics Emphasis (See AS Degree, page 53)

### MEDICAL CLUSTER

Associate of Science Degree with a PRE-DENTAL EMPHASIS PRE-MEDICAL EMPHASIS PRE-MEDICAL TECHNOLOGY EMPHASIS (UNDER REVIEW) PRE-PHARMACY EMPHASIS PRE-PHYSICAL THERAPY EMPHASIS PRE-PHYSICIAN ASSISTANT EMPHASIS PRE-VETERINARY SCIENCE EMPHASIS

(See AS Degree, page 53)

42

### MEDICAL OFFICE TECHNOLOGY

#### Certificate in Medical Office Technology CCD East

The Medical Office Technology certificate program prepares the student for a career as an allied health professional. Graduates are prepared to enter positions as clinical medical assistants, comprehensive medical assistants or orthopedic assistants in hospitals, clinics and physicians' offices. Students also will be prepared to work as a health information specialists (medical records), medical transcriptionists, medical office clerks, or medical unit coordinators (ward clerks).

Students will be trained in the use of a computer, telephone techniques, patient scheduling, management of medical record files, written communication, insurance billing, ICD-9CM and CPT coding techniques, transcription, medical software, and medical law and ethics. Comprehensive medical assistants also can obtain national certification by examination through the American Association of Medical Assistants.

Additionally, students are prepared to perform front-office tasks (comprehensive medical assistants only), conduct patient evaluations, give injections, perform venopunctures and provide other patient treatments. Orthopedic Assistant subspecialty graduates assist in orthopedic procedures, including cast applications and wound care, usually in hospital or clinic settings.

### Certificate in Medical Office Technology CLINICAL MEDICAL ASSISTANT EMPHASIS

CCD East

The Clinical Medical Assistant program prepares students to conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments, usually in hospital or clinic settings. Graduates are prepared to enter positions as clinical medical assistants and medical assistants.

#### Program Admission Requirements

1. Meet minimum Accuplacer assessment scores.

			Credit Hours
BIO	120	Basic Anatomy & Physiology	4
BTE	102	Basic Keyboarding Applications	3
MOT	102	Intro. to Medical Terminology	2
MOT	104	Law & Ethics for Health Professionals	2
MOT	112	Advanced Medical Terminology	2
MOT	136	Intro. to Clinical Skills	2
MOT	141	First Aid/CPR: Emergency Response	2
MOT	138	Laboratory Skills	4
MOT	140	Clinical Skills	4
MOT	150	Pharmacology Practices	3
MOT	186	Clinical Internship	3
PSY	115	Psychology of Adjustment	2
Total			33
* Orth	opedia	Assistant Subspecialty Option	
MOT	151	Orthopedic Assisting	8
MOT	190	Orthopedic Assisting Internship	3
Total	_		44

#### Certificate in Medical Office Technology COMPREHENSIVE MEDICAL ASSISTANT EMPHASIS CCD East

The Comprehensive Medical Assistant program is certified through the American Association of Medical Assisting. Students are prepared to perform front office tasks, complete insurance forms, make office appointments, perform ICD-9 and CPT coding, conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments, usually in hospital or clinic settings.

Graduates can obtain national certification by examination through the American Association of Medical Assisting. Graduates are prepared to enter positions as certified medical assistants and medical assistants.

Sec. 16. 16.

Program Admission Requirements

1. Meet minimum Accuplacer assessment scores.

			Credit Hours
BIO	120	Basic Anatomy & Physiology	4
BTE	102	Basic Keyboarding Applications	3
MOT	102	Intro. to Medical Terminology	2
MOT	104	Law & Ethics for Health Professionals	2
MOT	110	Medical Office Administration	-4
MOT	112	Advanced Medical Terminology	2
MOT	119	Medical Office Communication	3
MOT	120	Medical Office Financial Management	3
MOT	130	Insurance Billing & Coding	3
MOT	136	Intro. to Clinical Skills	2
MOT	141	First Aid/CPR: Emergency Response	2
MOT	138	Laboratory Skills	- 4
MOT	140	Clinical Skills	4
MOT	150	Pharmacology Practices	3
MOT	188	Medical Assistant Internship	5
PSY	115	Psychology of Adjustment	2
Total			48

MOT	151	Orthopedic Assisting	8
MOT	190	Orthopedic Assisting Internship	3

\* The Orthopedic Assistant Subspecialty Option (completion of MOT 151 and 190 in addition to either the Clinical or Comprehensive Medical Assistance certificate in Medical Office Technology) prepares students to assist in orthopedic procedures, including cast applications and wound care, usually in hospital or clinic settings. Graduates are prepared to enter positions as orthopedic assistants.

### Certificate in Medical Office Technology HEALTH INFORMATION SPECIALIST (MEDICAL RECORDS) EMPHASIS

#### CCD East

The Health Information Specialist program prepares students to use Microsoft Word, manage medical files, use medical coding, prepare admissions and discharge records, and assemble and analyze medical data, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical records clerks and health information specialists.

#### Program Admission Requirements

1. Meet minimum Accuplacer assessment scores.

Total			35
PSY	115	Psychology of Adjustment	2
MOT	184	Administrative Internship	2
MOT	139	Medical Records	4
MOT	131	Advanced Insurance Billing and Coding	3
MOT	124	Medical Filing	2
MOT	120	Medical Office Financial Management	3
MOT	112	Advanced Medical Terminology	2
MOT	104	Law & Ethics for Health Professionals	2
MOT	102	Intro. to Medical Terminology	2
CIS	118	Intro. to PC Applications	3
BTE	160	Data Entry I	3
BTE	102	Basic Keyboarding Applications	3
BIO	120	Basic Anatomy & Physiology	4
		Crea	lit Hours

### Certificate in Medical Office Technology MEDICAL OFFICE CLERK EMPHASIS

CCD East

The Medical Office Clerk program prepares students to use Microsoft, prepare basic medical office papers and forms, and process office files and records, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical office clerks.

#### Program Admission Requirements

1. Meet minimum Accuplacer assessment scores.

			Credit Hours
BIO	120	Basic Anatomy & Physiology	4
BTE	102	Basic Keyboarding Applications	3
CIS	118	Intro. to PC Applications	3
MOT	102	Intro. to Medical Terminology	2
MOT	104	Law & Ethics for Health Professionals	2
MOT	120	Medical Office Financial Managemen	t 3
MOT	124	Medical Filing	2
PSY	115	Psychology of Adjustment	2
Total			21

#### Certificate in Medical Office Technology MEDICAL TRANSCRIPTIONIST EMPHASIS CCD East

The Medical Transcriptionist program prepares students to use Microsoft Word and prepare insurance billing forms for and transcribe general, medical, surgical and radiological data. Graduates are prepared to enter positions as medical transcribers.

Program Admission Requirements

1. Meet minimum Accuplacer assessment scores.

			Credit Hours
BIO	120	Basic Anatomy & Physiology	4
BTE	101	Keyboarding I	4
CIS	135	Complete PC Word Processing/Word	3
MOT	102	Intro. to Medical Terminology	2
MOT	104	Law & Ethics for Health Professionals	2
MOT	112	Advanced Medical Terminology	2
MOT	119	Medical Office Communication	3
MOT	132	Medical Transcription I	4
MOT	142	Medical Transcription II	4
MOT	182	Medical Transcription Internship	3
PSY	115	Psychology of Adjustment	2

Total

#### Certificate in Medical Office Technology MEDICAL UNIT COORDINATOR (WARD CLERK) EMPHASIS CCD East

The Medical Unit Coordinator (Ward Clerk) program prepares students to use Microsoft Word; organize non-clinical functions of the nursing unit; provide liaison between physicians, nurses, patients, family members and other departments; and plan/coordinate the daily activities of the nursing unit, usually in hospital or clinic settings. Graduates are prepared to enter positions as

#### Program Admission Requirements

medical unit coordinators (ward clerks).

1. Meet minimum Accuplacer assessment scores.

			Credit Hours
BIO	120	Basic Anatomy & Physiology	4
BTE	102	Basic Keyboarding Applications	3
BTE	160	Data Entry I	3
CIS	135	Complete PC Word Processing/Word	3
MOT	102	Intro. to Medical Terminology	2
MOT	104	Law & Ethics for Health Professionals	2
MOT	134	Medical Unit Coordinating	7
MOT	184	Administrative Internship	2
PSY	115	Psychology of Adjustment	2
Total			28

33

#### **MULTIMEDIA DESIGN**

Associate of Arts Degree with a Multimedia Design Emphasis (See AA Degree, page 49)

## Associate of Applied Science Degree in Multimedia Design CCD Auraria

This program provides students with skills necessary for entry into the field of multimedia design. Students may choose to focus on specific skill areas, such as computer graphics, graphic design, music, video production or graphic arts. The Multimedia Design program allows students to develop basic skills common to all five specialties, while developing an emphasis in one.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Signature authorization on program application from MUM faculty adviser.
- All students are required to be computer literate before entering the program.

Gener	al Edu	cation Requirements	Credit Hours
SPE	115	Principles of Speech	.3
ENG	121	English Composition I	3
MAT	105	Intermediate Algebra	4
		S general education courses from the areas:	6-8
		d Humanities	
		al and Biological Sciences	
5	iocial	and Behavioral Sciences	

Total		16-18
(shares and shares and		

Major Requi	rements	
GRD 103	Intro. to Computer Graphics	3
MUM 101	Intro. to Multimedia	3
MUM 207	Intro. to Digital Videography/Editing	3
MUM 220	Photoshop	3
MUM 225	Web Page Design	3
MUM 285	Multimedia Portfolio Preparation (Speech Intensive Capstone)	3
MUM 297	Multimedia Internship	3-6
MUS 220	Computer Sound & Music	3
CWB 173	Complete Web Authoring/HTML/JavaScript	3

COMPUT	ER GRAPHICS EMPHASIS	
ART 13	1 Two-Dimensional Design — Color	3
GRD 20	3 Adobe Illustrator	3
GRD 20	9 QuarkXpress (Capstone)	3
GRD 22	0 Photoshop	3
	or	
<b>MUM 23</b>	0 Advanced Photoshop	(3)
MUM 21	0 3-D Modeling & Animation	3
Total		15

### **GRAPHIC DESIGN EMPHASIS**

GRD 100	Typography I	3
GRD 105	Typography & Layout	3
GRD 200	Design & Concept	3
GRD 206	Pre-Press for Non-Printer	3
GRD 285	Portfolio Preparation (Capstone)	3
Total		15

#### PHOTOGRAPHY EMPHASIS

PHO 101	Fundamentals of Photography	3
PHO 102	Fundamentals of Color Photography	3
PHO 107	History of Photography	3
PHO 204	Intro. to Digital Imaging	3
PHO 205	Non-Chemical Printing	3
Total		15

#### VIDEO PRODUCTION/COMMUNICATIONS EMPHASIS

COM 225	Intro. to Film	3
COM 251	Intro. to Digital Videography/Editing	3
COM 252	Intro. to Television Studio Production	3
COM 258	Advanced Digital Field Production/	
	Post Production	3
ENGL 2310	Documentary and Experimental Film & Video	3

#### Total

Courses taught at CU-Denver (interinstitutional registration is possible)

Program Total

### 61-66

15

### Certificate in Multimedia Design

CCD Auraria

CPD 103

27-30

This program provides students with skills necessary for entry into the field of multimedia design.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

#### Credit Hours 3

UKD 105	intro, to Computer Graphics	2
HUM 121	Survey of Humanities I	3
MUM 101	Intro. to Multimedia	3
MUM 210	3-D Modeling & Animation	3
MUM 220	Photoshop	3
MUM 225	Web Page Design	3
CWB 173	Complete Web Authoring/HTML/JavaScript	3

Total

Select an add	litional 6 credit hours from the following electi	ives with
MUM advis	er approval.	6
GRD 105	Typography & Layout	(3)
GRD 203	Adobe Illustrator	(3)
MUM 207	Intro. to Digital Videography/Editing	(3)
MUM 285	Multimedia Portfolio Preparation	(3)
	(Speech Intensive Capstone)	
MUM 297	Multimedia Internship	(3)

### Total

#### MUSIC

Associate of Arts Degree with a Music Emphasis (See AA Degree, page 49)

### NURSING

#### Associate of Applied Science Degree in Nursing CCD Lowry

This program prepares the graduate to practice as a professional nurse. Applicants must complete prerequisite courses with a grade of C or better prior to admission. A new class of students is accepted for admission each fall and spring semester. After the successful completion of NUR 109 during the first semester, students are eligible for state certification as a nursing aide. Successful completion of first-level courses with a grade of C or better results in a Certificate of Practical Nursing and eligibility to take the licensure exam for practical nursing. Students must obtain licensure as practical nurses and successfully complete BIO 205 and the Humanities elective before continuing into the second level of the program.

The Nursing program participates in the Colorado Nursing Articulation model through which nursing credits are accepted by other Colorado nursing programs for applicants seeking a baccalaureate degree in nursing.

Applicants are accepted first come, first served, according to the date their completed application packets are received in the Nursing Office. Applicants will be notified of their status by the end of the semester in which they apply. Applicants are selected for admission in both fall and spring semesters. More specific program information may be obtained from the Center for Health, Math and Science, 303-365-8300.

#### Program Application and Admission Requirements

- Take the CCD Basic Skills Assessment Test (BSAT) in the Testing Center in South Classroom Building 223, 303-556-3810. All prospective nursing students must take the BSAT without exception.
- 2. Attend the mandatory Nursing program orientation held the first Tuesday of every month at 5 p.m. in the Nursing Lab at the Health Sciences Center at Lowry, with a copy BSAT scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the minimum required BSAT

scores. The assessment must be met before a student will be admitted to the program regardless of previous course work. Exceptions are made by the program coordinator in unusual circumstances.

- 3. Submit the completed application packet as soon as possible. The completed application packet includes the program application form, two sealed letters of reference dated within the past 12 months, and a copy of the Basic Skills Assessment TESTscores. Incomplete packets will not be considered for admission.
- 4. Submit proof of general education courses when completed with a grade of C or better. Proof of completion of all general education courses (except BIO 205 and Humanities elective) must be submitted to the Nursing Office before enrolling into NUR courses.

### Prerequisites and/or

27

al Educ	cation Requirements Credit	Hours
201*	Human Anatomy & Physiology I	4
202*	Human Anatomy & Physiology II	4
205*	Microbiology	-4
235*	Psychology of Human Growth	
	& Development	3
121	English Composition I	3
102	Pharmacology Math	Ŧ
100+	Foundations of Nutrition	3
nities	Core Elective (See AAS curriculum for a list of	
ved co	urses)	2-3
	201* 202* 205* 235* 121 102 100+ anities	<ul> <li>235* Psychology of Human Growth</li> <li>&amp; Development</li> <li>121 English Composition I</li> </ul>

Must have been completed within the past 10 years

+ On acceptance to the program, complete just prior to

starting the first semester of NUR courses

#### Major Requirements

NUR	103	Pharmacology for Nursing	2
NUR	108	Intro. to Nursing	5
NUR	109	Basic Nursing Skills	3
NUR	110	Clinical Concepts of Nursing	4
NUR	112	Nursing Care of the Hospitalized Client I	7
NUR	114	Family-Centered Nursing I	5
NUR	208	Nursing Assessment & Diagnosis	3
NUR	210	Family-Centered Nursing II	6
NUR	211	Principles of Psychiatric Nursing	5
NUR	212	Nursing Care of Hospitalized Client II	8
NUR	214	Leadership & Management in Nursing	2
NUR	285	Comprehensive Nursing Internship (Capstone)	3
NUR	195	Success Seminar	1
Strong	gly Reco	ommended	
		Intro. to Medical Terminology	(2)

Total

78-81

### Associate of Applied Science Degree in Nursing NURSING — ADVANCED PLACEMENT

#### CCD Lowry, CCC Online

Licensed practical nurses who are graduates of approved schools of practical nursing may enter the second year of the Nursing program to become professional nurses. A new class of students is accepted for admission each fall and spring semester. The Nursing program participates in the Colorado Nursing Articulation model through which the college grants 38 practical nursing credits when the student completes articulation requirements. Educational validation through testing is required if the applicant graduated more than 10 years prior to entry into the program. Applicants must complete all general education courses and the bridge course, NUR 126, before admission into the program.

Applicants are accepted first come, first served, according to the date their completed application packet is received in the Nursing Office.

The Nursing — Advanced Placement program may be completed online. For more information, call 303-365-8300.

#### Program Application and Admission Requirements

- Take the CCD Basic Skills Assessment Test (BSAT) in the Testing Center in South Classroom Building 223, 303-556-3810. All prospective nursing students must take the BSAT without exception. The BSAT is available online by calling 303-556-3810.
- 2. Attend the mandatory Nursing program orientation held the first Tuesday of every month at 5 p.m. in the Nursing Lab at the Health Sciences Center at Lowry, with a copy BSAT scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the minimum required BSAT scores. The assessment must be met before a student will be admitted to the program, regardless of previous course work. There are no exceptions.
- 3. Submit the completed application packet as soon as possible. The completed application packet includes the program application form, two sealed letters of reference dated within the past 12 months, and a copy of the Basic Skills Assessment Test scores. Incomplete packets will not be considered for admission.
- Submit proof of successful completion of general education courses as early as possible. Proof of completion of all general education courses must be submitted to the Nursing Office before enrolling in NUR courses.
- 5. Submit copy of a valid Colorado license for practical nursing.

#### Prerequisites and/or

General Education Requirements		Credit Hours	
BIO	201*	Human Anatomy & Physiology I	4
BIO	202*	Human Anatomy & Physiology II	4
BIO	205*	Microbiology	4
PSY	235*	Psychology of Human Growth	
		& Development	3

ENG 121 English Composition I	3
Humanities Core Elective	
(See AAS curriculum for a list of approved courses)	3
NUR 126 Nursing Process Concepts & Skills	2
Credit awarded for Practical Nurse Education under	
Colorado Nursing Articulation Agreement.	31

\* Must be completed within past 10 years of entry into NUR courses

#### Major Requirements

NUR	195	Success Seminar	1	
NUR	208	Nursing Assessment & Diagnosis	3	
NUR	210	Family-Centered Nursing II	6	
NUR	211	Principles of Psychiatric Nursing	5	
NUR	212	Nursing Care of Hospitalized Client II	8	
NUR	214	Leadership & Management in Nursing	2	
NUR	285	Comprehensive Nursing Internship (Capstone)	3	

82

Total

#### Certificate in Critical Care Nursing

CCD Lowry

This program prepares the nurse for entry-level critical care nursing practice in a critical care unit. The program includes didactic courses and clinical instruction to help apply the concepts and principles learned in the classroom to the bedside.

The didactic courses include classroom lecture, discussion and case studies of all the major body systems. The content is based on the American Association of Critical Care Nurses (AACN) curriculum. Various guest speakers will share their critical care nursing expertise.

The critical care internship takes place in a critical care unit working with a critical care nurse preceptor. Critical competencies must be met with 80 percent proficiency to successfully complete the program and obtain the Critical Care Nursing certificate.

#### Program Admission Requirements

- Currently licensed with the state of Colorado as a registered nurse.
- Completion of CCN 230, or proof of prior successful completion of a basic ECG course, or pass the challenge exam with a minimum proficiency of 80 percent.
- 3. Current CPR certification.
- 4. Current vaccinations and immunizations.
- Malpractice insurance (either individual or group through employer). CCD will provide malpractice insurance for a nominal fee if requested.

#### **Application Process**

Submit a Critical Care Nursing program application packet to the Allied Health program chair at the CCD Health Sciences Center at Lowry, 1070 Alton Way, Building 849, Denver, CO 80230. The application packet must include the completed Critical Care Nursing program application, a copy of Colorado nursing license or permit to practice and one letter of reference from current employer or recent professional affiliation. Incomplete program applications will be returned to the applicant.

Call to schedule an interview with the Allied Health program chair at 303-365-8300.

#### Major Requirements Credit Hours

Total			12
CCN	285	Critical Care Clinical Internship	4
CCN	231	Care of the Critically III Patient	6
CCN	230	Basic ECG Interpretation	2

#### Certificate in Nurse Aide

CCD Lowry, CCD East

This program prepares the graduate to become a member of the health care team and provide personal care to clients under the supervision of a professional nurse. The program is completed in 10 weeks with theory, lab and clinical practice. Because the program is approved by the Colorado Board of Nursing, the graduate is eligible to take the exam to become a certified nursing assistant. The graduate may work in acute or long-term care health care organizations.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

	Credit Hours
Nurse Aide Theory and Lab	4
Nurse Aide Clinical	1
Long-Term Care Internship	(1)
	5-6
	Nurse Aide Clinical

#### Certificate in Perioperative Nursing

CCD Lowry

This program prepares the RN to practice as an operating room nurse after completing 14 credit hours of study. Students enrolled in this program are not eligible for financial aid. The program begins in the fall semester and continues through the spring semester with an individualized practicum experience. After successfully completing the program, students receive a certificate in Perioperative Nursing.

Program Admission Requirements

- Currently licensed with the state of Colorado as a registered nurse.
- 2. Current CPR certification.

- 3. Current vaccinations and immunizations.
- Malpractice insurance (either individual or group through employer). CCD will provide malpractice insurance for a nominal fee if requested.

#### **Application Process**

Submit a Perioperative Nursing program application packet to the Allied Health program chair at the CCD Health Sciences. Center at Lowry, 1070 Alton Way, Building 849, Denver, CO 80230. The application packet must include the completed Perioperative program application, a copy of Colorado nursing license or permit to practice and one letter of reference from current employer or recent professional affiliation. Incomplete program applications will be returned to the applicant.

Call to schedule an interview with the Allied Health program chair at 303-365-8300.

Major	Major Requirements Credit		
Fall S	emeste	er	
ORN	230	Perioperative Nursing	4
Sprin	g Sem	ester	
ORN	231	Perioperative Nursing Clinical Applications	3
ORN	299	Elective Perioperative Nursing	
		Clinical Applications	1-3
Total			8-11

#### **Certificate in Practical Nursing**

CCD Lowry

This program prepares the graduate to practice as a practical nurse. Applicants must complete prerequisite courses with a grade of C or better prior to admission. A new class of students will be accepted for each fall and spring semester. After the successful completion of NUR 109 during the first semester, students are eligible for state certification as a nursing aide. Successful completion of practical nursing courses with a grade of C or better results in a Certificate of Practical Nursing, eligibility to take the licensure exam for practical nursing and eligibility for admission into the second level of the AAS Nursing program to become a registered nurse. Following completion of the certificate in Practical Nursing and successful completion of the NCLEX-PN exam, students are encouraged to continue and complete the AAS in Nursing.

The Nursing program participates in the Colorado Nursing Articulation model through which practical nursing credits are accepted by other Colorado nursing programs for applicants seeking an Associate degree in Nursing.

Applicants are accepted first come, first served, according to the date their completed application packets are received in the Nursing Office. Applicants will be notified of their status by the end of the semester in which they apply. More specific program information may be obtained from the Center for Health, Math and Science.

#### Program Application and Admission Requirements

- Take the CCD Basic Skills Assessment Test (BSAT) in the Testing Center in South Classroom Building 223, 303-556-3810. All prospective nursing students must take the BSAT without exception.
- 2. Attend the mandatory Nursing program orientation held the first Tuesday of every month at 5 p.m. in the Nursing Lab at the Health Sciences Center at Lowry, with a copy of BSAT scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the minimum required BSAT scores.

The assessment must be met before a student will be admitted to the program regardless of previous course work. Exceptions are made by the program coordinator in unusual circumstances.

3. Submit the completed application packet as soon as possible. The completed application packet includes the program application form, two sealed letters of reference dated within the past 12 months, and a copy of the Basic Skills Assessment Test scores. Incomplete packets will not be considered for admission.

Submit proof of successful completion of general education courses as early as possible. Proof of completion of all general education courses must be submitted to the Nursing Office before enrolling in NUR courses.

#### Prerequisites and/or

General Education Requirements			Credit Hours
BIQ	201*	Human Anatomy & Physiology I	4
BIO	202*	Human Anatomy & Physiology II	4
PSY	235*	Psychology of Human Growth	
		& Development	3
ENG	121	English Composition I	3
NUR	102	Pharmacology Math	T
NUT	100	Foundations of Nutrition	3

\* Must have been completed within the past 10 years.

+ Complete just prior to starting the first semester of NUR courses.

Requi	rement	ts	Credit Hours
NUR	103	Pharmacology for Nursing	2
NUR	108	Intro. to Nursing	5
NUR	109	Basic Nursing Skills	3
NUR	110	Clinical Concepts of Nursing	4
NUR	112	Nursing Care of Hospitalized Client I	7
NUR	114	Family-Centered Nursing Care I	5
NUR	195	Success Seminar	1
Strong	ly Rec	ommended	
MOT	102	Intro. to Medical Terminology	(2)
Total			45

### PARALEGAL

#### Associate of General Studies Degree in Paralegal (AGS-PAR): CU-Denver

#### CCD Auraria

The following courses represent the CCD/CU-Denver paralegal transfer agreements. Students completing these degree requirements will have completed their lower-division general education requirements and will be admitted to CU-Denver as juniors in sociology or political science in the College of Liberal Arts and Sciences (CLAS).

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser and obtain an authorized signature.

Ger	ieral Education AA Core	Credit Hours
1.	English	6
	ENG 121, 122	
11.	Speech	3
	SPE 115	
m.	Mathematics (Select any 1 of the following)	3-5
	MAT 121, 125, 135, 201, 202	
IV.	Physical & Biological Sciences	
	(Select any 1 of the following)	4-5
	AST 101, 102	
	BIO 105, 111, 112	
	CHE 101, 102, 111, 112	
	GEY 111	
	PHY 105, 111, 112, 211, 212	
V.	Social & Behavioral Sciences (Select 9 credit h	ours
	from a minimum of 2 disciplines)	9
	ANT 101, 111	
	ECO 201, 202	
	GEO 105	
	HIS 101, 102, 201, 202	
	POS 105, 111	
	PSY 101, 102	
	SOC 101, 102	
VI.	Humanities (Select 9 credit hours from a minin	num
	of 2 disciplines)	9
	ART 110, 111, 112	
	HUM 121, 122, 123	
	Any foreign language 111 or higher	
	LIT 115, 201, 202	
	MUS 120, 121, 122	
	PHI 111, 112, 113	
	THE 105, 211, 212	

**General Education Sub-Total** 

34-37

Majo	r Requi	rements	
CIS	118	Intro. to PC Applications	3
CIS	135	Complete PC Word Processing/Word	3
PAR	121	Intro. to Paralegal	3
PAR	124	Legal Research	3
PAR	221	Civil Procedures	3
PAR	222	Evidence	3
PAR	280	Paralegal Internship	6
PAR	285	Paralegal II Synthesis (Capstone)	3

#### Total

Select 9 hours from any of the following			
PAR	101	Legal Writing	(3)
PAR	105	Torts	(3)
PAR	109	Property	(3)
PAR	115	Domestic Relations	(3)
PAR	126	Creditor/Debtor/Bankruptcy	(3)
PAR	201	Business Organizations	(3)
PAR	205	Probate	(3)
PAR	207	Legal Research Seminar I	(3)
PAR	208	Legal Research Seminar II	(3)
PAR	214	Administrative Law	(3)
PAR	231	Investigations I	(3)
PAR	239	Criminal Law	(3)
PAR	241	Environmental Law	(3)
PAR	252	Constitutional Law	(3)
PAR	258	Contracts	(3)
PAR	299	Independent Study	(1-3)
Total			70-73

#### Certificate in Paralegal GENERAL

#### CCD Auraria

This program prepares individuals with entry-level skills for the general paralegal field. Emphasis is placed on practical skills such as interviewing, researching and document drafting.

Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Credit Hours
CIS	118	Intro. to PC Applications	3
PAR	101	Legal Writing	3
PAR	121	Intro. to Paralegal	3
PAR	124	Legal Research	3
PAR	221	Civil Procedures	3
PAR	222	Evidence	3
PAR	280	Paralegal Internship	6
Electi	ve	PAR	3
CIS	135	Complete PC Word Processing/Word	3
PAR	185	Paralegal Synthesis I (Capstone)	3
Total			33

### Associate of Applied Science Degree in Paralegal

#### CCD Auraria

28

This program prepares students for entry into the paralegal field and for transfer to four-year institutions in Colorado. Emphasis is placed on practical skills such as interviewing, research and document drafting.

Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser and obtain an authorized signature.

Gener	al Edu	cation Requirements	Credit Hours
ENG	121	English Composition I	3
MAT	121	College Algebra	4
		or	
MAT	103	Contemporary College Mathematics	3
SPE	115	Principles of Speech	3
AAS I	Human ART 11 HUM MUS 1 Any Io	se from the following nities requirements 11, 112; CIS 118; 121, 122, 123; LIT 115, 201, 202 20, 121, 122; PHI 111, 112, 113 reign language 111 or higher; 05, 211, 212	3-5
Caland	Loide	se from the following	

Select I course from the following AAS Social & Behavioral Sciences requirements ANT 101, 111; ECO 201, 202; GEO 105; HIS 101, 102, 201, 202; PSY 101, 102; POS 105, 111; SOC 101, 102

10.00			
Ma	ior	Rei	uirement

wiaju	r Kequi	Tements	
CIS	118	Intro. to PC Applications	3
PAR	121	Intro. to Paralegal	3
PAR	124	Legal Research	3
PAR	221	Civil Procedures	3
PAR	222	Evidence	3
PAR	280	Paralegal Internship	6
CIS	135	Complete PC Word Processing/Word	3
Select	9 cour	ses from the following	25-30
PAR	105	Torts	(3)
PAR	109	Property	(3)
PAR	115	Domestic Relations	(3)
PAR	125	Tax Law	(3)
PAR	126	Creditor/Debtor/Bankruptcy	(3)
PAR	185	Paralegal Synthesis I	(3)
PAR	201	Business Organizations	(3)
PAR	205	Probate	(3)
PAR	207	Legal Research Seminar I	(E)
PAR	208	Legal Research Seminar II	(3)
PAR	214	Administrative Law	(3)
PAR	231	Investigations 1	(3)

#### DEGREE & CERTIFICATE PROGRAMS

Total			64-72
PAR	285	Paralegal Synthesis II (Capstone)	3
PAR	299	Independent Study	(1-3)
PAR	258	Contracts	(3)
PAR	252	Constitutional Law	(3)
PAR	241	Environmental Law I	(3)
PAR	239	Criminal Law	(3)

#### PHOTOGRAPHY

Associate of Arts Degree with a Photography Emphasis (See AA Degree, page 49)

#### Associate of General Studies Degree: MSCD/CU-Denver PHOTOGRAPHY (AGS-PHO)

#### CCD Auraria

The following courses represent the CCD/Metropolitan State College of Denver and CCD/CU-Denver Fine Arts transfer agreements. Students completing these degree requirements will meet their lower-division general education requirements and will be admitted to MSCD or CU-Denver as juniors in fine arts.

#### Recommended Humanities General Education Requirement: ART 111, 112, Art History I & II

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

Ger	teral Education Core	Credit Hours
I.	English	6
	ENG 121, 122	
П.	Speech	3
	SPE 115	
RI.	Mathematics (Select any 1 of the following)	3-5
	MAT 121, 125, 135, 201, 202	
IV.	Physical & Biological Sciences	
	(Select any 1 of the following)	4-5
	AST 101, 102	
	BIO 105, 111, 112	
	CHE 101, 102, 111, 112	
	GEY 111	
	PHY 105, 111, 112, 211, 212	
V.	Social & Behavioral Sciences (Select 9 credit	hours
	from a minimum of 2 disciplines)	9
	ANT 101, 111	
	ECO 201, 202	
	GEO 105	
	HIS 101, 102, 201, 202	
	POS 105, 111	
	PSY 101, 102	
	SOC 101, 102	

l	VI.	Humanities (Select 9 credit hours from a
Į		minimum of 2 disciplines)
l		*ART 110, 111, 112
l		HUM 121, 122, 123
		Any foreign language 111 or higher
l		LIT 115, 201, 202
l		MUS 120, 121, 122
l		PHI 111, 112, 113
l		THE 105, 211, 212

9

34-37

#### Must be taken as general education or extra electives

**General Education Sub-Total** 

	uirements	
ART 12		3
ART 13	0	3
PHO 10	Fundamentals of Photography	3
PHO 102	Fundamentals of Color Photography	3
PHO 102	History of Photography	3
PHO 11	Intermediate Black & White Photography	3
PHO 11	Intermediate Color Photography	3
Select I co	urse from the following	3
PHO 20	View Camera Techniques	(3)
PHO 202	Studio Lighting	(3)
PHO 20	The Fine Print	(3)
Select I co	urse from the following	3
PHO 21	Portrait Photography	(3)
PHO 21	Landscape Photography	(3)
PHO 21	Creative Process	(3)
Select a n	inimum of 1 elective course from the following	3
PHO 203	Photography Workshop	(3)
GRD 10.	Intro. to Computer Graphics	(3)
GRD 103	Typography & Layout	(3)
BUS 11	<ul> <li>Intro. to Business</li> </ul>	(3)
PHO 293	<ul> <li>Cooperative Education</li> </ul>	(3)
+ CU-De	nver will not accept these courses.	
Capstone	Course	
PHO 28	Seminar in Photography	3
Total		67-70

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#### Associate of Applied Science Degree in Photography CCD Auraria

This program provides technical and aesthetic training and the ability to think artistically which gives graduates the skills necessary to enter the field of professional photography, including free lance, portrait and creative photography. With this degree, students may transfer to four-year institutions in Colorado.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Meet with a faculty program adviser and obtain an authorized signature.

Gene	ral Ed	ucation Courses Credit	Hours
ENG		English Composition I	3
MAT		College Algebra	3-4
man	121	or	37
MAT	103	Contemporary College Mathematics	
SPE	115	Principles of Speech	3
Select	2 445	general education courses from the	
	ing 3 a		6
· · · ·		and Humanities	
	Physi	cal and Biological Sciences	
	Socia	I and Behavioral Sciences	
Majo	Requi	irements	
ART	121	Drawing I	3
ART	131	Two-Dimensional Design — Color	3
PHO	101	Fundamentals of Photography	3
PHO	102	Fundamentals of Color Photography	3
PHO	107	History of Photography	3
PHO	111	Intermediate Black & White Photography	3.
PHO	112	Intermediate Color Photography	3
Select	2 cour	ses from the following	6
PHO	201	View Camera Techniques	(3)
PHO	202	Studio Lighting	(3)
PHO	203	The Fine Print	(3)
Select	2 cour	ses from the following	6
PHO	211	Portrait Photography	(3)
PHO	212	Landscape Photography	(3)
PHO	213	Creative Process	(3)
Select	a min	imum of 9 credit hours from the following	9
ART		Painting I	(3)
ART	132	Three-Dimensional Design - Space & Form	(3)
BUS	115	Intro. to Business	(3)
GRD	103	Intro. to Computer Graphics	(3)
GRD	105	Typography & Layout	(3)
GRD	220	Photoshop	(3)
PHO	290	Special Topics	(1-3)
PHO	295	Job Search Workshop	(1)
PHO		Cooperative Education (variable credit)	(3-6)
PHO	285	Seminar in Photography (Capstone)	3
Total			60-61

### Certificate in Photography

#### CCD Auraria

This program provides technical and aesthetic training. and gives students the entry-level skills necessary in the field of professional photography, including free lance, portrait and creative photography.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

			Credit Hours
ART	121	Drawing I	3
ART	131	Two-Dimensional Design - Color	3
ENG	121	English Composition	3
PHO	101	Fundamentals of Photography	3
PHO	102	Fundamentals of Color	3
PHO	111	Intermediate Black & White	3
PHO	112	Intermediate Color Photography	3
Select	a mīn	imum of 6 credits from the following	6
GRD	105	Typography & Layout	(3)
BUS	115	Intro. to Business	(3)
PHO	201	View Camera Techniques	(3)
PHO	202	Studio Lighting	(E)
PHO	203	The Fine Print	(E)
PHO	205	Photography Workshop	(3)
PHO	211	Portrait Photography	(3)
PHO	213	Creative Process	(3)
PHO	285	Seminar in Photography	(3)
PHO	297	Cooperative Education	(3-6)
РНО	185	Advanced Photography (Capstone)	3
Total			30

#### PHYSICS

Associate of Science Degree with a Physics Emphasis (See AS Degree, page 54)

### POLITICAL SCIENCE

Associate of Arts Degree with a Political Science Emphasis (See AA Degree, page 49)

#### PSYCHIATRIC TECHNICIAN

#### CCD Lowry

This program prepares the student to practice as a psychiatric technician in specialized health care settings with client populations experiencing psychiatric disorders and behavior disruptions secondary to mental health issues.

#### Certificate in Psychiatric Technician — Singular Emphasis, Mental Illness

#### CCD Lowry

This certificate program is under review. Please contact the Center for Health, Math and Science, Health Sciences Center, 303-365-8300, for additional information.

### Certificiate in Psychiatric Technician — Dual Emphasis, Developmental Disabilities and Mental Illness

CCD Lowry

This certificate program is under review. Please contact the Center for Health, Math and Science, Health Sciences Center, 303-365-8300, for additional information.

### Psychiatric Technician Certificate — Advanced Placement, Mental Illness

CCD Lowry

Graduates of Colorado Board of Nursing-approved programs, with an emphasis in Developmental Disabilities (DD) or Licensed Practical Nurse (LPN), may enter the psychiatric technician program for Mental Illness certificate. This program is offered when a class size of 12 or more students is confirmed.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program. All prospective students must take the Basic Skills Assessment Test. There are no exceptions.
- Contact the program admissions assistant at 303-365-8301 to obtain a program application.
- 3. Submit a copy of a current Colorado license as Psychiatric Technician with Developmental Disabilities, the CCD Psychiatric Technician program application with official transcripts of previous college course work and two sealed letters of reference dated within the past two years (one letter must be from a supervisor or teacher) to the program admissions assistant. Students also must send an official transcript to CCD's Admissions, Registration and Records, Campus Box 201, PO Box 173363, Denver, CO 80217-3363.

Majo	Major Requirements Cred		
Cred	its rece	ived from previous Developmental	
		training	14
LPT	110	Nursing Concepts for Advanced Placement PT	1
LPT	111	Principles of Psychiatric Nursing	7
Total			22

### PSYCHOLOGY

Associate of Arts Degree with a Behavioral Sciences Emphasis, Psychology Emphasis

(See AA Degree, page 48)

### PUBLIC SAFETY

### Associate of General Studies Degree in Public Safety

CCD Auraria

The Public Safety degree program is in development. Please contact the Center for Business and Technology, 303-556-2487, for additional information.

### RADIATION THERAPY

### Certificate in Radiation Therapy

CCD Lowry

The Radiation Therapy program is the only program in Colorado preparing the radiologic technologist (RT) or the registered nurse (RN) for and entry-level position as a radiation therapist. The radiation therapist works in a hospital or clinic and is an important team member who applies ionizing radiation for therapeutic applications.

The 12-month, 3-semester certificate program begins each year in May. CCD's application for JRCERT Program Accreditation has been submitted. Course work includes classroom lecture and discussion with clinical internship experiences in one of 10 radiation oncology cancer centers located along the front-range. Graduates earn a certificate in Radiation Therapy and, on completion, are eligible to apply for registration by the American Registry of Radiologic Technologists (ARRT).

Qualified applicants are accepted first come, first served, using the date the application portfolio is received and on assignment of a clinical internship site. Deadline for application is March 1, or until enrollment is met.

#### Program Application and Admission Requirements

- 1. Completion of BIO 201, 202 and MAT 121 with a grade of C or better.
- 2. Copy of current ARRT certification or RN license.
- Submit a completed application to the college. Applications are available in South Classroom Building 133, online at ccd.rightchoice.org, or by calling 303-556-2600 to have an application mailed.
- Take the CCD Basic Skills Assessment Test in the Testing Center in South Classroom Building 223, 303-556-3810. Degreed applicants will be exempt from the testing requirement.
- 5. Attend a Radiation Therapy information and advising session held the third Tuesday of every month at 4 p.m. at the CCD Health Sciences Center at Lowry, 1070 Alton Way, Building 849, Denver. Applicants will be advised about the program, eligibility for admission and receive a Radiation Therapy program application.
- Submit the completed Radiation Therapy program application and portfolio, including: official transcripts from your RT or

RN program of study with a grade of C or better. If less than a 3.0 cumulative GPA is attained, you must include a statement about what steps you would take to ensure your success; a copy of current ARRT certification or RN license; three professional letters of reference; and responses to the following questions.

- a. What are your professional interests and goals?
- b. What personal characteristics do you believe a person should have to be successful as a radiation therapist?

Majo	Requi	rements	Credit Hours
RTH	221	Principles of Radiation Therapy 1	3
RTH	281	Internship I	7
RTH	241	Principles of Radiation Therapy II	2
RTH	242	Radiation Physics	3
RTH	243	Oncology Principles and Practice	4
RTH	282	Internship II	8
RTH	261	Treatment Planning	3
RTH	262	Radiation Biology	2
RTH	283	Internship III	11
RTH	285	Radiation Therapy Capstone	2
Total			45

### RADIOLOGY TECHNOLOGY

#### Associate of Applied Science Degree in Radiology Technology CCD Lowry

The Radiology Technology program prepares the student for an entry-level position as a radiographer in a variety of medical settings, including the hospital. The program consists of five semesters of course work that includes classroom, laboratory and clinical internship experience. Graduates earn an AAS degree and are eligible to apply for registration by the American Registry of Radiology Technologists (ARRT).

The program begins fall semester of each year. Information and requirements can be obtained from the Auraria Educational Planning and Advising Center or the Radiology Technology program coordinator at CCD Lowry, 303-365-8300. Students who are interested in articulating their career with a Bachelor of Science degree should contact the degree-awarding institution for information about transferable prerequisite course work.

#### Program Admission Requirements

- There are three steps for admission into the Radiology Technology program.
- Meet minimum assessment scores required for the general education courses in the program. All prospective Radiology Technology students must take the Basic Skills Assessment Test(BSAT). The BSAT scores are REA 83, ENG SS 85, EA 40, Study Skills 70 percent. The assessment scores must be met before a student can receive an application to the Radiology Technology program.
- To receive an application, students must attend a program information and advising meeting held the third Tuesday of

each month at 5 p.m. at the Health Sciences Center at Lowry. Bring a copy of the BSAT results and any student transcripts of course work at CCD or other colleges attended.

4. Complete the following general education requirements with a grade of C or better prior to starting the program. (Applicants are accepted for admission by the date both the BSAT scores are met and all program prerequisite course work is completed. It is important to complete steps 1 and 2 as soon as possible to receive an early date on the program application and to begin a Radiology Technology student file.)

Gener	al Edu	cation Requirements	Credit Hours
ENG	121	English Composition I	3
Select	either 1	BIO 120, or both BIO 201 and 202	4-8
BIO	120*	Basic Anatomy & Physiology or both	(4)
BIO	201*	Anatomy & Physiology I and	(4)
BIO	202*	Anatomy & Physiology II	(4)
Select	1 cours	e from the following	3.4
MAT	103	Contemporary College Mathematics	(3)
MAT	105	Intermediate Algebra	(4)
MAT	121	College Algebra	(4)
MAT	135	Intro. to Statistics	(3)
Select	1 cours	e from the following	3
SOC	101	Intro. to Sociology I	(3)
PSY	101	General Psychology I	(3)
	235		
		& Development	(3)

\* Must have been completed within the past five years

### RADIOLOGY TECHNOLOGY PROGRAM

Fall Sem	ester
----------	-------

RTE	101	Intro. to Radiography/Patient Care	3
RTE	121	Radiologic Procedures I	3
RTE	141	Radiographic Equipment/Imaging 1	3
RTE	181	Radiographic Internship I	5
RTE	195	Success Seminar	3

#### Spring Semester

RTE	111	Radiographic Patient Care II	2
RTE	122	Radiographic Procedures II	3
RTE	142	Radiographic Equipment/Imaging II	3
RTE	182	Radiographic Internship II	5

### Summer Semester

|--|

Fall S	emeste	er	
RTE	221	Advanced Medical Imaging	3
RTE	231	Radiation Biology/Protection	2
RTE	281	Radiographic Internship IV	8
Sprin	g Sem	ester	
RTE	282	Radiographic Internship V	11
RTE	289	Radiography Capstone	3
Total			75-80

## Certificate in Limited Scope Radiologic Technology

CCD Lowry

This program prepares the student as a limited scope radiographer who practices in the physician's office or small clinic. Limited scope radiographers are not prepared to practice in the hospital. The program consists of three semesters of course work that includes classroom, laboratory and clinical internship experience. Graduates earn a certificate and are eligible to take the state of Colorado Limited Scope Radiography exam.

The program begins fall semester of each year. Information and requirements can be obtained from the Auraria Educational Planning and Advising Center, or the Radiologic Technology program chair at the Health Sciences Center at CCD Lowry, 303-365-8300.

#### Program Admission Requirements

- There are two steps for admission into the Radiologic Technology program.
- Meet minimum assessment scores or prerequisites required for general education courses in the program. All prospective Radiologic Technology students must take the Basic Skills Assessment Test (BSAT). The assessment must be met before a student will be admitted to the program, regardless of previous course work. There are no exceptions.

To get an application, students must meet with a Radiologic Technology program adviser. Call 303-365-8300 to make an appointment. Bring a copy of the Basic Skills Assessment Test results and student transcripts of course work at CCD, or other colleges attended.

It is important to submit an application as soon as the above qualifications are met. Applicants are accepted for admission by the date the completed application packet is received.

A completed application packet includes the program application, copies of BSAT results, previous college transcripts and an educational plan.

Complete the following general education requirements with a C grade or better prior to starting the program.

Gener	al Edu	cation Requirements	Credit Hours
ENG	121	English Composition I	3
Select	either i	BIO 120, or both BIO 201 and 202	4-8
BIO	120*	Basic Anatomy & Physiology or both	(4)
BIO	201*	Anatomy & Physiology I and	(4)
BIO	202*	Anatomy & Physiology II	(4)
Select	1 cours	e from the following	3-4
MAT	103	Contemporary College Mathematics	(3)
MAT	105	Intermediate Algebra	(4)
MAT	121	College Algebra	(4)
MAT	135	Intro. to Statistics	(3)
Select	1 cours	e from the following	3
SOC	101	Intro. to Sociology I	(3)
PSY	101	General Psychology I	(3)
PSY	235	Psychology of Human Growth	
		& Development	(3)

\* Must have been completed within the past five years

#### LIMITED SCOPE RADIOLOGIC TECHNOLOGY PROGRAM Fall Semester

RTE	101	Intro. to Radiography/Patient Care	3
RTE	121	Radiologic Procedures I	3
RTE	141	Radiographic Equipment/Imaging I	3
RTE	181	Radiographic Internship I	5
RTE	195	Success Seminar	1
Sprin	g Sem	ester	
RTE	111	Radiographic Patient Care II	2
RTE	122	Radiographic Procedures II	3
RTE	142	Radiographic Equipment/Imaging II	3
RTE	182	Radiographic Internship II	5
Sumr	ner Sei	mester	
RTE	120	Radiography Limited Scope Internship	3
RTE	185	Radiography Limited Scope Capstone	2
Total			46-51

### **RECREATIONAL ASSISTANT**

The Health and Wellness Management degree program is under review. Please contact the Center for Health, Math and Science, Health Sciences Center, 303-365-8300, for additional information.

### SOCIOLOGY

Associate of Arts Degree with a Behavioral Sciences Emphasis, Sociology Emphasis

(See AA Degree, page 48)

### SPEECH

Associate of Arts Degree with a Speech Emphasis (See AA Degree, page 49)

### SURGICAL TECHNOLOGY

### Certificate in Surgical Technology

CCD Lowry

This program begins the summer term and continues for 12 months. Applications and all applicable documentation and test results need to be submitted to the Allied Health program chair by March 1 of each calendar year for the program starting the following summer. Admission information may be obtained from the Auraria Educational Planning and Advising Center or CCD Health Sciences Center at Lowry, 1070 Alton Way, Building 849. Enrollment is limited to 20 students.

The Surgical Technology program at CCD depends on voluntary affiliation by clinical affiliates for clinical practicum spaces. Students must recognize that due to the need to use all available clinical resources, they may have to travel some distance to sites outside the Denver metropolitan area.

#### Program Admission Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program. BIO and ENG prerequisites must be competed with a grade of C or better prior to beginning Surgical Technology course work. MOT 102 and STE 100 may be taken concurrently.
- All prospective Surgical Technology students must take the Basic Skills Assessment Test (BSAT). There are no exceptions.
- All applicants must schedule an interview with the program coordinator. Please call 303–365-8300 to schedule an interview.
- 4. All applicants must submit two sealed letters of reference dated within the past two years (one letter must be from a supervisor or teacher), a copy of a high school diploma or GED and an official transcript from any other college attended. Students also must send an official transcript to CCD's Admissions, Registration and Records, Campus Box 201, PO Box 173363, Denver, CO 80217-3363.
- 5. Application materials must be submitted by March 1 to be considered for admission into the class beginning summer of the academic year. Eligible applicants are selected first come, first served, based on the dates applications are received in the Surgical Technology Office at the CCD Health Sciences Center at Lowry, 1070 Alton Way, Building 849. Applicants not accepted are considered for the following year.

Gener	al Edu	cation Requirements Cr	edit Hours
Select	either	BIO 120, or both BIO 201 and 202	4-8
BIO	120	Basic Anatomy & Physiology or both	(4)
BIO	201	Anatomy & Physiology I and	(4)
BIO	202	Anatomy & Physiology II	(4)
ENG	121	English Composition 1	3
Sumn	ner Se	mester	
MOT	102	Intro. to Medical Terminology	2
STE	100	Intro. to Surgical Technology	5
Fall S	emeste	er	
STE	105	Pharmacology for Surgical Technology	2
STE	106	Surgical Skills	7
STE	107	Surgical Instrumentation	3
Sprin	g Sem	ester	
STE	109	Surgical Technology Clinical Practicum I	3
STE	110	Surgical Technology Clinical Practicum I	6.16.
		(Capstone)	8
STE	115	Surgical Pathology & Intervention	4
Total			41-45

#### TEACHER EDUCATION

# Associate of General Studies Degree in Elementary Education (AGS-EE)

CCD Auraria

The following courses represent the new CCD/Metropolitan State College of Denver Elementary Education (EE) Teacher Education 60-plus-60 transfer agreement. Students completing degree requirements will be admitted to MSCD as juniors in the EE Teacher Education program. Other transfer options are available.

All interested students should call the Education program adviser at 303-556-4278 for more details and to select appropriate electives.

Program Admission and Graduation Requirements

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Maintain a cumulative GPA of 2.0.
- Completion of Major Requirement courses with a grade of C or better is required to be eligible for graduation/transfer.

Gener	al Edu	cation Core Credit	Hours
ENG	121	English Composition I	3
ENG	122	and the second	3
SPE	115	Principles of Speech	3
MAT	155	Math for Elementary Educators 1	4
MAT	156	Math for Elementary Educators II or	4
MAT	121	College Algebra	
PHY	105	Conceptual Physics	4
GEO	105	World Regional Geography	3
HIS	201	United States History I	3
ART	110	Art Appreciation or	3
MUS	120	Music Appreciation	
Major	Requi	rements	
ECE	236	Child Growth & Development	4
EDU	200	Expressive Arts in the Elementary Classroom	3
EDU	210	Social Foundations & Multicultural Education	4

EDU 216 Children's Literature EDU 285 **Educational Technology** Portfolio Development (Capstone)

Courses selected with adviser approval to satisfy MSCD's lower-division major requirements, per most recent MSCD Transfer Guide.

OR, for those students needing Core Stamp for transfer to another institution, 3 credits of Social Science core and 6 credits of Humanities core are required.

Total 60

### **Certificate in Teacher Education** PARAEDUCATOR, SPECIAL EDUCATION EMPHASIS

CCD North

The Paraeducator certificate, with an emphasis in Special Education, is completed in two, 15-week semesters. It prepares students to provide services to special populations in the public school or agency environment. Working under the direct supervision of a teacher or other professional, the special education paraeducator communicates with, supervises and instructs students in different environments, including general education classrooms and the community. Employment often requires a Colorado Bureau of Investigation background check.

Certificate program credits apply toward the Associate of General Studies degree in Elementary Education that transfers to a bachelor's degree and a K-6 teaching license. See an adviser for specific transferability requirements.

Program Admission and Graduation Requirements

- 1. Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.
- 2. Completion of EDU 110, 114 and 211 with a C or better is required to be eligible for this certificate.

			Credit I	lours	
1	CIS	118	Intro. to PC Applications	3	
	EDU	110	Overview of Special Populations	4	
	EDU	111	Comm. Skills/Special Populations	3	
	EDU	112	Health & Safety Issues in Schools	1	
	EDU	114	Student Behavior Management	3	
	EDU	115	Paraeducator Practicum I	3	
	EDU	141	Basic Instructional Techniques	3	
	EDU	210	Social Foundations & Multicultural Education	4	
1	EDU	211	Paraeducator Practicum II (Capstone)	3	
	PSY	115	Psychology of Adjustment	2	
	Total			29	

Total

### **Certificate in Teacher Education** PARAEDUCATOR, BILINGUAL EMPHASIS

CCD North

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3

13

The Paraeducator certificate with an emphasis in bilingual education is for either pre-service or inservice paraeducators working with children in metro schools. The program emphasizes classroom instruction and hands-on, supervised experience of the paraprofessional's primary instructional and supervision duties.

Certificate program credits apply toward the Associate of General Studies degree in Elementary Education that transfers to a bachelor's degree and a K-6 teaching license. See an adviser for specific transferability requirements.

For more information call 303-556-3807 or 303-556-6464.

Program Admission Requirements

- 1. Acceptance into Collaborative Bilingual Education Teacher Training (CBETT) grant.
- 2. Meet minimum assessment scores, or completion of REA 060, ENG 060 and MAT 060 with C or better.

		Credi	Hours	
EDU	111	Communication Skills/Special Populations	3	
EDU	114	Student Behavior Management	3	
EDU	141	Basic Instructional Techniques	3	
EDU	251	Intro. to Bilingual Education	4	
EDU	261	Literacy in the Multicultural/		
		Multilingual Classroom	3	
Select	t a min	imum of 6 credits from the following	6	
SPA	111	First-Year Spanish 1	(5)	
SPA	112	First-Year Spanish II	(5)	
SPA	211	Second-Year Spanish 1	(3)	
SPA	212	Second-Year Spanish II	(3)	

22-26

Total

### Certificate in Teacher Education PARAEDUCATOR, LITERACY EMPHASIS

#### CCD Auraria, CCD North

The Paraeducator certificate, with an emphasis in literacy instruction, is for either pre-service or inservice paraeducators working with children in grades K-6. The program emphasizes classroom instruction and hands-on, supervised experience of the paraprofessional's primary instructional and supervision duties. Certificate program credits apply toward the Associate of General Studies degree in Elementary Education that transfers to a bachelor's degree and a K-6 teaching license. See an adviser for specific transferability requirements. Courses may be taught on the CCD Auraria or CCD North campuses, as well as off-site locations through Extended Campus to accommodate cohort groups. Contact the Education program coordinator at 303-556-4278 or CCD's Extended Campus at 303-556-3573 to develop a cohort program at your school site.

#### Program Admission Requirements

 Meet minimum assessment scores, or completion of REA 060, ENG 060 and MAT 060 with C or better.

			Credit Hours
ECE	236	Child Growth & Development	4
EDU	111	Comm. Skills/Special Populations	3
EDU	114	Student Behavior Management	3
EDU	115	Paraeducator Practicum I	3
EDU	141	Basic Instructional Techniques	3
EDU	211	Paraeducator Practicum II	3
EDU	240	Literacy Instructional Techniques	4
EDU	261	Literacy in the Multicultural/	
		Multilingual Classroom	3
ECE	268	Curriculum: Violence Prevention	3
Total			29

#### THEATRE

Associate of Arts Degree with a Theatre Emphasis (See AA degree, page 50)

### TRADES AND INDUSTRY

#### Associate of Applied Science Degree in Airframe/Power Plant CCD Auraria

Students must register for airframe/power plant courses at Emily Griffith Opportunity School. On completion of airframe/power plant courses, students will receive an FAA certificate. With an additional 15 credit hours at CCD, students may receive an AAS degree. Other FAA certificates may be substituted for Emily Griffith Opportunity School courses. This program also allows students to readily transfer into a Bachelor of Science degree program with a major in Technical and Industrial Administration. Please see the dean in the Center for Business and Technology for information on this program.

#### Program Admission Requirements

 Meet minimum assessment scores or prerequisites required for general education courses in the program.

#### Associate of Applied Science Degree in Trades CCD Auraria

The Trades AAS degree program consists of a maximum of 58 credit hours of trade-specific credits. Students may earn these credits via apprenticeship training (classroom and on-thejob hours) or technical education course work and training, plus a maximum of 20 credit hours of core general education courses at CCD. For those registered apprentices who complete a threeyear registered apprenticeship program, 20 CCD credit hours are required. For those completing a four-year or five-year apprenticeship program, 17 CCD general education credits are required. Students completing certificate course sequences and wishing to pursue the AAS degree must complete a minimum of 25 credit hours of general education credit and a minimum of 60 credit hours as noted below.

This program is offered jointly by CCD, Emily Griffith Opportunity School and the Joint Apprenticeship Training Committee. For a list of Emily Griffith's trades and industrial programs call 303-575-4702 or visit the Web site at www.egos-school.com. Students enrolled in the apprenticeshiptraining part of this program are not eligible for financial aid from CCD.

Program Admission Requirements

THE 105, 211, 212

- Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Official transcript showing completion of Emily Griffith Opportunity School's Apprenticeship program.

Apprenticeship Training	Credit Hours
Four- to five-year training and Capstone	43
Three-year training and Capstone	40
General Education Requirements	
ENG 121 or 131	3
MAT 103 or 121	3 4
Select 1 course from the following AAS Physical &	
Biological Sciences requirements	4.5
AST 101, 102; BIO 105, 111, 112*	
CHE 101, 102, 111, 112; GEY 111;	
PHY 105, 111, 112, 211, 212	
Select 1 course from the following	
AAS Humanities requirements	3-5
ART 111, 112; CIS 118;	
HUM 121, 122, 123; LIT 115, 201, 202	
MUS 120, 121, 122; PHI 111, 112, 113	
Any foreign language 111 or higher	

Select 1 course from the following AAS Social & Behavioral Sciences requirements 3		Select an with MTC
ANT 101, 111; ECO 201, 202; GEO 105; HIS 101, 102, 201, 202; PSY 101, 102; POS 105, 111; SOC 101, 102		Total
SPE 115 Intro. to Speech (3-year apprenticeship program only)	3	CNC Mac CCD Nort

Total

#### Associate of Applied Science Degree In Trades CNC MACHINE TOOL OPERATOR

#### CCD North

This program prepares the student as an entry-level specialist to work with CNC lathes, CNC mills and most other machine tools. Students are prepared to work with common metrology processes, various types of drawings and prints, AutoCAD software and CNC programming. Graduates are prepared to enter positions as CNC machine tool operators.

#### Program Admission Requirements

- 1. Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Or, in place of the above requirements, have completed the CNC Machine Tool Operator certificate program.

	Gener	al Edu	cation Requirements	Credit Hours
	CIS	118	And the set of the set	3
	ENG	121		3
			or	
	ENG	131	Technical Writing I	
1	MAT	109	Intermediate Algebra	4
1	SPE	115	Principles of Speech	3
	Select	one co	urse from the following	2-3
	ECO	201	Principles of Macroeconomics	(3)
	POS	105	Intro. to Political Science	(3)
	PSY	115	Psychology of Adjustment	(2)
3	Major	Requi	rements	
			Intro: to Machine Shop	2
1	MTO	131	Machine Math & Prints 1	3
3	MTO	132	Mills	4
	MTO	133	Engine Lathes I	4
1	MTO	140	Metrology	2
1	MTO	141	Mills II	4
	MTO	142	Machine Math & Prints II	1
3	MTO	143	Engine Lathes II	3
۰,	MTO	221	Engine Lathes III	2 3
1	MTO	223	Job Shop Machining I	3
1	MTO	250	Auto Cad I	3
1	MTO	251	CNC Operations (Capstone)	3
	MTO	252	CNC Principles	-4
1	MTO	253	CNC Mathematics I	2

Select an additional 6 or more credit hours	
with MTO adviser approval	

6

61-63

#### chine Tool Operator Certificate

63-68

CNC Machine Tool Operator is a program designed for completion in two, 17-week semesters. It prepares students with the job-entry skills necessary to perform most operations on the vertical mill, horizontal mill, lathe, grinder/shaper, CNC mill and CNC lathe. Graduates are prepared to enter positions as CNC machine tool operators.

All CNC Machine Tool Operator certificate program credits apply toward the requirements of the AAS degree in Trades, CNC Machine Tool Operator.

#### Program Admission Requirements

1. Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math & Prints I	3
MTO 132	Mills )	4
MTO 133	Engine Lathes I	4
MTO 140	Metrology	2
MTO 141	Mills II	4
MTO 142	Machine Math & Prints II	-C
MTO 143	Engine Lathes II	3
MTO 221	Engine Lathes III	2
MTO 223	Job Shop Machining I	3
MTO 250	Auto Cad I	3
MTO 251	CNC Operations (Capstone)	3
MTO 252	CNC Principles	4
MTO 253	CNC Mathematics 1	2
PSY 115	Psychology of Adjustment	1

#### Total

#### Machine Tool Operator Certificate

CCD North

Machine Tool Operator is a program designed for completion in two, 15-week semesters. It prepares students with the jobentry skills necessary to perform most operations on the vertical mill, horizontal mill, lathe and grinder/shaper. Graduates are prepared to enter positions as machine tool operators.

All Machine Tool operator certificate program credits apply toward the CNC Machine Tool Operator certificate program requirements.

Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math & Prints I	3
MTO 132	Mills I	4
MTO 133	Engine Lathes 1	4
MTO 140	Metrology	2
MTO 141	Mills II	.4
MTO 143	Engine Lathes II (Capstone)	3
MTO 223	Job Shop Machining 1	3
PSY 115	Psychology of Adjustment	1
Total		26

### Lathe Operator Certificate

CCD North

Lathe Operator is a program designed for completion in one, 15-week semester. It prepares students with the job-entry skills necessary to perform most operations on the lathe. Graduates are prepared to enter positions as lathe operators.

All Lathe Operator certificate program credits apply toward the Machine Tool Operator certificate program requirements,

#### Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math & Prints I	3
MTO 133	Engine Lathes I	4
MTO 140	Metrology	2
MTO 143	Engine Lathes II	3
MTO 223	Job Shop Machining I (Capstone)	2
Total		16

#### Mill Operator Certificate

#### CCD North

Mill Operator is a program designed for completion in one, 15-week semester. It prepares students with the job-entry skills necessary to perform most operations on mills. Graduates are prepared to enter positions as mill operators.

All Mill Operator certificate program credits apply toward the Machine Tool Operator certificate program requirements.

Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math & Prints I	3
MTO 132	Mills I	4
MTO 140	Metrology	2
MTO 141	Mills II	4
MTO 223	lob Shop Machining I (Capstone)	2
Total		17

### Associate of Applied Science Degree In Trades FABRICATION WELDER

#### CCD North

This program prepares the student as an entry-level specialist to work with most operations in oxy-acetylene welding, shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding on metals that range from heavy plate and pipe to thingauge sheet metals. Various steels and aluminum metal are used. Graduates are prepared to enter positions such as arc welders, industrial welders, production welders, fabrication welders, and TIC or MIG welders.

Program Admission Requirements

- 1. Meet minimum assessment scores or prerequisites required for general education courses in the program.
- 2. Or, in place of the above requirements, have completed the Fabrication Welder certificate program.

Gener	al Edu	cation Requirements	Credit Hours
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition 1	3
		or	
ENG	131	Technical Writing	
MAT	109	Intermediate Algebra	4
SPE	115	Principles of Speech	3
Select	one co	urse from the following	2-3
ECO	201	Principles of Macroeconomics	(3)
POS	105	Intro. to Political Science	(3)
PSY	115	Psychology of Adjustment	(2)
Majo	Requi	rements	
WEF	100	Oxyacetylene Welding I	1
WEF	102	Air Arc Gouging	2
WEF	108	SMAW Set Up & Padding	-4
WEF	109	SMAW I	4
WEF	110	SMAW II	4
WEF	111	SMAW Structural I	4
WEF	112	SMAW Structural II	3
WEF	114	Welding Math & Prints I	3
WEF	130	GMAW Set Up	2
WEF	203	Pipe Welding	3
WEF	205	GMAW Thin Gauge & Structural	4
WEF	207	GTAW Set Up	2

Total	adviser approvat	3
	additional 3 or more credit hours adviser approval	
WEF 20	8 GTAW Thin Gauge & Alloy (Capstone)	.4

#### **Fabrication Welder Certificate**

CCD North

Fabrication Welder is a program designed for completion in two, 17-week semesters. It prepares students with the job-entry skills necessary to perform most operations in oxyacetylene welding, shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding on materials that range from heavy plate to thin-gauge sheet metals and are composed of various steels and aluminum. Graduates are prepared to enter positions as arc, plate, industrial, production, fabrication, TIG or MIG and construction welders.

The Fabrication certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Trades, Fabrication Welder.

#### Program Admission Requirements

 Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 030.

			Credit Hours
PSY	115	Psychology of Adjustment	T
WEF	100	Oxyacetylene Welding I	3
WEF	102	Air Arc Gouging	2
WEF	108	SMAW Set Up & Padding	4
WEF	109	SMAW I	4
WEF	110	SMAW II	4
WEF	111	SMAW Structural I	-4
WEF	112	SMAW Structural II	3
WEF	114	Welding Math & Prints I	3
WEF	130	GMAW Set Up	2
WEF	203	Pipe Welding	3
WEF	205	GMAW Thin Gauge & Structural	4
WEF	207	GTAW Set Up	2
WEF	208	GTAW Thin Gauge & Alloy (Capstone)	4
1.1.4			

#### Total

#### Arc Welder Certificate

CCD North

Arc Welder is a program designed for completion in two, 15week semesters. It prepares students with the job-entry skills necessary to perform most operations in oxyacetylene and shielded metal arc welding on various sizes of steel materials. Graduates are prepared to enter positions as arc, plate and construction welders.

All Arc Welder certificate program credits apply toward the Fabrication Welder program requirements. Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

			Credit Hours
P5Y	115	Psychology of Adjustment	1
WEF	100	Oxyacetylene Welding I	3
WEF	102	Air Arc Gouging	2
WEF	108	SMAW Set Up & Padding	.4
WEF	109	SMAW I	4
WEF	110	SMAW II	4
WEF	111	SMAW Structural I	4
WEF	112	SMAW Structural II (Capstone)	3
WEF	114	Welding Math & Prints I	3
Total			28

#### **Basic Welder Certificate**

CCD North

Basic Welder is a program designed for completion in one, 15-week semester. It prepares students with job-entry skills necessary to perform most operations in shielded metal arc welding on common sizes of steel materials. Graduates are prepared to enter positions as welders and arc welders.

All Basic Welder certificate program credits apply toward the Arc Welder certificate program requirements.

#### Program Admission Requirements

 Meet minimum assessment scores, or co-enrollment in REA 060 and/or MAT 030.

Total			16
WEF	111	SMAW Structural 1 (Capstone)	4
WEF	110	SMAW II	4
WEF	109	SMAW I	4
WEF	108	SMAW SetUp & Padding	4
			Credit Hours

#### VETERINARY TECHNOLOGY

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#### Associate of Applied Science Degree in Veterinary Technology CCD LOWRY

This program prepares the graduate to practice as a veterinary technician. The program is designed for completion in four semesters. Completion of the curriculum with a grade of C or better results in an Associate of Applied Science degree. At program completion, and on program accreditation, students are eligible for a state certification examination. This exam is not mandatory for the state of Colorado at present, but may assist in employment opportunities.

Veterinary technicians are paraprofessional members of a veterinary team, assisting a doctor of veterinary medicine. Veterinary technicians perform a variety of tasks, including preparing examination rooms and surgery suites, holding and restraining animals during the exam and/or treatment, collecting specimens, performing routine laboratory procedures, taking diagnostic X-rays, administering medication or treatments, assisting in surgery, performing office skills, maintaining inventory of supplies and assisting with client education.

Career opportunities for Veterinary technicians are available in a variety of settings, including private veterinary practices, research laboratories, kennels, zoos, and local, state and federal agencies. These experiences can lead to other job opportunities such as sales, hospital administration, teaching in a Veterinary Technology program and animal advocacy.

The Veterinary Technology program at CCD is partnered with the Animal Assistance Foundation. Clinical experience will be obtained at various metro-Denver-area veterinary clinics and shelters.

Application materials must be submitted by April 1 to be considered for admission into the class beginning fall of the academic year. Eligible applicants are selected first come, first served, based on the dates applications are received by the program coordinator at the CCD Health Sciences Center at Lowry, 1070 Alton Way, Building 849. Applicants not accepted are considered for the following year. Graduate exit competency is measured by successful completion of the capstone course, VET 285, Veterinary Internship II.

#### Program Admission Requirements

- 1. Completion of BIO 111 or equivalent with a grade of C or better.
- Take the CCD Basic Skills Assessment Test (BSAT) in the Testing Center in South Classroom Building 223, 303-556-3810.
   Meet minimum assessment scores or prerequisites required for general education courses in the program.
- Schedule an appointment with the Veterinary Technology program adviser to obtain program application. Call the Health Sciences Center at CCD Lowry at 303-365-8300.

Gener	al Edu	cation Requirements	Credit Hours
BIO	205	Microbiology	4
CIS	118	Intro. to PC Applications	3
ENG	121	English Composition I	3
MAT	103	Contemporary College Mathematics	3
MOT	102	Intro. to Medical Terminology	3 2 3
PSY	101	Intro. to Psychology	3
		or	
SOC	101	Intro. to Sociology	
SPE	115	Principles of Speech	3
First S	Semest	er	
VET	101	Intro. to Veterinary Technology	4
VET	195	Success Seminar	1
VET	205*	Veterinary Anatomy & Physiology I	4

#### Second Semester

JULU	nu sen	icster	
VET	111	Diagnostic Imaging	3
VET	120	Client, Employee Relations/Office Procedures	2
VET	206	Veterinary Anatomy & Physiology II	4
Third	Seme	ster	
VET	201	Surgical Nursing	2
VET	202	Veterinary Nursing	3
VET	208	Parasitology	32
VET	224	Pharmacology for Veterinary Technology	3
VET	225	Anesthesiology	2
VET	230	Veterinary Internship I	4
Four	th Sem	ester	
VET	240	Veterinary Medicine & Surgery	3
VET	241	Clinical Pathology	4

VET241Clinical Pathology4VET242Veterinary Clinical Care2VET285Veterinary Internship II4

Prerequisite BIO 111 required

Total



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With more than 600 general education, developmental, major and elective courses offered each year, how will you know what course you really want or need to take? This alphabetical list of course descriptions that are common to more than one program will help you decide. Your adviser or educational case manager also can help make the decision easier.

### COURSE DESCRIPTIONS

#### COURSES COMMON TO MORE THAN ONE PROGRAM

#### **085** Recitation

Variable credit hours

Designed for students with limited science or mathematics background. Provides opportunities for the student to practice study skills and strategies for learning biology, chemistry, mathematics and physics.

#### 290 Special Topics Course

1 - 6 credit hours

Course titles (topics) will vary. Permission of the instructor and center dean is required prior to registration. Four-year institutions vary in their acceptance policies for special topics courses. Students planning to transfer should keep a portfolio of their work.

#### 295 Job Search Workshop

Variable credit hours

Presents information on the nature of work, employer expectations, résumé writing, job interview techniques and job search skills.

#### 287, 297 Cooperative Education (Co-op.) Variable credit hours

Provides opportunities to supplement course work with practical work experiences related to the student's educational program and occupational objective. Credit hours vary. Permission of the instructor/coordinator and the cooperative job supervisor is required. Four-year institutions vary in their policies regarding acceptance of cooperative education credit. Students who plan to transfer should consult an adviser.

#### **199, 299 Independent Study** Variable credit hours

Students contract with a faculty member for a program-related, independent project not covered by existing curriculum. Each credit hour assigned corresponds to a plan for a minimum of 30, 50-minute hours of student time. Permission of the faculty and center dean is required prior to registration. Students who plan to transfer should consult with an adviser; four-year institutions vary in their independent study acceptance policies Students with fewer than 30 college-level credits take 199-numbered courses. Students with more than 30 college-level credits take 299-numbered courses.

### ACCOUNTING

#### ACC 101 Fundamentals of Accounting 3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Emphasizes the basic elements of the accounting cycle through statement preparation. Includes common bookkeeping procedures for handling cash receipts and disbursements and working with accounts receivable and payable. Includes practice in handling journals and ledgers.

### ACC 115 Payroll Accounting

### 3 credit hours

Prerequisite: ACC 121

Studies federal and state employment laws and their effects on personnel and payroll records. This course is non-technical, gives students a practical working knowledge of current payroll tax laws and actual experience in applying regulations. Students will learn computerized payroll procedures.

### ACC 116 Computerized Billing

3 credit hours

Prerequisite: ACC 121

Introduces the concepts and operations of a computerized billing system. Topics include searches, queries, entering and posting account charges and payments, corrections and audits of journals, and preparation and printing of reports.

#### ACC 121 Accounting Principles I 4 credit hours

Corequisite: BUS 110 or equivalent

Introduces the study of accounting principles to give the student an understanding of the theory and logic that underlie procedures and practices.

### ACC 122 Accounting Principles II

4 credit hours

Prerequisite: ACC 121

Introduces the study of partnership and corporate accounting systems and issues. Provides an overview of financial statement analysis, manufacturing cost control, and management planning and budgeting techniques.

### ACC 125 Computerized Accounting

3 credit hours

Prerequisite: ACC 121

Introduces computerized accounting in a microcomputer environment. Topics include a review of basic accounting theory and training in both manual and computerized accounting procedures. Using a predesigned accounting software package, students learn the principles and techniques required for computerized processing of accounting data, and for generating accounting reports and financial statements. Students will have extensive hands-on experience with computerlzed systems.

#### ACC 131 Income Tax I

3 credit hours

Corequisite: ACC 121

Studies the basic concepts of federal income taxation, including gross income, deductions, accounting periods and methods, and property transactions with emphasis on taxation of individuals and sole proprietorships.

#### ACC 211 Intermediate Financial Accounting 4 credit hours

Prerequisite: ACC 122

Studies the asset valuation process. Acquaints students with the historical, conceptual and pragmatic dimension of a wide range of major accounting issues that are integral to the development of balance sheets, income statements and statements of changes in financial positions for the complex organization.

### ACC 215 Accounting Systems

3 credit hours

Corequisite: ACC 122

Studies the principles, concepts and tools used in the analysis, design, implementation and integration of accounting systems, internal control systems and accounting procedures. Students learn key elements of systems analysis, business systems design, accounting software selection, and the acquisition and implementation of systems. Explores techniques and systems for electronic control systems, electronic data exchange, electronic funds transfer and Web commerce.

### ACC 226 Cost Accounting

3 credit hours

Prerequisite: ACC 122

Introduces the theory, concept and procedures of cost accounting. Gives students a basic understanding of managerial and cost accounting systems used in manufacturing businesses.

### AMERICAN SIGN LANGUAGE

#### ASL 101 American Sign Language I 3 credit hours

Introduces American Sign Language (ASL) Includes both an awareness of the American deaf culture and methods by which the American deaf interrelate. Includes basic ability to communicate with deaf individuals using ASL, and topics of places, names and the ability to ask and answer questions that include "who, what, when, where and how."

### ASL 102 American Sign Language II

3 credit hours

Prerequisite: ASL 101

Continues topics introduced in ASL 101. Emphasizes critical and logical thinking in ASL. Assists the non-native user of ASL to better integrate signing into the larger deaf community. Also, students will add to their basic ability to communicate with the deaf in social and individual settings.

#### ASL 121 American Sign Language 5 credit hours

Prerequisite: ESL 101 or instructor consent

Designed to give the learner a beginning knowledge of American Sign Language and the beginning structure and syntax to help the learner communicate with a basic knowledge of ASL.

### ANTHROPOLOGY

### ANT 101 Cultural Anthropology

3 credit hours

Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change and applied anthropology.

### ANT 107 Introduction to Archaeology

3 credit hours

Surveys the recovery of human prehistoric and historic past through excavation, analysis and interpretation of material remains, including the archaeology and prehistory of several areas of the world. Covers the work of archaeologists along with discussions of major theories and excavations.

### ANT 111 Physical Anthropology

3 credit hours

Studies human biology and its effects on behavior. Includes principles of genetics and evolution, vertebrates and primates, human origins, human variations and ecology.

#### ANT 203 Urban Socio-Anthropology 3 credit hours

Prerequisite: ANT 101 or SOC 101 or SOC 102

Examines how cities and city life are shaped by cultural, social, political and economic forces operating at many different levels. Examines the history and theoretical roots of urban anthropology and sociology, ethnographic fieldwork in urban environments, and urban social organization in cross-cultural perspective. Students will be able to apply general principles in a global context.

#### ANT 265 Violence and Culture

3 credit hours

Prerequisite; ANT 101, or PSY 101, or PSY 102, or SOC 101, or SOC 102

Examines violence in multiple cultural contexts. Develops an understanding of societal and institutional causes of violence, explores resources for intervention and treatment and provides service learning applications in violence treatment. Topics include culture, gender and ethnicity, the media, family violence, sexual violence, the state, prevention and treatment.

#### ARABIC

#### ARB 111 First-Year Arabic I

5 credit hours

Gives students a fundamental understanding of the Arabic language, and develops their basic listening, speaking, reading and writing skills.

#### ARB 112 First-year Arabic II

5 credit hours

Prerequisite: ARB 111

Teaches the student how to establish and maintain an advanced conversation in Arabic and introduces more advanced grammatical structures and writing. Gives more detailed cultural background and flavor of the Arab world.

#### ART

### AMG 280 Introduction to Arts Management

and not-for-profit world.

3 credit hours

Prerequisite: ENG 121, SPE 115 Introduces students to the principles and practices involved in creating and operating arts organizations in the profit

### AMG 282 Grant Writing for

#### Arts Management

3 credit hours

Prerequisite: ENG 121

Introduces students to the principles of and the skills needed for grant writing and fund-raising in the arts management field.

#### AMG 297 Arts Management Internship

3 - 6 credit hours Prerequisite: AMG 280, 282 Introduces students to an on-site internship experience in a wide variety of Arts Management-related situations.

#### **ART 110 Art Appreciation**

3 credit hours

Introduces cultural significance of the visual arts, including painting, photography, sculpture, crafts, design and architecture. Surveys the techniques, terminology and traditions of art, as well as current trends. Provides students with opportunities to visit galleries and museums of art in the Denver area.

#### ART 111 Art History I

3 credit hours

Provides the knowledge base to understand the visual arts, including works from Western and non-Western cultures. Surveys the visual arts from the ancient through the medieval periods.

### ART 112 Art History II

3 credit hours

Provides the knowledge base to understand the visual arts, including works from Western and non-Western cultures. Surveys the visual arts from the Renaissance through the modern periods.

### ART 113 Modern Art History

3 credit hours

Provides the knowledge base to understand the visual arts, including works from Western and non-Western cultures. Surveys the visual arts from the late 19th century through the 21st century.

#### ART 121 Drawing I

3 credit hours

Introduces various approaches and media designed to develop drawing skills and visual awareness.

#### ART 122 Drawing II/Mixed Media

3 credit hours Prerequisite: ART 121

Continues topics introduced in ART 121 with emphasis in the use of a variety of contemporary media and drawing materials, individual expressive style, color and advanced composition.

### ART 131 Two-Dimensional Design - Color

3 credit hours

Studies basic design elements, visual perception, form and composition.

#### ART 132 Three-Dimensional Design -Space and Form

3 credit hours

Prereauisite: ART 131

Continues ART 131 with further examination of composition, modular repetition, color effect and three-dimensional design.

#### ART 151 Fundamentals of Photography 3 credit hours

Covers basic black and white photographic craft. Places special emphasis on approaching photography as a visual language. Includes the language of photography, the camera, film exposure and processing, printing, print finishing and photographic criticism.

### ART 152 Fundamentals of **Color Photography**

3 credit hours

Prerequisite: ART 151 (PHO 101)

Introduces color theory, the nature of light and light sources, the reproduction of color, color films and processing. Emphasizes building individual experiences with color transparency films and potential expression through color photography.

### ART 153 Intermediate Black and White Photography

3 credit hours

Prerequisite: ART 151 (PHO 101) and ART 152 (PHO 102)

Familiarizes the student with the basic principles of the Zone System for black and white photography; use of mathematics in photography; basic sensitometry and film analysis; data plotting, graphing

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and interpreting; testing procedures; lightmetering techniques; controlling film exposure and development; and visualization for expressive black and white prints.

### ART 154 Intermediate Color Photography

3 credit hours Prerequisite: PHO 101, 102 or instructor consent

Presents the basic principles of color printing and provides practical experience in the areas of physics of light, color film and paper and human color vision.

### ART 157 History of Photography

3 credit hours

Surveys the history of photography from its beginnings to the present. Emphasizes individual photographers who have made significant contributions to the field. Includes technical, artistic, commercial and social development of photography as a form of visual communication.

#### ART 211 Painting I

3 credit hours

Introduces a technical and formal foundation for the beginning student, including composition, color, materials and techniques of acrylic painting.

### ART 212 Painting II

3 credit hours Prerequisite: ART 211

Emphasizes color, composition, techniques and formal visual concepts as they relate to oil painting.

### ART 213 Painting III

3 credit hours Prerequisite: ART 212 Continues advanced work with consistent thematic development, sophisticated color relationships, formal and technical concerns.

#### ART 214 Painting IV

3 credit hours Prerequisite: ART 213

Continues advanced work with thematic development, sophisticated color relationships, formal and technical concerns and consistent progression of subject matter.

#### ART 231 Watercolor I

3 credit hours

Prerequisite: ART 121

Introduces a technical and formal foundation for the beginning student to include color, composition, materials and techniques of watercolor painting.

#### ART 232 Watercolor II

3 credit hours

Prerequisite: ART 231 Continues the study of watercolor

techniques with an emphasis on subject development, form, color and theme.

### ART 252 Studio Lighting

3 credit hours

Prerequisite: ART 151, 152, 153

Introduces basic concepts and principles needed to produce personally expressive photographs with studio lighting equipment, especially electronic flash. Includes working with a variety of camera formats, from 35mm to 4x5 view camera.

### **ART 253 View Camera Techniques**

3 credit hours

Prerequisite: ART 151, 152

Provides each student with an introduction to the visual aesthetics of photographic images and light, making use of hands-on photographic experience with the 4x5 view camera. Covers processing techniques.

### ART 270 Figure Drawing I

3 credit hours

Prerequisite: ART 121

Introduces the basic techniques of drawing the human figure, to include general anatomy and gesture drawing using a variety of media.

### ART 271 Figure Drawing II

3 credit hours

Prerequisite: ART 270

Continues the study of the various methods of drawing the human figure, with emphasis on the description of form and individual style.

#### ART 281 The Business of Visual Arts 3 credit hours

Provides the knowledge base to understand the business and cultural world of visual arts. Includes interactive field trips to galleries and museums, administrative and curatorial speakers, marketing portfolios and presentations.

### GRD 100 Typography I

3 credit hours Carequisite: Preferred with GRD 103

Introduces the history and concepts of typography as applied to graphic communications. Explores appropriate use of typography in a variety of design applications, emphasizing the basic design principles of typographic compositions and typesetting. Covers type recognition and typographic terms.

#### GRD 103 Introduction to Computer Graphics

3 credit hours

Introduces methods of creating artistic output with current computer software programs used by the graphic design industry. Emphasizes skills with two-dimensional media that are applicable to a variety of visual communication professions.

### GRD 105 Typography and Layout

3 credit hours

Prerequisite: GRD 100 and GRD 103, or instructor consent

Covers the creation and production of graphic projects, emphasizing the layout creative-design process, problem solving and research. Provides experience producing thumbnails, roughs and digital layouts, emphasizing refined creative typography.

### **GRD 107 Illustration**

3 credit hours

Prerequisite: ART 121 or instructor consent

Introduces product rendering in a variety of media for both two- and threedimensional design projects. Prepares for print production, both traditionally and digitally. Explores freehand and electronic methods.

### GRD 200 Design and Concept

3 credit hours

Prerequisite: GRD 100, 103, and 105, or instructor consent

Covers the process of comprehensive problem solving of complex and advanced print design. Provides experience in digital production of designs, using multiple computer applications emphasizing concept.

#### **GRD 203 Adobe Illustrator**

3 credit hours

Prerequisite: GRD 103 or instructor consent Uses the computer to create objectbased graphics for color illustration applications that range from designing ads, brochures and packing, to logos or any other print project. Students work with scanners to input existing art and photographs for manipulation on the computer.

### GRD 206 Pre-Press for Non-Printer

#### 3 credit hours

Prerequisite: GRD 100, 103, and 105 or instructor consent

Introduces the production of final print-ready art, both mechanically and electronically. Emphasizes black and white, one-through-four-color processes and the production of digital pre-press files for printed projects.

### GRD 209 QuarkXpress (Capstone)

#### 3 credit hours

Prerequisite: GRD 103 or instructor consent Corequisite: GRD 209

Uses advanced electronic software on the computer to create all types of publications. Instructs students on black and white page layout and multicolor magazine layouts with Quark, demonstrating how the graphic design industry uses this desktop publishing software.

#### **GRD 220 Photoshop**

#### 3 credit hours

Prerequisite: GRD 103 or instructor consent Acquaints students with Adobe

Photoshop software, its tools and features. Provides exercises in photo retouching and manipulation and in image generation for preparation of print medium or as a finished product. Features hands-on computer experience.

#### GRD 225 Web Page Design

3 credit hours

Prerequisite: GRD 103, MUM 101, or instructor consent

Introduces and explains concepts of Web page design, then assigns relevant laboratory projects for designing and creating Web pages, using the latest Webpage-design software. Features hands-on computer experience.

### **GRD 285 Portfolio Preparation**

3 credit hours

Prerequisite: GRD 100, 103, 105, 200

Continues to explore the production of comprehensive and complex design projects to display advanced design and computer skills. Provides more experience in digital production of designs, in application of multiple computer programs and in preparation of a portfolio.

#### GRD 297 Graphic Design Internship

#### 3 - 6 credit hours

Prerequisite: GRD 285

Introduces students to an on-site internship experience in a wide variety of graphic design-related situations.

#### MUM 101 Introduction to Multimedia 3 credit hours

Prerequisite: GRD 103 or instructor consent

Examines the latest developments in the field of multimedia production. Produces a multimedia project on the computer.

#### MUM 103 Introduction to Computer Graphics

#### 3 credit hours

Introduces methods of creating artistic output with current computer software programs used by the graphic design industry. Emphasizes skills with two-dimensional media that are applicable to a variety of visual communication professions.

#### MUM 207 Introduction to Digital Videography/Editing

#### 3 credit hours

Prerequisite: ENG 121 or SPE 115 or corequisite, or instructor consent Corequisite: ENG 121 or SPE 115 or prerequisite, or instructor consent

Familiarizes the student with the use of digital video cameras, software and editing. Introduces video aesthetics. Students will film and edit short video productions.

#### MUM 209 Multimedia Animation Studio 3 credit hours

Prerequisite: GRD 103 and MUM 101 or instructor consent

Introduces the student to 2-D and 3-D solid modeling with animation for the production of multimedia assets.

#### MUM 210 3-D Modeling and Animation 3 credit hours

Prerequisite: MUM 103 or instructor consent Familiarizes students with desktop multimedia using the Macintosh. Intended to serve both the advanced and the professional users of Macintosh systems.

#### MUM 220 Photoshop

3 credit hours

Prerequisite: GRD 103 or instructor consent Introduces skills necessary to process and manipulate visual images from photographic and videographic input for the

#### MUM 225 Web Page Design

production of multimedia assets.

3 credit hours

Prerequisite: GRD 103 or MUM 101, or instructor consent

Introduces and explains concepts of Web page design, then assigns relevant laboratory projects for designing and creating Web pages, using the latest Webpage-design software. Features hands-on computer experience.

#### MUM 230 Advanced Photoshop

3 credit hours

Prerequisite: GRD 220 or MUM 220 or instructor consent

Introduces students to the advanced functions of Photoshop for image manipulation, Web page design and multimedia applications. Designed to include both lecture and hands-on computer experience.

#### MUM 285 Multimedia Portfolio Preparation

3 credit hours

Prerequisite: MUM 101 or 103 or instructor consent

Introduces the student to the processes involved in producing a visual and audio computer-animated CD-ROM portfolio of work produced in previous multimedia courses.

#### MUM 297 Multimedia Internship

3 credit hours

Prerequisite: GRD 103 or MUM 101 or instructor consent

Introduces the student to an on-site experience as an intern, working in a multimedia production facility.

#### PHO 101 Fundamentals of Photography 3 credit hours

Covers basic black and white photographic craft. Places special emphasis on approaching photography as a visual language. Includes the language of photography, the camera, film exposure and processing, printing, print finishing and photographic criticism.

### PHO 102 Fundamentals of Color Photography

#### 3 credit hours

Prerequisite: PHO 101 (ART 151)

Introduces color theory, the nature of light and light sources, the reproduction of color, color films and processing. Emphasizes building individual experiences with color transparency films and potential expressions through color photography.

### PHO 107 History of Photography

3 credit hours

Surveys the history of photography from its beginnings to the present. Emphasizes individual photographers who have made significant contributions to the field. Includes technical, artistic, commercial and social development of photography as a form of visual communication.

### PHO 109 Photo Lab

#### 1 credit hour

Corequisite: One or more courses from the CCD PHO courses

Introduces operations, lab safety, and proper operation of equipment to beginning and advanced students as a corequisite for taking one or more courses from the CCD Photography Department.

### PHO 111 Intermediate Black and White Photography

3 credit hours

#### Prerequisite: PHO 101, 102

Familiarizes the student with the basic principles of the Zone System for black and white photography: use of mathematics in photography; basic sensitometry and film analysis; data plotting, graphing and interpretation; testing procedures; light-metering techniques; controlling film exposure and development; and visualization for expressive black and white prints.

### PHO 112 Intermediate Color Photography

3 credit hours Prerequisite: PHO 101, 102 or instructor consent

Presents the basic principles of color printing and provides practical experience in the areas of physics of light, color film and paper and human color vision.

### PHO 185 Advanced Photography (Capstone)

3 credit hours

Prerequisite: PHO 111, 112

Introduces professional quality techniques, the Zone System, the view camera, photographic chemistry, proper use of the light meter, and how to produce a professional quality black and white print. Emphasizes practical testing and application of the technical controls that augment expression.

### PHO 201 View Camera Techniques

3 credit hours

Prerequisite: PHO 101, 102 Provides each student with an introduction to the visual aesthetics of photographic images and light, making use of hands-on photographic experience with the 4x5 camera. Covers theory of lenses, depth-of-field practice and sheet film exposure/processing techniques.

### PHO 202 Studio Lighting

3 credit hours

Prerequisite: PHO 101, 111, 112 Introduces basic concepts and principles needed to produce personally expressive photographs with studio lighting equipment, especially flash. Includes working with a variety of camera formats, from 35 mm to 4x5 view camera.

### PHO 203 The Fine Print

#### 3 credit hours

Prerequisite: PHO 101, 102, 111, 112

Introduces and refines advanced skills of the student interested in producing professional quality black and white prints. Integrates concepts of Zone System with tone reproduction.

#### PHO 204 Introduction to Digital Imaging 3 credit hours

Prerequisite: PHO 101, 111

Introduces digital imaging to students who have no previous computer experi-

ence, but are familiar with still photography. Covers film formats, basic color, and black and white scanning and image manipulation in Photoshop.

#### PHO 205 Non-Chemical Printing

3 credit hours

Prerequisite: PHO 101, 111

Explores a variety of digital imaging printing methods from scanned photographs and image files. Includes an introduction to color separation, halftone screens and photographic style printing by electronic means.

### PHO 211 Portrait Photography

3 credit hours

Prerequisite: PHO 101, 111 Explores personal style of portraiture, history of the field, and portraiture as visual language and creative expression.

### PHO 212 Landscape Photography

3 credit hours

Prerequisite: PHO 101, 102

Introduces basic concepts in landscape photography, including an overview of the history of landscape photography, artistic and technical aspects of final prints, landscape photography as creative expression, criticism and production of portfolio.

### PHO 213 Creative Process

3 credit hours

Prerequisite: PHO 101, 111

Integrates creative expression and photographic craft — two sides of the same coin. Encourages students to produce inner-directed work.

### PHO 285 Seminar in Photography

3 credit hours

Prerequisite: PHO 111, 112

Provides an opportunity to compile a professional portfolio as a preparation for job entry. Provides the advanced student with an opportunity to receive personal attention from the photography faculty in her/his specific area of professional expertise.

### PHO 297 Photography Internship

3 credit hours

Prerequisite: Instructor consent Introduces the student to an on-site experience as an intern, working in a multimedia production facility.

### ASTRONOMY

#### AST 101 Astronomy I

4 credit hours Prerequisite: ENG 090 or higher, MAT 090 or higher

Examines methods of science, overall content and structure of the universe, motions of the sun, moon and stars, history of astronomy, tools of the astronomer, the composition, structure, characteristics, and origins of the solar system and potential for extraterrestrial life. Course includes laboratory and observational experience.

#### AST 102 Astronomy II

4 credit hours

Studies the nature of light, stellar spectra, stellar energy sources, structure and life cycle of stars, the sun, galaxies, and the origin and evolution of the universe. Course includes laboratory and observational experience.

#### BIOLOGY

#### **BIO 105 Science of Biology**

4 credit hours

Prerequisite: ENG 090, MAT 090, REA 090

Designed for non-science majors. Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Explores biology as a science and the impact of biological science on society. Includes laboratory experiences.

#### BIO 111 General College Biology I 5 credit hours

Prerequisite: ENG 090, MAT 105, REA 090

Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure, function and the metabolic processes of respiration and photosynthesis, as well as cell reproduction and basic concepts of heredity. Includes laboratory experience.

### BIO 112 General College Biology II

5 credit hours

### Prerequisite: BIO 111

Continues General College Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. Includes laboratory experience.

#### **BIO 116 Human Biology**

3 credit hours

Introduces human anatomy and physiology for those who have no background in science. Does not substitute for a year-long anatomy and physiology course with a laboratory. Topics include: atoms, molecules, cells, energetics, genetics and a brief survey of systems.

#### BIO 118 Human Ecology and the Environment

3 credit hours

Explores the ways in which human population ecology has an impact on global environmental balance and is, in turn, affected by it. Topics focus on population, natural resources and land use. Introduces selected principles of general ecology such as food webs and biogeochemical cycles.

#### BIO 120 Basic Anatomy and Physiology 4 credit hours

Provides a detailed survey of the anatomy and physiology of all human body systems. Designed for the Health and Wellness, Massage Therapy, Psychiatric Technician, Radiographic, Recreation Therapy and Surgical Technology programs.

#### BIO 201 Human Anatomy and Physiology I

4 credit hours

Prerequisite: BIO 111 or equivalent, or consent of program chair

Includes atomic, molecular, cellular, tissue, and gross morphology of the skeletal, muscular, nervous and endocrine systems. Includes required laboratory.

### BIO 202 Human Anatomy and Physiology II

4 credit hours

Prerequisite: BIO 201 or instructor consent Includes atomic, molecular, cellular, histology, gross morphology, and physiology of the reproductive, integumentary, urinary, cardiovascular, lymphvascular, digestive and respiratory sytems, plus homeostatic mechanisms. Includes required laboratory.

#### **BIO 205 Microbiology**

4 credit hours

Prerequisite; BIO 111 or 202 Studies microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms, and the study of the role of microorganisms in infectious disease.

#### **BIO 228 Field Biology**

3 - 4 credit hours

Prerequisite: BIO 112 or GEY 111 Introduces students to field experiences in biology, geology and ecology. Includes identification of plants and animals in their natural environment and geologic features. The course includes mandatory field trips to nearby natural areas.

#### BUSINESS ADMINISTRATION

#### **BUS 110 Business Math**

3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Emphasizes the application of mathematics to business situations. Teaches problem-solving techniques in areas of merchandising, accounting, general business and personal finance. Proficiency in the use of a calculator is necessary,

### **BUS 115 Introduction to Business**

3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Surveys the operation of the American business system, fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities.

#### BUS 180 Business Certificate (Capstone) 1 credit hour

Prerequisite: BUS 115 and BUS advisor consent

Reviews and focuses on preceding management and business studies; completed during the final semester before receiving a management certificate.

#### **BUS 203 International Business**

3 credit hours

Prerequisite: BUS 115

Provides students with an understanding of the interdisciplinary nature of international business, including: the development of theories and methods of international trade, financing mecha-

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nisms, and terms used in export documentation and finance; impacts of geography in business transactions; legal aspects of international business; and developing an effective international marketing strategy.

#### **BUS 205 Business Ethics**

3 credit hours

Prerequisite: BUS 115 and MAN 226

Analyzes ethical behavior for business. Ethics deals with standards of right and wrong that are determined by the ethical and social expectations of society in general, and the expectation that responsible people will observe the ethical standards of our society. The ethical issues involve trade-offs among ethical decisions and economics, legal, social and cultural concepts.

#### **BUS 207 Teleservices**

3 credit hours

Introduces the various components of the teleservices industry, including outsourcing. Emphasizes the telephone as a vehicle for customer service.

## BUS 216 Legal Environment of Business 3 credit hours

Prerequisite: BUS 115

Emphasizes public law, regulation of business, ethical considerations, and various relationships that exist within society, government and business. Specific attention will be devoted to economic regulation, social regulation, laws that have an impact on labor management and environmental concerns. Students will develop an understanding of the role of law in social, political and economic change.

#### BUS 217 Business Communications 3 credit hours

Emphasizes effective business writing: letters, memoranda, reports, application letters and résumés. Includes the fundamentals of business communication and an introduction to international communication.

## BUS 226 Business Statistics

3 credit hours

Prerequisite: BUS 115, and MAT 090 or 103 Covers statistical applications in business, including descriptive statistics, probability and sampling distributions, statistical inference, confidence intervals, hypothesis testing for large and small samples, correlation, and single and multiple variable regression.

### BUS 240 Customer Service for the Retail and Financial Industries

3 credit hours

Covers the communication process, the purpose of business, customers, customer service excellence, service delivery, customer and employee behaviors, customer loss, complaints, career paths and job enrichment. This course provides the student with the conceptual knowledge and tools to provide customer service in the retail and financial industries.

#### BUS 241 Introduction to Retail Concepts 3 credit hours

Covers the concepts and history of retail business, the retail environment, the retail image, service professionals, merchandising, pricing and customer service. This course is designed for the student who is interested in the retail industry.

#### BUS 260 Business Process Foundations 3 credit hours

Prerequisite: MAR 221, CWB 221 Provides a thorough knowledge of

three industry business process models and how e-commerce solutions help streamline these processes. The three industries studied are: financial services, manufacturing and telecommunications.

# BUS 285 Business Policy and Ethics (Capstone)

#### 3 credit hours

Prerequisite: Sophomore status and course taken in the last semester of study.

Designed to integrate the skills learned in prior business studies by building on them through a critical examination of such classic issues as the role of business in society, business policy, business ethics, the complex roles of government and business in a global economic community and the nature of corporate social responsibility.

### BUS 287 Cooperative Education/Internship

3 credit hours

Provides students with the opportunitiey to supplement course work with practical work experience related to their educational program and occupational objectives. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

### MAN 117 Time Management

1 credit hour

Provides students with the conceptual knowledge and tools to make better use of time in performing management functions and functions of their personal lives.

#### MAN 170 Supermarket Loss Prevention 3 credit hours

Familiarizes supermarket managers with the broad spectrum of supervisory issues that can cause profit loss within the overall supermarket environment Presents prevention methods.

## MAN 200 Human Resources

Management 3 credit hours

Prerequisite: BUS 115

Provides students with a broad overview of the contemporary issues, theories and principles used to effectively manage human resources. Includes hiring, compensation, development, employee relations and legal issues.

#### MAN 216 Small Business Management 3 credit hours

Prerequisite: ACC 101, BUS 115

Examines the elements necessary for the successful formation of a new small business. This course enhances the skills of those already involved in the operation of a small business. Includes development of a complete small business plan.

### MAN 225 Managerial Finance

3 credit hours

Prerequisite: ACC 121, BUS 115

Examines the concepts and techniques used to analyze financial accounting information for managerial planning, decision making and control. Focuses on decision making relating to the areas of budgets, forecasts, cost volume production, ROI and financial statements.

#### MAN 226 Principles of Management 3 credit hours

Surveys the principles of management. Emphasizes the primary functions of planning, organizing, staffing, directing, and controlling with a balance between the behavioral and operational approaches.

#### MAN 229 Motivation and Management 3 credit hours

Introduces an inner force that results from an individual's desire to satisfy unmet needs. Productivity is a result of the behvior of members of an organization; influencing behavior through motivation is a manager's key to increasing productivity.

## MAN 244 Introduction to MS Project 2000

#### 3 credit hours

Provides practice using case-studybased software, Microsoft Project 2000. Uses the MS Project 2000 to manage resource issues and monitor project progress. Focuses on the proper use of Gantt and PERT charts and how they interact.

#### MAR 111 Principles of Sales

3 credit hours

Prerequisite: BUS 115

Enables students to understand and develop ethical sales techniques and covers the role of selling the marketing process. Emphasizes behavioral considerations in the buying and selling process along with sales techniques.

#### MAR 117 Principles of Retailing 3 credit hours

#### Prerequisite: BUS 115

Covers the basic principles and techniques of merchandising, operations, layout, store organization, site location and customer service with an emphasis on retailing operations.

#### MAR 160 Customer Service

3 credit hours

Enables students to learn the relationships of service to customers. Emphasizes managing customer expectations by building customer rapport and creating positive outcomes.

#### MAR 216 Principles of Marketing 3 credit hours

Analyzes the theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer.

#### MAR 220 Principles of Advertising 3 credit hours

Examines the principles and practices of advertising and advertising's relationship to business to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout and ethical considerations.

#### MAR 240 International Marketing

3 credit hours

Prerequisite: BUS 115

Enables the student to explore the international marketing of United States products, and to explore the increasing competitive international environment and recent changes in the environment that have challenged U.S. business. The course is designed to make the reader an "informed observer" of the global marketplace, as well as enabling him/her to develop skills to make marketing decisions.

# **BUSINESS TECHNOLOGY**

# BTE 100 Introduction to Keyboarding 3 credit hours

Introduces touch keyboarding, as well as basic operations and functions of equipment. Emphasizes learning the alphanumeric keyboard, proper techniques, speed and accuracy. Designed for students who have minimal or no keyboarding skills.

#### **BTE 101 Keyboarding 1**

#### 4 - 5 credit hours

Prerequisite: BTE 100

Introduces keyboard, machine parts, correct techniques and accuracy in keyboarding applications of centering, tabulating letters and manuscripts.

#### BTE 102 Basic Keyboarding Applications 3 credit hours

Prerequisite: Keyboarding skill of 15 wpm Designed for the individual with key-

boarding skills of approximately 20 words per minute. Introduces correct formatting of letters, tables, memos and reports. Emphasizes speed and accuracy.

# **BTE 104 Keyboarding SpeedBuilding**

4 credit hours

Prerequisite: BTE 100

Builds keyboarding speed and improves accuracy through course technique and concentrated effort using the Cortez Peters Championship Typing Method.

#### BTE 108 Business Machines: 10- Key by Touch

1 - 2 credit hours

Introduces the student to touch control of a 10-key pad. The class emphasizes the development of speed and accuracy using proper technique.

#### BTE 120 Records Management

4 credit hours

Corequisite: BTE 101 or instructor consent Develops the ability to file and

retrieve documents using alphabetic, numeric, subject and geographic systems. Provides the participant with records management skills, including emphasis on PC computer management.

# BTE 121 Alpha Speedwriting I

4 credit hours

Prerequisite: BTE 101

Covers the theory of an alphabetic system of shorthand. Develops skills in brief forms, theory, dictation speed and transcription.

#### BTE 133 Word Processing Communications and Applications

3 credit hours Prerequisite: BTE 101 Corequisite: CIS 135

Reinforces language-arts skills using application materials of realistic office communications. Stresses decision-making skills and enables students to process data and prioritize the demands they may encounter while working in an office.

#### BTE 138 Windows 95

2 credit hours

Introduces the functions of the environment of Windows 95. Demonstrates the use of Graphic Use Interface (GUI), showing the mechanisms of control and file manipulation, as well as program and graphic regulation.

#### BTE 139 Professional Development 3 credit hours

Examines the role of professional ethics, job search strategies and personal image as it relates to career development.

#### BTE 160 Data Entry I

3 credit hours

Introduces basic data-entry activities for the microcomputer. A number of activities provide source documents with fields for entering information; speed and accuracy in keyboarding will be stressed.

#### **BTE 200 Office Procedures**

#### 3 credit hours.

Prerequisite: BTE 101

Introduces the business world of the 21st century and the various office duties and skills required. Includes organization of office work, incoming and outgoing mail, telephone techniques, office equipment, office communications and business ethics.

#### **BTE 202 Keyboarding II**

5 credit hours

Prerequisite: BTE 101 or equivalent

Reinforces fundamentals of keyboarding procedures. Develops speed and accuracy in more advanced levels of production work, using the prevailing business forms. Emphasizes quality of output.

## BTE 204 Advanced Keyboarding SpeedBuilding

4 credit hours

Prerequisite: BTE 100

Builds greater keyboarding speed and improves accuracy through the use of course technique and concentrated effort.

# **BTE 209 Legal Terminology**

2 credit hours

Prerequisite: BTE 101 or equivalent skill

Develops knowledge and understanding of terms used in the legal field. Students will learn to define the terms and then to use them in legal context. Pronunciation guides are provided for each word, and the correct pronunciation is reinforced by taped dictation.

#### **BTE 230 Machine Transcription**

5 credit hours Prerequisite: ENG 090, BTE 101 or equivalent

Develops skills and competencies in three major areas, including language arts, transcribing from machine dictation and correct formatting of business documents. Dictation represents the voices of executives from throughout the world.

# BTE 288 Model Office

3 credit hours

Prerequisite: BTE 100, 108, CIS 135, minimum English assessment score required

Provides students with the highest quality technical and office education through training on state-of-the-art equipment within a simulated office environment.

# CAREER DEVELOPMENT FACILITATOR

# CDF 105 Introduction to Career Development

3 credit hours

Introduces career development theory, various career development programs, case management skills, adult development issues, ethical/legal issues and career facilitation skills for special populations. Emphasizes enhanced skills and knowledge that can apply immediately on the job. First of four classes required for national Career Development Facilitator certification.

#### CDF 106 Helping and Assessment Process

3 credit hours

Teaches the five-step helping process and skills, focusing on application in the workplace. Reviews formal and informal career assessments, including theory, technical considerations, administration and interpretation. Second of four classes required for national Career Development Facilitator certification.

# CDF 107 Career Information and Program Design

3 credit hours

Introduces career and labor market information resources, including print and computer resources. Studies the design of a career resource center and the process of designing a career development program. Introduces effective training skills. Third of four classes required for national Career Development Facilitator certification.

### CDF 108 Goal Setting and Action Plans 3 credit hours

Reviews career decision making, client goal setting and planning processes; introduces job portfolios, job search techniques, job retention and client follow-up issues; and reviews the application process for national certification. Fourth of four classes required for national Career Development Facilitator certification.

# CENTRAL SERVICE TECHNICIAN

#### CST 100 Central Service Technician 3 credit hours

Prerequisite: High school diploma or GED, or concurrent enrollment in GED and MOT 102 Corequisite: MOT 102

Familiarizes students with principles of central service supply, processing and distribution. Course emphasizes medical terminology, anatomy and physiology, microbiology, sterilization, inventory, storage and communication skills. On successful course completion, eligible candidates are qualified to sit for the National Institute for the Certification of Healthcare Sterile Processing and Distribution Personnel (NICHSPDP).

# CST 105 Central Service Instrument Technician

3 credit hours

Prerequisite: High school diploma or GED, or concurrent enrollment in GED and MOT 102 Corequisite: MOT 102

Emphasizes theoretical and practical aspects of medical instrument identification, cleaning, assembly, sterilization and storage. Prepares students for entry-level positions in medical instrument processing facilities, including hospitals, clinics and free-standing surgical units. Classroom and laboratory instruction is included with clinical site placement for work-related experiences.

# CST 107 Central Service Technology Clinical Experience

2 credit hours

Prerequisite: High school diploma or GED Corequisite: CST 100

Provides students with hands-on experience in a central service clinical setting.

#### CST 150 Central Service Technology Certification Examination Review 1 credit hour

Prerequisite: Graduate of, or current enrollment in a CST program, or employment as a central service/sterile processing technician for at least one year; or instructor consent. Assessment test will be waived.

Reviews principles of Central Service Technology, including human anatomy and physiology, surgical instrumentation, microbiology, infection control, decontamination, packaging, sterilization, sterile storage and distribution for the national Central Service Technology certifying examination.

# CHEMISTRY

#### CHE 085 Problem Solving

1 credit hour Corequisite: for All CHE Courses. A tutorial class designed to help students develop problem-solving skills.

#### CHE 101 Introduction to Chemistry I 5 credit hours

Prerequisite: ENG 110, MAT 109

For non-science majors, students in occupational and health programs, or students with no chemistry background. Includes the study of measurements, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base, gas laws and condensed states. Laboratory experiments demonstrate the concepts qualitatively and quantitatively.

#### CHE 102 Introduction to Chemistry II 5 credit hours

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Prerequisite: CHE 101

Includes the study of hybridization of atomic orbitals for carbon, nomenclature of organic compounds, properties of different functional groups, nomenclature of various biologically important compounds, their properties and their biological pathways. Laboratory experiments demonstrate the topics quantitatively and qualitatively.

#### CHE 106 General, Organic and Biochemistry

4 credit hours

Introduces the fundamentals of inorganic, organic and biochemistry. Primarily for students in health or life sciences.

#### CHE 111 General College Chemistry I 5 credit hours

Prerequisite: CHE 101, ENG 121, MAT 121 Corequisite: ENG 121, MAT 121

Includes the study of thermodynamics, chemical kinetics, chemical equilibrium, acid-base equilibrium, ionic equilibrium, electrochemistry, nuclear chemisty and organic chemistry. Also includes problem-solving skills and descriptive contents for these topics. May include organic chemistry if time permits. Laboratory experiments will demonstrate qualitative and quantitative analytical techniques.

#### CHE 112 General College Chemistry II 5 credit hours

Prerequisite: CHE 111

Includes the study of thermodynamics, chemical kinetics, chemical equilibrium, ionic equilibrium, electrochemistry, nuclear chemistry and organic chemistry. Also includes problem-solving skills and descriptive contents for these topics. May include organic chemistry if time permits. Laboratory experiments demonstrate both qualitative and quantitative analytical techniques.

# CHINESE

#### CHN 101 Conversational Chinese I 3 credit hours

Gives students a fundamental understanding of the Chinese language and develops basic listening, speaking, reading and writing skills.

#### CHN 111 First-Year Chinese I

5 credit hours

Gives students a fundamental understanding of the Chinese language and develops their listening, speaking, reading and writing skills.

#### CHN 112 First-Year Chinese II

5 credit hours

Prerequisite: CHN 111

Continues to develop students' skills in listening, speaking, reading and writing. Emphasizes basic competency in further use of the Chinese language.

#### CHN 212 Second Year Chinese II

3 credit hours

Prerequisite: CHN 211

Continues to develop students' abilities in listening, speaking, reading and writing the Chinese language through learning more complex sentence structures and vocabulary, reading stories and writing compositions.

# COMMUNICATIONS

#### COM 100 Multicultural Learning Community Recitation

1 credit hour

Corequisite: COM 230

Applies knowledge and skills developed concurrently in COM 230, Multicultural Communication. Expands intercultural competence through service learning and Web technology.

#### COM 113 Communication for the Workplace

2 credit hours

Provides the student with necessary communication skills such as active listening, communicating nonverbally, giving and receiving feedback and understanding diverse communication styles. Also challenges students to engage in problem solving for the workplace, as well as conflict management and people skills. Reinforces the importance of these skills in making a successful transition into a work environment.

#### COM 126 Introduction to Mass Media 3 credit hours

Prerequisite: ENG 121 or SPE 115 or corequisite, or instructor consent Corequisite: ENG 121 or SPE 115 or prerequisite, or instructor consent

Examines the basic concepts, principles and social issues related to various traditional and emerging mass media for communication and journalism studies and general students.

# COM 225 Introduction to Film

3 credit hours

Prerequisite: ENG 121 and/or ENG 111, or instructor consent

Corequisite: ENG 122 if not taken as prerequisite, or instructor consent

Introduces students to the critical study of cinema as an art form and a cultural phenomenon. Topics covered include cinematography, editing, mise-enscene and sound; the connections between cinema and related art forms; film genres, both narrative and non-narrative; and the social dimensions of film production and reception.

#### COM 230 Multicultural Communication 3 credit hours

Corequisite: COM 100

Examines how attitudes about multicultural issues can affect interactions with others. Explores the knowledge and skills needed to create a common context for shared communication strategies in a multicultural society.

# COM 251 Introduction to Digital Videography/Editing

3 credit hours

Prerequisite: ENG 121 or SPE 115 or corequisite, or instructor consent Corequisite: ENG 121 or SPE 115 or prerequisite; or instructor consent

Familiarizes the student with the use of digital video cameras, software and editing. Introduces video aesthetics. Students will film and edit short video productions.

# COM 252 Introduction to Television Studio Production

3 credit hours

Prerequisite: COM 251 or MUM 207 or instructor consent

Introduces students to television studio production. Emphasizes skills in the operation of video equipment and production of a short studio television program.

### COM 257 Advanced Television Production

3 credit hours

Prerequisite: COM 126, 225, 251, 252, ENG 121, 122, ENGL 2300, 2310 (UCD), or instructor consent

Teaches students how to produce a videotape based on the script developed in CU-Denver course ENGL 2315, Writing the Short Film Script. Students will create a shooting script, storyboard, production design and timeline. Students then will film, edit and analyze their productions.

# COM 258 Advanced Digital Field Production/Post Production

3 credit hours

Prerequisite: COM 126, 225, 251, 252, ENG 121, 122, and ENGL 2300 and 2310 (UCD), or instructor consent

Continues to develop students' skills in digital field production. Students will shoot and edit a cable television-level documentary or experimental production. The course will stress advanced production, post-production techniques, and aesthetics, with a focus on third-party editing software and Web casting.

#### COM 297 Communications Internship 3 credit hours

Prerequisite: COM 126, 225, 251, 252, ENG 121, 122, or instructor consent Corequisite: UCD course ENGL 2310

Introduces the student to an on-site experience as an intern, working in a video production facility.

# COMMUNITY HEALTH WORKER

# CHW 100 Introduction to Community Health Work

2 credit hours Prerequisite: High school diploma or GED Corequisite: CHW 120, 130, 297 Introduces students to the basic

concepts of community health work, to

the roles of community health workers and to basic practical skills necessary to the occupation.

#### CHW 120 Community Health Issues 3 credit hours

Prerequisite: High school diploma or GED Corequisite: CHW 100, 130, 297

Introduces students to the multiple health issues for community health workers. Develops core competencies to function as a community health worker.

### CHW 130 Community Health Resources 3 credit hours

Prerequisite: High school diploma or GED Corequisite: CHW 100, 120, 297

Introduces students to the skills and resources necessary for community health work with clients in the community.

# CHW 297 Community Health Worker Field Experience

2 credit hours

Prerequisite: High school diploma or GED Corequisite: CHW 100, 120, 130

Provides students with an opportunity to apply community health worker knowledge and practice community health worker skills in community settings.

# CRITICAL CARE NURSING

# CCN 199 Independent Study

1 - 2 credit hours

Prerequisite: Instructor consent

Provides elective study of selected topics in the critical care program.

# CCN 230 Basic ECG Interpretation 2 credit hours

Prerequisite: Colorado licensure as a registered nurse

Develops the ability of the registered nurse to read and interpret the electrocardiogram of the critically ill client and identify treatment modalities for arrhythmias. Requires critical thinking and analytical skills.

#### CCN 231 Care of the Critically III Patient 6 credit hours

Prerequisite: Colorado licensure as a registered nurse, CCN 230 Corequisite: CCN 285

Synthesizes the applied physiology, physical, diagnostic, psychosocial and spiritual assessment of the critically ill patient into a comprehensive treatment plan using critical thinking and analytical and clinical skills.

# CCN 285 Critical Care Clinical Internship

4 credit hours Prerequisite: Colorado licensure as a registered nurse, CCN 230 Corequisite: CCN 231

Applies didactic learning of ECG interpretation and care of the critically ill patient to the clinical practice of nursing in a critical care environment.

# DENTAL HYGIENE

# DEH 101 Pre-Clinic Dental Hygiene Science

2 credit hours

Prerequisite: Program acceptance Corequisite: First-semester DEH courses

Explores the practice of dental hygiene, including infection control, recording medical and dental histories, providing oral health care instructions, oral cancer screening, scaling and polishing teeth. Lab work includes application of diagnostic, preventive and therapeutic procedures.

# DEH 102 Pre-Clinic Care

2 credit hours

Prerequisite: Program acceptance Corequisite: First semester DEH courses

Introduces the basics of clinical care in a laboratory setting. Students practice on manikins, fellow students and patients from the community. Emphasis is on fundamental instrumentation and patient examination skills.

# DEH 103 Embryology and Histology

2 credit hours

Prerequisite: Program acceptance Corequisite: First-semester DEH courses

Explores the microscopic origin and structures of the body with special emphasis on the tissues of the teeth, face and oral cavity. Covers basic building blocks of the cell, including complex tissues and their arrangement.

#### **DEH 105 Dental Radiology**

3 credit hours Prerequisite: Program acceptance Corequisite: First-semester DEH courses

Introduces basic concepts of radiation physics, radiation biology and protection, radiograph exposure, processing quality assurance, and radiographic appearance of normal anatomic landmarks, anomalies and pathologies.

#### **DEH 109 Dental Anatomy**

3 credit hours

Prerequisite: Program acceptance Corequisite: First-semester DEH courses

Explores the anatomy of the teeth, including crown and root morphology. Students become proficient at identifying extracted specimens as to their dentition, arch, class and order of eruption.

# DEH 111 Medical and Dental Emergencies

3 credit hours

Prerequisite: Program acceptance Corequisite: First-semester DEH courses

Provides practicum instruction and introduces beginning skills in evaluating the reason for the emergency, suggestions for preventing these occurrences, and familiarity with equipment, emergency medications and procedures.

# **DEH 116 Preventive Dentistry**

3 credit hours

Prerequisite: First-semester DEH courses Corequisite: Second-semester DEH courses

Provides an in-depth study of the principles of interpersonal communication to practice nutritional counseling. Explores the problems associated with special populations and their dental needs. Emphasizes flourides, oral physiotherapy aids and home-care instruction.

# **DEH 144 Periodontics I**

2 credit hours

Prerequisite: First-semester DEH course work Corequisite: Second-semester DEH course work

Introduces the principles of periodontics. Emphasizes the structures of the periodontium. Explores epidemiology and histopathology of periodontal diseases. Studies periodontal assessment, etiology, progression, classification and diagnosis.

#### DEH 150 Dental Hygiene Clinic Science I 2 credit hours

Prerequisite: First-semester DEH courses Corequisite: Second-semester DEH courses

Provides the theory and discussion of beginning dental hygiene clinical practice with emphasis on patient management, therapeutic aids and advanced instrumentation techniques.

#### DEH 152 Dental Hygiene Clinic Care 1 3 credit hours

Prerequisite: First-semester DEH courses Corequisite: Second-semester DEH courses

Provides clinical experience in treating patients, including providing health assessment, dental charting, oral and periodontal evaluations, oral health instructions, scaling and polishing of tooth surfaces and application of therapeutic agents.

#### DEH 156 Applied Pharmacology 3 credit hours

Prerequisite: First-semester DEH courses Corequisite: Second-semester DEH courses

Provides the background to understand drug therapy and to inform patients about drugs that may be employed in the treatment of their dental conditions.

# DEH 158 General and Oral Pathology

# 3 credit hours

Prerequisite: First-semester DEH courses Corequisite: Second-semester DEH courses

Prepares students to understand, describe and identify disease. Provides skills necessary to detect deviations from normal in the evaluation of patient's health status; helps students identify appropriate referral mechanisms to render a definitive diagnosis.

#### DEH 160 Head and Neck Anatomy

2 credit hours

Prerequisite: Program acceptance Corequisite: First-semester DEH courses First-semester DEH course.

Introduces the anatomy of the head and neck with special emphasis on the mouth and oral cavity. Emphasizes surface anatomy, landmarks and the use of descriptive terms.

# DEH 195 Success Seminar

#### I credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

#### DEH 201 Dental Hygiene Clinic Science II 2 credit hours

Prerequisite: First-semester DEH courses Corequisite: Third-semester DEH courses

Examines pulpal vitality testing, amalgam polishing/margination, bleaching and mouth guards. Special emphasis on caring for handicapped persons and those with medical complications.

#### DEH 203 Dental Hygiene Clinic Care II 4 credit hours

Prerequisite: First-semester DEH courses Corequisite: Third-semester DEH courses

Provides continued clinical experience to treat patients with more advanced levels of periodontal disease. The placement of occlusal sealants and amalgam polishing/margination, bleaching mouth guards and night-guard fabrication is added to the services available.

#### **DEH 205 Dental Materials**

3 credit hours

Prerequisite: First-semester DEH courses Corequisite: Third-semester DEH courses

Provides a survey of materials used in dentistry, as well as training in common dental laboratory procedures. Provides practical experience in the manipulation of dental materials.

# DEH 209 Local and Regional Dental Anesthesiology

3 credit hours

Prerequisite: First-semester DEH courses Corequisite: DEH 201, 203, 205, 207, 211

Provides a working knowledge of the theory and practice of local anesthesia and nitrous oxide sedation as applied to the practice of dentistry/dental hygiene. Provides the student with the knowledge and skills necessary to administer local anesthetics and nitrous oxide proficiently and safely.

#### DEH 211 Community Dental Health 3 credit hours

Prerequisite: First-semester DEH courses Corequisite: Third-semester DEH courses

Explores the principles, methods and materials related to community dental health. Includes a servicelearning component.

#### DEH 250 Clinic Science III

2 credit hours

Prerequisite: Third-semester DEH courses Corequisite: Fourth-semester DEH courses

Provides learning activities designed to help the graduating dental hygiene student make the transition from school to private practice. Explores dental specialty skills.

# DEH 252 Clinic Care III (Capstone)

4 credit hours Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses Facilitates the integration of clinical skills with the development of time management skills necessary for

#### DEH 254 Periodontology II

3 credit hours

private practice.

Prerequisite: Third-semester DEH courses Corequisite: Fourth-semester DEH courses

Explores applied periodontics with patients presenting advanced levels of periodontal disease. Explores surgical options and examines mechanisms and rationale for referral to specialists.

#### DEH 256 Community Field Experience 3 credit hours

Prerequisite: Third-semester DEH courses Corequisite: Fourth-semester DEH courses

Provides practical application of community dental health theory and opportunities to conduct needs assessments on a variety of populations. Emphasizes meeting the needs of specific populations through program planning, implementation and evaluation. Supervised rotations are in low-income, public health facilities.

## DEH 258 Ethics and Issues in Dental Hygiene

2 credit hours

Prerequisite: Third-semester DEH courses Corequisite: Fourth-semester DEH courses

Explores the legal and ethical implications of practicing dental hygiene. Prepares students to benefit the profession, the community and themselves by practicing dental hygiene in an ethically and legally correct manner.

# **DEH 260 Practice Management**

# 2 credit hours

Prerequisite: Third-semester DEH courses Corequisite: Fourth-semester DEH courses

Provides practical guidelines and applications of dental hygiene practice management principles.

## **DEH 264 Periodontics II**

2 credit hours Prerequisite: Second-semester DEH course work Corequisite: Third-semester DEH course work

Continues exploration of theoretical and clinical preparations for planning and delivery of non-surgical dental hygiene care. Studies immunology, micro- and macro-anatomy, and radiological features of the periodontium in health and disease. Stresses recognition, classification and treatment planning of the compromised periodontal tissue.

# **DEH 284 Advanced Periodontics**

2 credit hours Prerequisite: Third-semester DEH course work Corequisite: Fourth-semester DEH course work

Features advanced study of the radiographic, clinical, macroscopic and histological leatures of the periodontium. Explores alternative and surgical options of treatment and examines mechanisms and rationale for referral to specialists. Guest lecturers from the dental community discuss current concepts in periodontal therapy.

#### DEH 294 National Board Review

2 credit hours Prerequisite: Third-semester DEH course work Corequisite: Fourth-semester DEH course work

An elective course designed to provide formal review sessions for students preparing to take the National Board Examination. Components of the course include test-taking skills and strategies, practice test sessions and evaluation, case studies, and organized group review of all aspects of the Dental Hygiene curriculum. The goal is to ensure adequate understanding of the concepts and applications of the dental hygiene knowledge base.

# EARLY CHILDHOOD EDUCATION

# ECE 101 Introduction to

Early Childhood Education 3 credit hours

Prerequisite: Minimum assessment scores. Corequisite: ECE 102

Provides an introduction to early childhood education. Topics include the eight key areas of professional knowledge: child growth and development, nutrition and safety, developmentally appropriate practices, guidance, family and community relationships, diversity, professionalism, and administration and supervision. Ages addressed: birth through age 8.

# ECE 102 Introduction to Early Childhood Education Lab

3 credit hours Corequisite: ECE 101

Includes a classroom seminar and a placement in a child care setting. Provides a supervised placement for the student with an opportunity to observe children, to practice appropriate interactions and to develop effective guidance and management techniques. Ages addressed: birth through age 8.

# ECE 103 Guidance Strategies for Children

#### 3 credit hours

Prerequisite: Minimum assessment scores

Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues and prosocial skills. Ages addressed: birth through age 8.

# ECE 111 Infant and Toddler Theory and Practice

#### 3 credit hours

Prerequisite: Minimum assessment scores Presents an overview of theories and

applications, including observations and issues pertinent to infant and toddler development in group and/or family settings. Includes state requirements for licensing, health, safety and nutrition issues. Ages addressed: prenatal through age 2.

# **ECE 188 Supervised Student** Practicum/Seminar 1

3 credit hours Prerequisite: ECE 101, 102, 103, 206, 220, 236, 240, 241 and 256 Corequisite: ECE 208

Develops understanding of children's growth and behavior and the ability to meet their individual and group needs. Focuses on teaching styles and ways of relating to children and adults. Requires a weekly seminar. Ages addressed: birth through age 8.

# ECE 205 Nutrition, Health and Safety 3 credit hours

Prerequisite: Minimum assessment scores

Focuses on nutrition, health and safety as a key factor for optimal growth and development of young children. Content includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities and communication with families. Ages addressed: prenatal though age 8.

#### ECE 208 Children's Assessment Systems 1 credit hour

Prerequisite: Minimum assessment scores Corequisite: ECE 188

Examines the objectives, instruments and outcomes for assessment of young children in the early childhood classroom. Ages addressed: birth through age 8.

#### ECE 209 Observing and Using Young **Children's Assessment Instruments** I credit hour

Prerequisite: Minimum assessment scores Corequisite: ECE 288

Examines the current research on the continuous practice of observing children. Students practice with a variety of assessment instruments currently used in Colorado ECE programs.

# ECE 220 Curriculum Development: Methods/Techniques

#### 3 credit hours

Prerequisite: Minimum assessment scores.

Provides an overview of early childhood curriculum development. Includes processes for planning and implementing developmentally appropriate environments, materials and experiences and quality in early childhood programs. Ages addressed: birth through age 8.

#### ECE 226 Creativity and the Young Child 3 credit hours

Prerequisite: Minimum assessment scores

Provides an emphasis on encouraging and supporting creative self-expression and problem-solving skills in children. Explores creative-learning theories and research. Focuses on developmental domains. Ages addressed: birth through age 8.

# ECE 227 Curriculum: Music/Movement and the Young Child

3 credit hours

Prerequisite: Minimum assessment scores Teaches early childhood educators

techniques for facilitating music and movement with young children. Ages addressed: birth through age 8.

# ECE 228 Curriculum: Language and Literacy

# 3 credit hours

Prerequisite: Minimum assessment scores

Presents strategies for optimum language development, literacy, social and emotional development. Supports children's language and literacy in home, classroom and community settings. Provides appropriate teacher/child verbal interactions, classroom environments and activities. Ages addressed: birth through age 8.

#### ECE 236 Child Growth and Development 4 credit hours

Prerequisite: Minimum assessment scores Covers the growth and development of the child from conception through the elementary school years. Emphasizes physical, cognitive, language, social and emotional domains, and the concept of the whole child and how adults can provide a supportive environment. Ages addressed: prenatal through age 12.

#### ECE 240 Administration of Early **Childhood Care and Education Programs** 3 credit hours

Prerequisite: Minimum assessment scores Examines Colorado's minimal licensing requirements, as well as optimal stan-

dards pertaining to the operation of programs for young children. Includes a focus on the human relations component of an early childhood professional's responsibilities. Focuses on a new director's administrative skills and administration from a teacher's perspective. Ages addressed: birth through age 12.

# ECE 241 Administration: Human Relations

3 credit hours

Prerequisite: Minimum assessment scores

Focuses on the human relations component of an early childhood professional's responsibilities. Course content includes director/staff relationships, staff development, leadership strategies, parent/ professional partnerships and community interaction.

# ECE 256 Working with Parents, Families and Community Systems

3 credit hours

Prerequisite: Minimum assessment scores

Examines attitudes and family value systems and how they affect parent/professional partnerships. Addresses communication, problem-solving and conflict-resolution strategies. Plans effective activities and programs for parent involvement. Ages addressed: birth through age 8.

#### ECE 260 The Exceptional Child 3 credit hours

Prerequisite: ECE 236

Covers services for infants, toddlers, and young children with disabilities and chronic conditions. Focuses on strategies, activities, and adaptations that assist with the inclusion of children with disabilities and chronic conditions in child care programs. Ages addressed: birth through age 8.

### ECE 267 Curriculum: Bias Free 3 credit hours

Prerequisite: Minimum assessment scores Presents an analysis of anti-bias issues that have an impact on the early childhood care and education workforce. Emphasizes planning curriculum and creating an atmosphere in the classroom through an anti-bias lens, embracing developmentally appropriate practices (DAP) philosophy, technique and content.

# ECE 268 Curriculum: Violence Prevention

Ages addressed: birth through age 8.

#### 3 credit hours

Prerequisite: Minimum assessment scores Examines curriculum development in the emotional and social developmental

domain. Addresses the classroom setting, as well as family and community participation. Provides strategies that will be used as guiding principles for a peaceful, non-violent classroom. Ages addressed: birth through age 8.

#### ECE 288 Supervised Student Practicum/Seminar II (Capstone) 3 credit hours

Prerequisite: ECE 188 Corequisite: ECE 209

Develops the student's understanding of children's growth and behavior and the ability to meet their individual and group needs. Focuses on the teaching styles and ways of relating to children and adults. Requires a weekly seminar. Ages addressed: birth through age 8.

### **ECONOMICS**

#### ECO 118 Labor Economics

3 credit hours

Introduces national labor trends and analyzes labor trends using contemporary labor market theory. Explores the economics of collective bargaining, labor law, the role of government and additional union labor topics affecting business.

#### ECO 201 Principles of Macroeconomics 3 credit hours

Studies the American economy, stressing the interrelationships among the household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking and international trade.

#### ECO 202 Principles of Microeconomics 3 credit hours

Prerequisite: Minimum assessment scores in reading, math and English, or instructor consent.

Analyzes the firm as it relates to the economy as a whole and economic issues. Students construct and study several economic models related to the firm: perfect competition, monopoly, oligopoly and monopolistic competition.

## EDUCATION

# EDU 110 Overview of Special Populations

3 - 4 credit hours

Provides students with knowledge in the areas of laws and history of special education; roles and responsibilities of paraprofessionals in schools; basic learning concepts; cognitive, communicative, physical and affective needs of typical and non-typical learners; transitioning students; job coaching; and student self-advocacy.

# EDU 111 Communication Skills with **Special Populations**

2-3 credit hours

Provides knowledge in the areas of effective communication skills, problem-solving skills and analyzing self as a communicator.

#### EDU 112 Health and Safety Issues in Schools

1 credit hour

Provides students with knowledge in the areas of health and safety issues in schools, basic first aid and CPR procedures, and the feeding and positioning of physically challenged students.

#### EDU 114 Student Behavior Management 2 - 3 credit hours

Provides students with knowledge in the areas of behavior modification, teaching appropriate behaviors, contingency contracts, observing and recording behavior, and lunchroom and playground supervision.

#### EDU 115 Paraeducator Practicum I 3 credit hours

Prerequisite: Instructor consent

Provides initial supervised experience in a school setting where students apply the theories and practices learned in course work. Students complete a variety of paraeducator duties with emphasis on reflection and self-evaluation in relation to children's learning. This course is appropriate for both preservice and inservice paraeducators.

#### **EDU 141 Basic Instructional Techniques** 2 - 3 credit hours

Provides students with knowledge in the areas of delivering instruction, grouping students, reading with students, modifying instructional materials, and using technology and adaptive equipment.

# EDU 200 Expressive Arts in the Elementary Classroom

3 credit hours

Prerequisite: ART 110 or MUS 120

Explores the integration of visual arts, music and physical education/movement into the self-contained elementary classroom curriculum based on the theory of multiple intelligences. Students become familiar with the Colorado Model Content Standards for each area, learn basic curriculum development and practice their skills with elementary students through field experiences.

#### EDU 210 Social Foundations and Multicultural Education 4 credit hours

Introduces students to the social toundations and diverse contexts involved in K-12 education. Student will critically investigate historical, philosophical, financial and legal constraints, as well as cultural variations, socio-economic status, gender equity, language background, human relations and the school as a social institution.

#### EDU 211 Paraeducator Practicum II 3 credit hours

Prerequisite: EDU 115 and instructor consent Provides the final supervised experi-

ence in a school setting where students apply the theories and practices learned in additional course work. Students complete a variety of paraeducator duties with emphasis on reflection and self-evaluation in relation to children's learning. This course is appropriate for both preservice and inservice paraeducators,

# EDU 216 Children's Literature

3 credit hours

Explores a wide variety of types of literature for children, from picture books to books for young adults, and examines major issues and concepts related to teaching and reading children's literature. Presents criteria for examining and evaluating children's fiction and non-fiction selections for quality and worth, as well as for incorporating them into the curriculum.

# EDU 240 Literacy Instructional Techniques

4 credit hours

Prerequisite: EDU 141 or instructor consent

Provides students with more knowledge of instructional techniques in the teaching of language, reading and writing. It introduces students to the phases of literacy development and explores the best practices in literacy instruction for grades K through 6. Accomodating the needs of learners with special needs, including learning disabilities or secondlanguage considerations, also are covered. It emphasizes theory and practical classroom applications methods.

#### EDU 251 Introduction to Bilingual Education

3 - 4 credit hours

Introduces bilingual and multicultural education with emphasis on the linguistically and culturally diverse learner. Covers historical perspectives, philosophical frameworks, legal implications, subject matter methodologies and current issues that have an impact on bilingual educational programs.

# EDU 261 Literacy in the Multicultural/Multilingual Classroom

3 credit hours

Introduces students to the theories, methods, and techniques for teaching reading and language to children from diverse cultural and linguistic backgrounds. The course includes field experience, applying course work with children.

#### EDU 285 Educational Technology Portfolio Development (Capstone) 3 credit hours

Prerequisite: Instructor consent

Prepares preservice teacher educators to integrate technology into their teaching curriculum. The goal is to provide students with the skills and knowledge to make appropriate decisions regarding the role of technology in supporting content standards, learning, and assessment in early childhood, elementary, or secondary education.

### ELECTROENCEPHALOGRAPHY TECHNOLOGY

#### EEG 102 Electroencephalography (EEG) I 4 credit hours

Corequisite: CIS 118, EEG 103 and 105

Introduces the history and development of EEG, electrode design and application methods, patient assessment and basic principles of laboratory management. Examines the International 10-20 system of electrode placement and includes laboratory sessions to practice the International 10-20 system.

# EEG 103 Instrumentation/Principles 3 credit hours

Corequisite: CIS 118, EEG 102, 105

Concentrates on basic electroencephalography (EEG) principles, electrode types and characteristics, application techniques, machine instrumentation, basic electronic principles, electrical theory and safety, equipment maintenance and troubleshooting. Includes concepts of digital EEG and clinical observation.

#### EEG 105 Patient Care and Safety 3 credit hours

Corequisite: CIS 118, EEG 102, 103

Emphasizes basic techniques in patient handling and in communication skills with patients, family and staff. Examines patients with special needs, management of medical emergencies and seizure first aid.

# EEG 111 Neuroanatomy and Physiology I

3 credit hours Prerequisite: CIS 118, EEG 102, 103, 105 Corequisite: EEG 112, 184

Introduces the structure and function of the central and peripheral nervous systems. Includes the brainstem and cranial nerves.

#### EEG 112 Electroencephalography (EEG) II 3 credit hours

Prerequisite: CIS 118, EEG 102, 103, 105 Corequisite: EEG 111, 184

Practices EEG testing at clinical sites. Develops skills in the 10-20 system.

#### EEG 120 Clinical Neurology

3 credit hours Prerequisite: CIS 118, EEG 102, 103, 105, 111, 112, 115 and 184 Corequisite: EEG 185

Presents diseases relevant to electroneurodiagnostic technology and electrographic clinical correlation. Includes study of seizure types, classifications and EEG correlation, encephalopathies, infections, psychiatric and cerebral vascular disease, neoplasm, coma, headaches and related clinical disciplines. Introduces neuropharmacology. Combines concepts with the basic oral communication techniques necessary for the END profession.

#### EEG 184 Clinical Internship I

5 credit hours Prerequisite: CIS 118, EEG 102, 103, 105 Corequisite: EEG 111, 112

Focuses on electroencephalography (EEG) testing at clinical sites and develops skills in the International 10-20 system of electrode placement.

# EEG 185 Clinical Internship II

7 credit hours Prerequisite: CIS 118, EEG 101, 102, 103, 105, 111, 112 and 184

Corequisite: EEG 120

Emphasizes electroencephalography (EEG) testing at clinical sites and includes history taking, electrode application and recording. Emphasis is on development of basic techniques and interpersonal skills.

#### EEG 195 Success Seminar

1 credit hour

Prerequisite: Official acceptance into one of the allied health programs (EEG)

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

# ELECTRONEURODIAGNOSTIC TECHNOLOGY

# END 207 Evoked Potential

6 credit hours

Prerequisite: EEG 185

Presents the concepts, terminology and techniques of evoked potential (EP) technology. Provides an overview of instrumentation related to EPs. Introduces each of three modalities (VEP, BAEP and SEP). Lab sessions will include practice recordings of each EP modality on classmates.

#### END 224 Clinical Internship III

8 credit hours Prerequisite: EEG 185 Corequisite: END 285

Emphasizes Evoked Potential technology, including VEP, BAEP and SEP. May include observation/performance of more specialized procedures. Develops additional skills in EEG recording and analysis.

# END 285 Electroneurodiagnostic Technology Capstone

3 credit hours Prerequisite: END 207 Corequisite: END 224

Prepares the student for a job search in the electroneurodiagnostic field, and reviews the major areas covered during the two-year program prior to the student sitting for the National Registry Examination.

# ELECTRONICS TECHNOLOGY

# ELT 101 DC Circuits

2 credit hours

Studies DC circuits by examining series-parallel resistive circuits, such as the loaded voltage divider, RC and RL time-constant circuits, properties of magnetism, inductance and capacitance.

# ELT 102 AC Fundamentals

3 credit hours

Introduces AC concepts and circuits, using AC meters, oscilloscopes and signal generators. Students construct and analyze series and parallel circuits with inductance or capacitance and resistance to show relationships of voltage, current, phase and impedance using phasor analysis.

# **ELT 109 Fiber Optics**

I credit hour

Provides additional skills necessary to secure an entry-level position as a networking technician. Includes hands-on practice, theory and related skills of terminating, testing, troubleshooting and installing network fiber optics cabling.

# ENGINEERING GRAPHICS

#### CAD 101 Computer-Aided Drafting I 3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Introduces computer-aided drafting and includes an overview of equipment and CAD applications using the latest Autocad 2-D software. Concepts include basic CAD menus, two-dimensional drawing commands, drawing entities editing techniques, dimensioning and text commands and drawing layouts.

#### CAD 102 Computer-Aided Drafting II 3 credit hours

Prerequisite: CAD 101 or instructor consent Continues computer-aided drafting and includes customization of CAD menus, blocks and symbols and drawing set-up procedures, including use of model and paper space.

# CAD 201 Computer-Aided Drafting -Customized

3 credit hours

Corequisite: CAD 102

Introduces the student to concepts such as the menu and tool bar customization, basic CAD programming, attribute extraction and other advanced customizing tools.

# CAD 202 Computer-Aided Drafting - 3-D

3 credit hours

Corequisite: CAD 201

Introduces the student to AutoCAD Desktop 3-D solid-modeling techniques in either the architectural or mechanical emphasis.

#### CAD 225 Architectural Desktop 3 credit hours

Prerequisite: CAD 202, DRT 276 Introduces advanced architectural modeling schemes and production drawing development.

# CAD 254 Mechanical Desktop

3 credit hours

Prerequisite: CAD 202; DRT 266 Introduces advanced mechanical modeling schemes, large assembly management and production drawing development.

# CAD 258 Projects in 3-D -

Mechanical Desktop 3 credit hours

Corequisite: CAD 254 Develops student skills in advanced mechanical areas such as castings, weldments and sheet metal to produce various

#### CAD 278 Projects in 3-D — Architectural Desktop

3 credit hours

Coreauisite: CAD 225

complete 3-D models.

Develops student skills in advanced architectural areas to produce various complete 3-D models.

# DRT 100 Introduction to Engineering. Graphics

3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Introduces engineering graphics for drafting students. Topics include lettering, line work, reproduction methods and geometric constructions, orthographic projections and sketching, isometric sketching, and orthographic and sectioning drafting practices.

# **DRT 101 Pictorial Drawing**

3 credit hours

Prerequisite: DRT 100 or instructor consent

Introduces the principles of pictorial practices. Topics covered are axonometric projects (isometric, dimetric and trimetric), oblique projections (general, cabinet and cavalier) and perspective drawing (one- and two-point perspectives).

#### DRT 102 Descriptive Geometry/ Auxiliary Views

#### 3 credit hours

Prerequisite: DRT 101

Introduces the student to projections, including simple and complex, inclined and oblique, and line and plane applications. The student will learn specific procedures that allow the determination of a line, true length and point of view of a line, an edge view and true size.

#### DRT 164 Dimensioning and Tolerancing 3 credit hours

Prerequisite: CAD 102

Instructs students how to correctly dimension various objects and features on drawings using proper SME Y14.5 1995 standards. Students learn to calculate and dimension fit tolerances and determine tolerances from standard fit tables.

### DRT 166 Introduction to Mechanical Drafting

3 credit hours

Corequisite: DRT 164

Introduces the drawing of threads, fasteners and springs. Covers welding drawings, gear and cam drawings, sheet metal developments and manufacturing processes.

# DRT 174 Architectural Dimensioning

3 credit hours

Prerequisite: CAD 102

Introduces dimensioning and how to correctly dimension, using standard architectural schemes.

#### DRT 176 Introduction to Architectural Drafting

3 credit hours

Corequisite: DRT 174 or instructor consent Introduces the field of architectural drafting. Prepares students to draw a small, single-family residence, including floor plans, foundation and framing plans and all necessary detail plans.

#### **DRT 264 Geometric Tolerancing**

3 credit hours

Prerequisite: CAD 201

Introduces the principles of geometric tolerancing. Concepts covered include datums, straightness, flatness, roundness, cylindricity, parallelism, perpendicularity, angularity, concentricity, runouts and how each relates to modern machine shop practices.

# DRT 266 Advanced Mechanical Drafting 6 credit hours

Corequisite: DRT 264

Introduces the drawing of mechanical and operating assemblies and subassemblies. Elements included are cast, welded, machined and purchased parts. Topics included are the preparation of appropriate assembly drawings, necessary detail drawings, use of required parts, call-outs and material lists and appropriate dimensioning for the subject matter.

#### DRT 274 Architectural Codes and Style

3 credit hours Prereauisite: CAD 201

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Introduces the elements of how local codes have an impact on the architectural community and how the architectural drafter understands and supports the licensed architect in the design process. Introduces major architectural styles.

#### DRT 276 Advanced Architectural Drafting 6 credit hours

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Corequisite: DR 274

Introduces the modeling of entire structures in 3-D space, from the simple extruded 2x4 stud to entire walls, framed structures, roofs and foundations. Students become proficient in the use of existing plug-ins from vendors and the development of a complete bill of materials.

# DRT 280 Graduation Portfolio Mechanical Project

6 credit hours

Corequisite: CAD 258

Completes the Mechanical emphasis in Engineering Graphics. Students produce a complete 3-D model of an entire mechanical device. Tasks include modeling individual parts at each level of manufacturing, assembling in 3-D space and developing a complete set of plans for production. The project demonstrates understanding of the development cycle, revisions and the skills needed to perform in an engineering firm.

# DRT 290 Graduation Portfolio Architectural Project

6 credit hours

Corequisite: DRT 278

Completes the Architectural emphasis in Engineering Graphics. Students produce a complete 3-D model of an entire structure. Tasks include modeling individual parts at each level of manufacturing, assembling in 3-D space and developing a complete set of plans for production of the building. The project demonstrates understanding of the development cycle, revisions and the skills needed to perform in an architectural firm.

# ENGLISH

#### ENG 005 English Grammar

1 - 5 credit hours

Reviews the basics of traditional English grammar and the conventions of academic and professional punctuation, mechanics, and usage. Explains common sentence errors and how to correct them, the contstruction of clear, effective sentences, paragraphs, and essays.

#### ENG 030 Basic Writing Skills

2 credit hours

Prerequisite: Appropriate assessment score

Focuses on sentence and basic paragraph structure and development. Student will review and improve grammar, usage, and punctuation skills while employing critical-thinking strategies and the writing process to respond to a wide variety of writing situations.

#### **ENG 060 Writing Fundamentals**

3 credit hours

Prerequisite: Appropriate assessment score or ENG 030

Focuses on paragraph structure and development and introduces the basic essay. Students will review and improve grammar, usage and punctuation skills while employing critical-thinking strategies and the writing process to respond to a wide variety of writing situations.

# ENG 080 Workshop in Reading, Writing and Speaking

3 credit hours

Prerequisite: Minimum assessment score in English and reading

Provides students with an understanding of the interrelationship among reading, writing, and speaking. Aids students in developing language fluency necessary in other communication-based classes.

# ENG 090 Basic Composition

3 credit hours

Prerequisite: Appropriate assessment score or ENG 060 or ESL 053

Emphasizes critical thinking as students explore writing for specific purposes and audiences. Students will develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development.

## ENG 121 English Composition I

#### 3 credit hours

Prerequisite: Minimum assessment score in English or ENG 090

Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. Includes a minimum of five (5) compositions that may include expressive and informative writing, but stress analytical, evaluative and persuasive writing.

#### ENG 122 English Composition II

3 credit hours

Prerequisite: ENG 121

Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative and/or persuasive papers that incorporate research.

#### ENG 131 Technical Writing I

3 credit hours

Prerequisite: ENG 090

Develops proficiency in technical writing, emphasizing principles for organizing, drafting and revising a variety of documents for industry, business and government.

#### ENG 143 Writing Your Autobiography

3 credit hours

Prerequisite: ENG 121

Explores autobiographical writing with an emphasis on anecdotes and remembrances in narrative presentations. This 3-credit-hour course is designed for English majors and non-majors.

#### ENG 221 Creative Writing I

3 credit hours

Prerequisite: ENG 121

Begins development of expression through writing; provides an introduction to literary forms such as poetry, fiction, creative non-fiction and drama; introduces techniques for developing and controlling such forms; and stresses the multicultural and diverse nature of language.

# ENG 222 Creative Writing II

3 credit hours

Prerequisite: ENG 221

Continues development of expression through writing; provides instruction in literary forms such as poetry, fiction and/or nonfiction; emphasizes techniques for developing and controlling such forms; and stresses the multicultural and diverse nature of language.

#### English as a Second Language (ESL) ESL 001 Spelling

3 credit hours

Introduces ESL students to techniques that increase basic spelling skills in English. Study includes structured word analysis, rule analysis and spelling strategies for words not governed by rules.

## ESL 009 Introductory ESL

1 - 12 credit hours Prerequisite: Students must be 17 years

or older Provides listening, speaking, reading and writing activities that increase the student's communication skills in everyday and work situations. Assists students in progressing from minimal English skills (Level 0-1) to competency in survival needs and routine work and social demands (Level 6-7). Offered by the GED Institute at community-based sites.

## ESL 011 Basic Pronunciation

1 - 3 credit hours

Provides listening and speaking activities that help students recognize and produce English vowel and consonant sounds and common stress and intonation patterns.

# ESL 012 Intermediate Pronunciation

1 - 3 credit hours

Prerequisite: ESL 041 or LOEP reading score of 46+

Provides listening, speaking and reading activities that help students recognize and produce a variety of stress and intonation patterns in English. Helps ESL students to produce problematic English sounds.

#### ESL 021 Basic Grammar

1 - 3 credit hours

Prerequisite: Minimum assessment score Helps the student master basic struc-

tures in English grammar through oral and written practice.

#### ESL 022 Intermediate Grammar

1 - 3 credit hours Prerequisite: ESL 021 or minimum assessment score

Reviews basic grammar and intro-

duces intermediate structures. Provides integrated practice through a variety of oral and written exercises.

# ESL 023 Advanced Grammar

1 - 3 credit hours

Prerequisite: ESL 022 Reviews intermediate grammar.

Introduces advanced structures with increased emphasis on written communication.

## ESL 031 Basic Conversation

3 credit hours

Prerequisite: Minimum assessment scores Provides listening and speaking activities that help the student communicate more competently. Provides practice with pronunciation, vocabulary and basic grammatical patterns.

# ESL 032 Intermediate Conversation

3 credit hours

Prerequisite: ESL 031or minimum assessment score

Teaches listening, pronunciation and conversation skills. Increases speed and accuracy in speaking through free and guided conversational practice,

# ESL 033 Advanced Conversation

3 credit hours

Prerequisite: ESL 022 or minimum assessment score

Provides student with opportunities to increase the listening and speaking skills required in academic and work situations. Emphasizes vocabulary building, listening, and note-taking strategies, as well as questioning, discussion and presentation skills.

# ESL 041 Basic Reading

3 credit hours

Prerequisite: Minimum assessment score

Improves comprehension of simple written texts through vocabulary building and reading strategies.

#### ESL 042 Intermediate Reading

3 credit hours

Prerequisite: ESL 041 or minimum assessment score

Helps the student read more quickly and accurately and understand a variety of intermediate-level reading material.

#### ESL 043 Advanced Reading

1 - 3 credit hours Prerequisite: ESL 042 or minimum assessment score

Prepares the student for academic reading assignments. Assists the student to read more accurately and critically through the development of vocabulary knowledge and reading skills. Introduces research skills.

# ESL 052 Intermediate Composition

3 credit hours Prerequisite: ESL 022 or 023 Corequisite: ESL 023 (if not completed as a prerequisite)

Introduces the fundamentals of paragraph organization and development. Assists the student in developing sentence variety and grammatical competency within well-organized paragraphs.

#### ESL 053 Advanced Composition

3 credit hours Prerequisite: ESL 052 or

Writing Sample placement

Reviews paragraph organization and develops the skills of writing essays using selected rhetorical modes. Stresses accurate use of advanced grammatical structures. Includes summarizing, paraphrasing and research writing.

#### ESL 061 Vocational ESL I

1 - 4 credit hours

Prerequisite: Instructor consent

Teaches limited English vocational students basic communication skills in preparation for vocational training and work.

# ESL 062 Vocational ESL II

1 - 4 credit hours

Prerequisite: Instructor consent

Provides intermediate to advancedlevel English language learners with instruction in language skills needed for vocational training and employment.

#### ESL 064 Job Search Skills

1 - 3 credit hours

Prerequisite: Instructor consent

Provides ESL students with basic preemployment skills that include developing a resume, completing applications, interviewing for a job, calling for information about a job and focusing the job search.

#### ESL 071 Basic Language Skills 9 credit hours

Develops and strengthens the reading, writing, listening, speaking and grammar production skills of non-native English speakers whose assessment scores reflect a readiness to benefit from basic-level ESL courses.

#### ESL 072 Intermediate Language Skills

6 - 15 credit hours Prerequisite: ESL 021 and 041, or intermediate level test scores

Provides intermediate and high-intermediate English language students with intensive instruction and practice in reading, writing and speaking English. Teaches intermediate and advanced-level grammar concepts. Prepares students for further academic and vocational study.

# FITNESS, HEALTH AND RECREATION

#### FHR 100 Rhythmic Aerobics

2 credit hours

Introduces the student to the field of rhythmic aerobics. Includes an overview of health benefits, practical applications in public and private facilities, and choices and opportunities in fitness/recreation/health care centers. A program of choreographed movements will be designed to improve cardiovascular endurance, agility, flexibility, balance, strength, rhythm and coordination.

#### FHR 101 Aerobics Walk/Jog/Step 2 credit hours

Introduces the student to the field of aerobics. Includes health benefits with practical applications in public and private facilities. Emphasis is on the development of an individual walking/jogging/ stepping program designed to improve or maintain cardiovascular endurance, agility, flexibility, balance, strength, coordination, health and longevity.

#### FHR 102 Volleyball

2 credit hours

Develops the skills of volleyball. Emphasis is on rules, strategies, safety and sportmanship involved in playing both competitively and recreationally.

## FHR 104 Weight Training

2 credit hours

Provides basic knowledge of weight training and importance in an overall fitness program. Students will, under the direct supervision of the instructor, develop and practice an individualized weighttraining program.

#### FHR 105 Swimming I

2 credit hours

Introduces basic floating and breathing techniques. Teaches elementary crawlstroke, breaststroke, sidestroke and backstroke. Review of health benefits and lap swimming designed to improve cardiovascular endurance.

#### FHR 106 Water Exercise

2 credit hours

Provides instruction and practice in a variety of aerobic exercises conducted in the swimming pool. Designed to review health benefits and improve cardiovascular endurance. An aerobic fitness opportunity for students who cannot participate in traditional aerobic activities due to physical limitations.

#### FHR 110 Golf I

2 credit hours

Introduces golf as a lifetime recreational sport. Instruction of and practice in basic golf skills, set-up posture, stance, grip, short and full swings and equipment selection.

#### FHR 208 Biomechanics of Movement 3 credit hours

Corequisite: BIO 116 or higher

Provides health and wellness majors and those in related areas of movement science with the basic knowledge and understanding of analytical techniques that can be used to improve human performance and avoid injury in sports and exercise.

# FRENCH

#### FRE 111 First-year French 1 5 credit hours

Instructs the student in the pronunciation of all the French sounds and introduces first-semester basic grammatical structures. Immerses students in the culture and flavor of France through the innovative materials of "French in Action."

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#### FRE 112 First-Year French II

5 credit hours

Prerequisite: FRE 111

Teaches the student how to establish and maintain average conversation in French and introduces second-semester grammatical structure. Immerses student in detailed culture and flavor of France through the innovative materials of "French in Action."

# FRE 211 Second-Year French 1

3 credit hours

Prerequisite: FRE 112

Teaches the student how to establish and maintain an advanced conversation in French and introduces third-semester grammatical structure and writing. Gives more detailed cultural background and flavor of France.

## GENERAL EDUCATION DEVELOPMENT

# **GED 001 GED Preparation**

1-12 credit hours

Prepares the student for the five areas of the Colorado High School Equivalency Examination (formerly GED test): writing, social studies, science, reading and mathematics. Includes diagnostic assessment and simulated GED test practice.

### GED 052 GED Preparation (Off-campus) 1 - 12 credit hours

Prerequisite: Student must be 17 years of age Prepares the student for the five areas of the Colorado High School Equivalency Examination (formerly GED Test): writing, social studies, science, reading and mathematics. Includes diagnostic assessment and simulated GED test practice. Offered by the GED Institute at community-based sites.

# GEOGRAPHY

#### GEO 105 World Regional Geography 3 credit hours

Includes concepts of spatial relationships between and among the geographic regions of the world. Includes demographic and cultural (political, economic and historic) forces related to the physical environments of selected regions. Analyzes interrelationships between developed and developing regions.

#### **GEO 200 Human Ecology**

3 credit hours

Surveys world resources, the nature of world resources, attitude toward resources, environmental principles and the impact of population on resource bases.

# GEOLOGY

# **GEY 111 Physical Geology**

4 credit hours

Prerequisite: ENG 090 or higher, MAT 090 or higher

Studies earth's materials, its structure, surface features and the geologic processes involved in its development. Includes laboratory experience.

# **GEY 112 Historical Geology**

4 credit hours

Prerequisite: GEY 111 or instructor consent

Investigates the events that formed the earth and the evolution of flora and fauna. Students will study rock and fossil records to determine the geological, geochemical and biological evolution that has shaped, formed and modified earth. Includes laboratory and field trip experiences.

# **GEY 228 Field Biology**

3 - 4 credit hours

Prerequisite: BIO 112 or GEY 111

Introduces students to field experiences in biology, geology and ecology. Includes identification of plants, animals in their natural environment and geologic features. The course includes mandatory field trips to nearby natural areas.

# GRAPHIC COMMUNICATION TECHNOLOGY

# GCT 101 Introduction to Graphic Technology

3 credit hours

Surveys the development of graphic communications, past and present. It includes a study of history, design, processes, terminology, materials and the importance of graphic communication in contemporaray society.

# GCT 102 Electronic Composition, Art and Copy Preparation

3 credit hours

Prerequisite: GCT 101

Covers treatment of original art and graphics for reproduction and paste up of electronic mechanicals, including display type, illustrations, registration work and typesetting elements.

# GCT 103 Introduction to Visual Communications

3 credit hours

Prerequisite: GCT 101, 102

Introduces principles, emphasizing effective and efficient communication of information through type, graphic elements, screens, photographs, illustrations, templates, style sheets and spot process color separations.

# GCT 104 Introduction to Web and Home Page

3 credit hours

Prerequisite: GCT 101, 102, 103

Emphasizes browsing the World Wide Web on the computer. Includes researching the Web, using e-mail, learning file transfer protocol, exploring news groups and creating Web pages.

# GCT 105 Resume and Portfolio

3 credit hours

Prerequisite: GCT 101, 102, 103, 104, or instructor consent

Develops a professional presentation of work that demonstrates potential in graphic communications technology, as well as a variety of experiences. Students will develop the concept of self-promotion, a resume and a cover letter needed to secure employment.

# GCT 111 Line and Halftone Photography 3 credit hours

Enables the student to perform basic graphic arts darkroom work and produce balftone photographs for camera-ready art. This includes how to: use the halftone screen, determine the range of tones in a photo, recognize various methods of exposure and development necessary to reproduce all tones and operate a process camera.

#### GCT 112 Beginning Offset Press

3 credit hours

Prerequisite: GCT 111

Introduces a fundamental understanding of offset presses, including delivery, printing head and operation. Uses the presses with an ink and water fountain solution for a simple job.

## GCT 113 Intermediate Offset Press

3 credit hours

Prerequisite: GCT 111, 112

Introduces the student to T-Head presses and the quick-copy system, while presenting more detailed information on small presses. Students learn pressure settings and adjustments, registration techniques and multicolor registering for print jobs.

### GCT 114 Paper Management and Estimating

3 credit hours

Prerequisite: GCT 111, 112, 113

Introduces the different facets of paper management and estimating, while students prepare and produce small production jobs. The course teaches students how to estimate paper and press and production times.

# GCT 151 Introduction to Desktop Publishing

3 credit hours

Prerequisite: GCT 201 or instructor consent Introduces the concepts and tech-

niques used in the successful creation and management of desktop publishing projects. Covers document, art and color management; art creation for reproduction, emphasizing format and pre-production control; software; and concepts related to creation, output, workflow and problem solving.

# GCT 185 Bindery and Portfolio (Capstone)

3 credit hours Prerequisite: GCT 111, 112, 113, 114

Introduces small and large bindery operations. Students gain expertise in press operations while learning about paper, job pricing, job planning, scheduling, work flow and plant layout.

# GCT 201 Electronic Graphics

3 credit hours

Introduces fundamentals and basic electronic operating procedures. Emphasizes practical application and principles of layout and typography. It requires creation of camera-ready documents for the reproduction process.

# GCT 202 Electronic Page Layout

3 credit hours

Prerequisite: GCT 201 or instructor consent Places emphasis on the leading page layout software program, emphasizing efficient communication of information. The course covers type, graphic elements, screens, photographs, illustrations, templates, style sheets, spot-color and process-color separations.

# GCT 203 Electronic Scan and Color Theory

3 credit hours Prerequisite: GCT 201 and 202, or

instructor consent

Provides experience in computer-generated art and digitizing artwork and photographs for production. Students will learn color theory and tone manipulation through electronic scanning.

# GCT 204 Electronic Pre-Press

3 credit hours

Prerequisite: GCT 201, 202 and 203, or instructor consent

Explores electronic methods of art production, as well as digital and filmcolor proofing techniques.

# GCT 205 Digital Photography and Portfolio

3 credit hours

Prerequisite: GCT 201, 202, 203 and 204, or instructor consent

Emphasizes the development of visual problem-solving, alternative image-generation methods, electronic pre-press, laser writers, and electronic printing and publishing. This course culminates in the creation of a professional portfolio and discussion of current professional practices.

# GCT 285 Printing Production Management (Capstone)

3 credit hours

Prerequisite: GCT 201, 202, 203, and 204 Continues to prepare the student for printing presentation and job interviewing techniques. Students will develop skills for competing in the local job market. Course work includes developing specifications and estimating for the industry.

# GCT 297 Graphic Communication Technology Internship

3 - 6 credit hours

Prerequisite: Instructor consent Introduces students to an on-site experience as an "intern-in-training" in a wide variety of Graphic Communication Technology-related situations.

# HEALTH AND WELLNESS

#### HWE 235 Exercise Testing and Prescription

3 credit hours

Prerequisite: BIO 201 or 111, BIO 202 or 112, FHR 208

Provides students with the opportunity to conduct laboratory fitness assessments, evaluate test results and develop exercise prescription. Health appraisals, metabolic calculations, exercise principles and prescriptions are discussed and practiced in detail.

# HEALTH AND WELLNESS MANAGEMENT

# HWM 101 Essentials of Total Fitness and Wellness

3 credit hours

Prerequisite: PSY 101 or SOC 101

Provides a systematic introduction to explore health-related fitness and wellness issues; general principles of exercise for health and fitness; nutrition, health and fitness connections; and exercise, diet and weight control connections. Explores relationships of exercise to the environment, to rehabilitation and to disease prevention.

## HWM 195 Success Seminar

1 credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

### HWM 201 Health Psychology

## 3 credit hours

Prerequisite: HWM 101

Provides systematic introduction to and exploration of the psychological procedures in prevention, diagnosis and treatment of such medical problems as cardiovascular disorders, headaches, obesity, asthma and chronic pain. Explores psychological factors that contribute to promotion and maintenance of good health and to recovery from existing illness.

## HWM 205 Health and Wellness Marketing and Promotion

# 3 credit hours

Prerequisite: HWM 101

Provides a systematic introduction to the principles of health and wellness. Provides opportunity for students to analyze various methods of marketing to promote health and wellness in different ways and to design an educational marketing program for health and wellness.

#### HWM 285 Health and Wellness Management Practicum (Capstone) 5 credit hours

Prerequisite: HWM 101, 201, 205, MOT 137

Provides practical experience in health and wellness management that facilitates students' abilities to apply theoretical concepts to hands-on situations and to problem solve given practical limitations of real-world environments. Emphasizes developing professional behaviors and skills, addressing individual needs of clients, and developing research, and entrepreneurial and job-search skills.

# **HEALTH OCCUPATIONS**

### HOC 107 Speedy Spanish for Medical Personnel

2 credit hours

Provides health professionals the opportunity to learn basic conversational Spanish needed to communicate with clients and families in a variety of situations.

# HISTORY

### HIS 101 Western Civilization I

3 credit hours

Explores the major political, historical, economic, social, cultural and intellectual events in Western civilization from beginnings to 1650.

#### HIS 102 Western Civilization II 3 credit hours

Explores the major political, historical, economic, social, cultural and intellectual events in Western civilization from 1650 to the present.

#### HIS 201 United States History I 3 credit hours

Examines the major political, historical, economic, social, cultural and intellectual events in United States' historyfrom beginnings to 1865.

#### HIS 202 United States History II 3 credit hours

Examines the major political, historical, economic, social, cultural and intellectual events in United States' history from 1865 to present.

# HIS 205 Women in History

3 credit hours

Conveys the primary ideas of women's history, and uses these ideas to analyze the lives of American women from many cultures and to assess the impact of their lives on the history of the United States.

### HIS 225 Colorado History

3 credit hours

Examines the major political, historical, economic, social, cultural and intellectual events in Colorado history from beginnings to the present. The course meets for 16 weeks and carries credits of 3 hours lecture or independent study.

# HUMAN SERVICES

#### HSE 105 Introduction to Social Welfare 3 credit hours

Examines the historical and philosophical background of statutes, ideologies, political process, policy making, decision rules and influential leaders who have had an impact on shaping the social welfare institutions in the United States. Offered spring semester only.

#### HSE 106 Survey of Human Services 3 credit hours

Provides a philosophical, political, statutory and contemporary overview of the role, values, knowledge and intervention strategies encountered by human service professionals in addressing social problems.

# HSE 107 Interviewing Principles and Practices

3 credit hours

Identifies basic concepts of the interview relationship with emphasis on the "helping" interview. Examines the principles, documentation and techniques of interviewing. Gives opportunity to engage in practice interviews, role playing and feedback. Includes principles of speech requirements.

#### HSE 108 Introduction to Therapeutic Systems

3 credit hours

Prerequisite: HSE 107 or PSY 101 or PSY 235 or instructor consent

Introduces basic concepts of major therapeutic systems, including backgrounds, developmental theories and practices of specific systems from psychoanalysis to reality therapy.

#### HSE 109 Social Issues in Human Services 3 credit hours

Provides an analytical overview of the social functions of human services. Examines the welfare system from various political perspectives. Presents idealism and pragmatism of the present state of human services and trends for the future. Offered fall semester only.

# HSE 113 Human Services for Persons with Developmental Disabilities

3 credit hours

Prerequisite: REA 060, 109, MAT 055, ENG 060

Provides a basic overview of the historical development, philosophy and values of rehabilitative services for those who plan to work with persons with developmental disabilities. Offered fall semester only.

# HSE 115 Human Services Practicum I (Certificate Capstone)

1 - 6 credit hours

Prerequisite: Admission as a Human Services program major or instructor consent

Provides experience in various service agencies to familiarize students with agency work. Emphasizes developing observational skills, individual growth in self-awareness, interviewing skills, introduction to agencies and client systems. A weekly classroom seminar complements the agency experience. Offered spring semester only.

#### HSE 116 Human Services Practicum 3 credit hours

Provides practical experience in a social setting where students learn to apply human services theoretical concepts to hands-on situations. Presents students with the practical limitations and specialized program offerings available to clients in the context of a public assistance service-delivery setting.

#### HSE 117 Confidentiality

1 credit hour

Emphasizes working with mental health and substance abuse clients and using confidentiality in a clinical practice. Details specific provisions of federal and state statutory regulations involved with client confidentiality.

#### HSE 121 Psychosocial Interventions for Persons with Developmental Disabilities 3 credit hours

Prerequisite: AAA 109, ENG 060, MAT 055, REA 060

Provides students with an overview of models and methods that can prevent and treat behavior problems in individual adults with developmental disabilities.

#### HSE 205 Human Services for Groups 3 credit hours.

Prerequisite: HSE 108 or instructor consent Introduces the concepts, principles,

goals and skills of group work as a method of providing human services. Emphasis is on basic practice skills and intervention techniques. Offered fall semester only.

#### HSE 206 Human Services for Families 3 credit hours

Prerequisite: HSE 107 and 108 or instructor consent

Covers such topics as systems theory, communication theories, structure therapists, developmental theory and future directions in family therapy research. Offered fall semester only.

## HSE 207 Community Organization 3 credit hours

Prerequisite: HSE 108 or instructor consent Examines the theory and practice of

organizing communities, neighborhoods, committees and advisory boards as they relate to the social services delivery system. Offered fall semester only.

#### HSE 208 Social Welfare Policy 3 credit hours

Prerequisite: HSE 109 or instructor consent.

Presents models for social policy analysis, program planning and evaluation. Applies models to relevant social welfare issues.

#### HSE 209 Crisis Theory and Intervention

3 credit hours Prerequisite: HSE 107 and 108 or instructor consent

Introduces basic theories and principles of crisis intervention from a historical and practical orientation. Offered spring semester only.

## HSE 211 Human Services Practicum II 4 credit hours

Prerequisite: HSE 115 or instructor consent Provides placement in a service

agency where the student applies the values, concepts and skills gained in theory courses to the actual process of helping people. Emphasis is on sharpening skills and knowledge, use of self in the helping process, understanding systems and use of community resources. Offered fall semester only.

# HSE 215 Introduction to Delinquency and Justice

3 credit hours Prerequisite: HSE 107, 108 or instructor consent

Provides a historical and philosophical background of theories, ideologies, statutes, political processes and policies of the American Juvenile Justice System. Examines juvenile processes from predelinquency and adjudication, through corrections.

#### HSE 221 Substance Abuse Counseling 4 credit hours

Emphasizes two areas of drug and alcohol counselor preparatory work for state certification, including basic counseling skills and client records management. Prepares students for entry-level work in the substance abuse treatment field. Includes the development of treatment plans, clinical notes, discharge summary and demonstration.

## HSE 225 Clinical Techniques in Substance Abuse

3 credit hours Prerequisite: HSE 221 Corequisite: HSE 107, 108

Applies advanced counseling skills and staff supervision techniques to clinical practices in substance abuse and mental health settings. Reviews the role of a clinical supervisor and details the process of therapeutic counseling practices.

# HSE 285 Human Services Practicum III

1 - 7 credit hours

#### Prerequisite: HSE 211

Provides practical experience working in an approved social service agency. The student participates in various service agency functions as a group member and leader, and further develops skills and knowledge in the use of self and systems in the helping process. Offered spring semester only.

# HSE 297 Internship Work Experience

1 - 6 credit hours

#### Prerequisite: HSE 114 or 217

Provides students who desire jobs as paraprofessionals with the guided opportunity to practice the skills they learned in the classroom.

# HUMANITIES

# HUM 115 Introduction to Chicano Studies

## 3 credit hours

Introduces students to skills development in multicultural education. Consists of Chicano history, migration and labor, education, law and Chicano culture.

#### HUM 116 African American Studies 3 credit hours

Emphasizes significant contributions of African American writers, artists, scientists and political leaders to American civilization. Examines key African American cultural contributors.

#### HUM 121 Survey of Humanities I 3 credit hours

Introduces, through a study of the visual arts, literature, music and philosophy, the history of ideas that have defined cultures. Emphasizes connections among the arts and values of diverse cultures. including European and non-European. from the Ancient world to 1000 C.E. Survey of Humanities I, II and III may be taken in any order.

#### HUM 122 Survey of Humanities II 3 credit hours

Examines written texts, visual arts and musical compositions to analyze and reflect the evolution and confluence of cultures in Europe. Asia and the Americas from 1000 C.E. to 1750 C.E. Survey of Humanities I, II and III may be taken in any order.

#### HUM 123 Survey of Humanities III 3 credit hours

Introduces, through a study of the visual arts, literature, music and philosophy, evolution and confluence of world cultures form 1750 C.E. fo the present. Survey of Humanities I, II and III may be taken in any order.

# HUM 185 Cultural Diversity in the Humanities

#### 3 credit hours

Introduces students to the various aspects of social and cultural diversity. Promotes development of critical thought and growth of multicultural, multisocial and multilingual understanding.

# HUM 225 Contemporary Chicano Culture

#### 3 credit hours

Examines current issues of Chicano culture. General themes include alienation, community identity, political organization, cultural change, ideology and power.

#### HUM 251 Curanderismo: A Cultural Approach to Holistic Medicine 3 credit hours

Introduces students to intercultural, alternative and holistic approaches to health, diet and medical care.

# HUM 285 Seminar in Critical Thinking (Capstone)

#### 3 credit hours

Prerequisite: ENG 121, MAT 135, SPE 115

Shows the interconnections among the various courses required for CCD's AA and AGS degrees. Reviews both the common and unique properties of the subject areas studied.

# INFORMATION TECHNOLOGY

# CIS 110 Introduction to **Operating Systems**

3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Introduces concepts, terminology and hands-on skills in the use of DOS and Windows. Emphasizes navigation. file manipulation, file creation and troubleshooting.

#### **CIS 118 Introduction to PC Applications** 3 credit hours

Introduces computer concepts and components, as well as application-suite software and the Internet. Included are descriptions of and hands-on experiences with word processing, spreadsheets, databases, operating environments and other common PC application packages.

#### **CIS 119 Introduction to Programming** 3 credit hours

Prerequisite: Minimum assessment score of 60 in math, 60 in English, 60 in reading and 60 in study skills

Introduces major programming concepts, including numbering systems, program documentation and design, the DOS operating system and authoring computer programs, using BASIC programming language.

#### CIS 135 Complete PC Word Processing/ Word 3 credit hours

Prerequisite: CIS 118, BTE 100 or 20 WPM typing speed, or instructor consent

Provides complete word processing skills and covers the use of basic commands and functions and originating, processing and editing business documents with Microsoft Word.

# CIS 139 Microsoft Certification Prep: Word

1 credit hour Prerequisite: CIS 135 or instructor consent

based on prior experience

Prepares students for the Microsoft Office User Specialist certification examination for Word. Students will elect to review and prepare for either the Core- or Expert-level exam.

#### CIS 145 Complete PC Databases/Access 3 credit hours

Prereauisite: CIS 118 or instructor consent Introduces the operation of a PC database management system. Students use Microsoft Access to develop skills in database design, table operations, searches, sorts, edits, queries, forms and reports.

#### CIS 149 Microsoft Office Certification Prep: Access

I credit hour

Prerequisite: CIS 145 or instructor consent based on prior experience

Prepares students for the Microsoft Office User Specialist certification examination for Access. Students will review and prepare for the Access Corelevel exam.

#### CIS 155 Complete PC Spreadsheets/Excel 3 credit hours

Prerequisite: CIS 118 or instructor consent Introduces the concepts and principles of PC spreadsheets. Students use Microsoft Excel to develop skills in spreadsheet design, formatting, formulas, functions, charts, and macros, and to perform statistical and what-if analyses.

### CIS 159 Microsoft Office Certification Prep: Excel

I credit hour

Prerequisite: CIS 155 or instructor consent based on prior experience

Prepares students for the Microsoft Office User Specialist certification examination for Excel. Students will elect to review and prepare for either the Core- or Expert- level exam.

# **CIS 165 Complete PC Presentation** Graphics/PowerPoint

3 credit hours

Prerequisite: CIS 118 or instructor consent Introduces the concepts and tech-

niques of computer graphics. Students use Microsoft PowerPoint to create and deliver various presentation projects.

# CIS 169 Microsoft Office Certification Prep: PowerPoint

I credit hour

Prerequisite: CIS 165 or instructor consent based on prior experience

Prepares students for the Microsoft Office User Specialist certification examination for PowerPoint. Students will review and prepare for the PowerPoint Core level exam.

#### CIS 180 Microcomputer Hardware 3 credit hours

Corequisite: CIS 118

Covers the maintenance and installation of microcomputers and peripheral devices, including printers, expanded memory, modems, video display terminals and secondary storage devices. Introduces electronics and microcomputer architecture.

#### **CIS 201 FrontPage**

3 credit hours

Prerequisite: CIS 118

Covers the skills of designing, creating, and editing basic Web pages for delivery and use on the World Wide Web.

# CIS 218 Advanced PC Applications— Integration Software

3 credit hours

Prerequisite: BTE 101 and CIS 135 or instructor consent

Introduces sharing files and information among software applications and users. To facilitate successful integration, the student will learn the basics of presentation, spreadsheet and database software applications, as well as advanced features of a word processing software application.

## CIS 243 Introduction to SQL

#### 3 credit hours

Prerequisite: CIS 119 or instructor consent Corequisite: CIS 145

Introduces students to creating database structures and storing, retrieving and manipulating data in a relational database. SQL is the set of statements that all users and programs must use to access data in the Oracle database. This course also will use SQL\*Plus to manipulate SQL statements.

#### CIS 244 SQL PL/SQL

3 credit hours

Prerequisite: CIS 243

Develops skills to create and maintain database objects; store, retrieve and manipulate data; and create PL/SQL blocks of application code that are shared by multiple forms and reports.

## CIS 245 Data Modeling and Relational Databases

3 credit hours Prerequisite: CIS 244 Introduces a systematic approach to database development using entity-relationship models and relational database design. Students learn how to interpret and create ER models and first-cut database designs based on business information requirements.

#### CIS 246 Oracle Database Administration I 4 credit hours

Prerequisite: CIS 245

Designed to give students a foundation in basic Oracle architecture, storage structure and database administrative tasks. Students will gain the knowledge and skills to create databases and data dictionary views, and to manage Oracle instances, tables, tablespaces, data files, control files, redo log files and rollback segments.

## CIS 247 Oracle Database Administration II 4 credit hours

Prerequisite: CIS 246

Designed to give students basic administrative skills that build on those learned in CIS 246. Students will gain the knowledge and skills to manage indexes, restraints and data integrity; load and reorganize data; use national support language; create and manage users and their profiles, resources, privileges and roles; and manage password security.

#### CIS 248 Oracle Data Backup and Recovery

4 credit hours

Prerequisite: CIS 247

Introduces students to the critical task of planning and implementing database backup and recovery strategies and techniques. Examines various backup, failure, restore and recovery scenarios, and uses Oracle tools for performing backup and recovery operations.

#### CIS 250 Computer Diagnosis and Repair 3 credit hours

Prerequisite: CIS 180

Covers the hands-on troubleshooting, configuration and installation of microcomputers and their peripherals.

#### CIS 251 PC Help Desk Skills

3 credit hours

Prerequisite: CIS 250

Enables the student to understand and develop appropriate help-desk techniques. Includes roles of help-desk personnel, and how to troubleshoot hardware and software problems.

#### CIS 261 A+ Certification Preparation 3 credit hours

Prerequisite: CIS 250

Prepares students for the CompTIA A+ certification examination. Hardware and software concepts are reviewed using A+ techniques.

# CIS 263 Oracle SQL PL/SQL Certification Exam Preparation

3 credit hours

Prerequisite: CIS 244

Prepares students for the Oracle8i DBA: Architecture and Administration certification exam #1Z0-001. This is the first in the series of tests to become an OCP.

#### CIS 264 Oracle DBA: Architecture and Administration Certification Preparation 3 credit hours

Prerequisite: CIS 247

Prepares students for the Oracle8i: Architecture and Administration certification exam #1Z0-023. This is the second in the series of tests to become an OCP.

#### **CIS 285 Capstone Project**

1 credit hour

Prerequisite: Course taken in graduating semester, student no more than 15 hours from graduation or instructor consent

Designed to ensure the student understands the more advanced concepts and principles of a specific computer area. These concepts may include the computer system, software use and applications, networking principles, programming techniques and other concepts as appropriate.

#### CNT 160 Basic Telecommunications 3 credit hours

Prerequisite: CIS 118

Introduces the background needed to understand telephony products and services in the telecommunications industry. Includes hardware and devices, transmission characteristics and codes, network configurations, software and protocols.

# CNT 161 Advanced Telecommunications 3 credit hours

Prerequisite: CNT 160

Continues the topics covered in CIS 175. Covers, in detail, the emerging technologies in the telecommunications area such as X.25, ISDN, ATM and frame relays.

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# CNT 162 Strategic Solutions in Telecommunications

# 3 credit hours

Prerequisite: CNT 160

Covers the integration of telecommunications services through the use of integration scenarios and case studies.

#### CNT 163 Emerging Telecommunications Technologies 3 credit hours

Prerequisite: CNT 160

Covers the latest technologies in telecommunications, telephony and networking. Wireless communication, fiber optic utilization and other recent technology developments are studied through student research. This course and CNT 160, 161, 162 and 202 prepare students for the NACSE Telecomm Technician 2 (NTT2) certification exam.

#### CNT 164 Project Analysis and Design 3 credit hours

Prerequisite: CNT 160

Develops skills to analyze, design and manage a telecommunications system. Typical systems from business and industry are analyzed and discussed. This course and CNT 205 and 206 prepare students for the NACSE Senior Network Specialist (NSNS) certification exam.

# **CNT 165 Convergent Technologies**

3 credit hours

Prerequisite: CNT 161

Summarizes telecommunication, with survey of how data, voice and video technologies are converging for telecommunications systems.

## CNT 170 Novell Network Administration I 3 credit hours

Prerequisite: CNT 203 or instructor consent Covers preliminary Novell Netware topics and skills such as NOS installation, defining and maintaining network objects in Novell Directory Services (NDS), designing and maintaining the file system, managing user access and rights and maintaining file system security.

#### CNT 171 Novell Network Administration II 3 credit hours

Prerequisite: CNT 170 Covers Advanced Novell Netware topics such as maintaining network directory services security, implementation of network printing using queues and NDPS, writing and implementing login scripts for users and groups and operating the Novell server console. This course also covers Novell's Zen Works product, which is a valuable aid for administration of Novell networks. After successful completion of this course, students will be prepared for exam.

# CNT 200 Introduction to Networking 3 credit hours

Corequisite: CIS 118 or instructor consent Introduces the concepts of data communications, telecommunications and networking. Covers network concepts, acronyms, protocols and components.

#### CNT 201 Local Area Networks 3 credit hours

Prerequisite: CNT 200

Introduces the concepts, technologies, components and acronyms used in localarea network environments. Focuses on computer connections at the physical layer, as well as how data is moved between computers in the logical layer. Discusses peer-to-peer networks and client/server models and covers network operating system (NOS) data management.

# CNT 202 Wide Area Networks

3 credit hours

Prerequisite: CNT 203 or instructor consent Covers the concepts, functions and

acronyms of wide-area networks. Discusses analog and digital transmission, circuit types, communication modes, modems, microwaves, satellites and multiplexers. Also covers physical, data link and higher-layer protocol technology, as well as voice-over, wide-area and virtualprivate networks.

# CNT 203 Introduction to TCP/IP

3 credit hours

Corequisite: CNT 201

Prepares students to identify TCP/IP layers, components and functions. Covers navigation tools, TCP/IP services and troubleshooting methodologies.

# CNT 204 Introduction to

Internet Technologies 3 credit hours Prerequisite: CIS 118 Introduces how data graphics and servers are interrelated and indexed through the use of HTTP protocol and Hypertext Markup Language (HTML). Covers the growth of the Internet and typical duties of a Webmaster.

#### CNT 205 Internetworking Devices 3 credit hours

Prerequisite: CNT 203 or instructor consent

Provides a detailed understanding of internetworking. Focuses on the problems of network growth and the internetworking components that solve these problems.

# CNT 206 Protocol Analysis

3 credit hours

Corequisite: CNT 205

Provides a survey of the most common encoding schemes and protocols used in local-area networks, wide-area networks and point-to-point networks. Focus is on TCP/IP, NCP/SPX/IPX,

SMB/Netbios/Netbeul, Web browser to Web server and client/service information transfer via HTTP.

#### CNT 207 Network Analysis and Design 3 credit hours

Prerequisite: CNT 203

Covers the skills needed to analyze, design and manage local-area and pointto-point networks. Discusses network diagrams from several corporate networks.

#### CNT 209 Computer Networking Lab 3 credit hours

3 credit hours Prerequisite: CNT 207 or instructor consent

Demonstrates problem-solving skills in data communications, telecommunications and networking. Covers workstation operation, wiring and cabling, network construction using a variety of network/internetwork devices, and configuring and managing Novell and Windows 2000 operating systems.

# CNT 211 Microsoft Windows XP Configuration

3 credit hours

Prerequisite: CNT 203 or instructor consent Provides students with the knowledge and skills necessary to address the implementation and desktop support needs of customers who are planning to deploy and support Microsoft Windows XP Professional in a variety of network operating system environments.

# CNT 212 UNIX/Linux Administration 3 credit hours

Prerequisite: CNT 203 or instructor consent

Introduces the UNIX/Linux operating. system and covers the skills required to install, configure and operate a UNIX/ Linux system. Designed to prepare students for the NACSE Certified Linux Administrator (NCLA) certification exam.

# CNT 224 Microsoft Wireless Network Administration

3 credit hours

Prerequisite: CNT 200 or instructor consent Provides the student with the

Microsoft official curriculum from our Microsoft Regional Academy. The course offers detailed instruction on the foundational concepts and technologies of wireless data networking. On completion of this course, students are prepared to take the Certified Wireless Network Administrator (CWNP) Certification exam.

#### **CNT 225 Web Server Management** 3 credit hours

Prerequisite: CNT 203

Provides a solid understanding of what is required to install, configure, secure and maintain a Web server and keep it running. Course topics include choosing server software, evaluating HTTP protocols, detecting and fixing problems and how to generate server statistics. Includes a discussion of the types of possible threats and potential dangers.

# CNT 230 Windows 2000 Professional 3 credit hours

Prerequisite: CNT 203 or instructor consent

Covers Windows 2000 Client installation, implementation, administration, support, network management and troubleshooting. Prepares students for Windows 2000 exam #70-210.

## CNT 231 Windows 2000 Server

3 credit hours

Corequisite: CNT 230

Covers the operation and configuration of Windows 2000 on the server side and provides the skills required for installation, implementation, administration and troubleshooting of the system. Prepares students for the Windows 2000 #70-215 exam.

# CNT 232 Windows 2000 Network Infrastructure Administration

3 credit hours

Prerequisite: CNT 231 or instructor consent

Covers the installation, configuration and administration of Windows 2000 networking services. Prepares students for the Windows 2000 #70-216 exam.

# CNT 233 Windows 2000 Active **Directory Services**

3 credit hours Corequisite: CNT 232

Covers the installation, configuration and troubleshooting of Windows 2000 Active Directory components, DNS for Active Directory and Active Directory security solutions. Prepares students for the Windows 2000 #70-217 exam.

# CNT 234 Windows 2000 Directory Services Infrastructure Design

3 credit hours

Prerequisite: CNT 233

Builds student skills to analyze business requirements and design of a directory service architecture within a Windows 2000 domain. Prepares students for the Windows 2000 #70-219 exam.

#### CNT 235 Windows 2000 Network Security Design 3 credit hours

Corequisite: CNT 234

Builds student skills to analyze business requirements and design a security solution for Windows 2000. Covers resource access control, resource access auditing, authentication and encryption. Prepares students for the Windows 2000 #70-220 exam.

# CNT 236 Windows 2000 Network Infrastructure Design

3 credit hours

Prerequisite: CNT 235

Builds student skills to analyze business requirements, design and analyze a Windows 2000 network infrastructure. Covers topologies, routing, addressing, name resolution, virtual private networks and remote access. Prepares students for the Windows 2000 #70-221 exam.

#### **CNT 251 Anti-Virus Concepts** 3 credit hours

Prerequisite: CNT 200 or instructor consent Prepares the student for virus eradication. The student will learn how viruses work, how they are designed and how viruses are written. Course will focus on virus eradication and cleaning.

#### **CNT 252 Security Modeling** 3 credit hours

Prerequisite: CNT 261 or instructor consent

Designs various security models using rights and permissions. Covers Microsoft, CISCO, Novell Netware, UNIX, and standard-based security calls. The focus of this course is security theory with some practical security applications.

#### CNT 253 Firewalls and How They Work 3 credit hours

Prerequisite: CNT 261 or instructor consent Introduces students to the design and implementation of firewalls. Covers such topics as firewalls using CISCO routers, Microsoft server platform and UNIX platform. Students will learn how firewalls function in these environments and the basic steps to plan and implement firewalls.

# **CNT 254 Data Encryption**

3 credit hours

Prerequisite: CNT 253 or instructor consent Exposes the student to data encryption models. Examines the differences between data storage, including

Microsoft, Novell Netware and UNIX. Includes encryption and data transmission. Covers encryption over various networks, including the Internet.

# CNT 260 CISCO Network Associate I 5 credit hours

Prerequisite: CNT 201 or instructor consent Introduces network fundamentals, the OSI model and industry standards, IP addressing (subnet masks) and basic network design.

#### CNT 261 CISCO Network Associate II 5 credit hours

Prerequisite: CNT 260

Focuses on router theory and technologies, including router configurations, protocols, network management and introductory LAN switching.

#### CNT 262 CISCO Network Associate III 5 credit hours

Prerequisite: CNT 261

Focuses on advanced routing and switching configurations, LAN switching, network management and advanced network design.

## CNT 263 CISCO Network Associate IV 5 credit hours

Prerequisite: CNT 262

Focuses on project-based learning, including advanced network design projects and advanced management projects. This course and CNT 260, 261 and 262 prepare students for the CISCO Certified Network Associate (CCNA) certification exam.

# CSC 150 Visual Basic Programming

3 credit hours

Prerequisite: CIS 119 or instructor consent Introduces the student to programming concepts, using the Visual Basic Programming language. Topics may include program design, loops, arrays, functions, arithmetic, and VB topics, such as form layout and design, control properties and methods, event and general procedures and modules.

# CSC 151 Advanced Visual Basic Programming

3 credit hours

Prerequisite: CSC 150

Continues the study of Visual Basic programming. Emphasis is placed on developing more complex programs. Topics may include OLE, DDE, DLLs, custom controls, database and telecommunications.

# CSC 152 Database Programming with Visual Basic

3 credit hours

Prerequisite: CSC 150

Provides an in-depth look at Visual Basic as a database application development language. Topics may include ADO, multi-tier components, data-bound controls, remote data access, SQL and ASP.

# CSC 153 Visual Basic Certification Preparation

3 credit hours

Prerequisite: CSC 151

Prepares the student to pass the Microsoft Certified Professional examination #70-176, Designing and Implementing Desktop Applications with Visual Basic 6.0.

# CSC 160 Computer Science I

4 credit hours Prerequisite: CIS 119, MAT 121 or instructor consent

Introduces students to the discipline of computer science. Topics covered will include algorithm development, data representation, arithmetic and logical expressions, sub-programs and input/output operations using a structured programming language.

## CSC 161 Computer Science II 4 credit hours

Prerequisite: CSC 160 or instructor consent

Continues the structured algorithm development and problem-solving techniques begun in Computer Science I. Students gain experience in the use of data structures and design of larger software projects. Intensive computer laboratory experience required.

# CSC 230 C Language Programming (C++)

3 credit hours

Prerequisite: CIS 119 or instructor consent

Introduces the C++ programming language. Topics may include data types, decision making, input and output processes, and common programming structures, functions and pointers.

#### CSC 231 Advanced C Language Programming (C++) 3 credit hours

Prerequisite: CSC 230

Continues the study of C language. Topics include pointers, arrays, linked lists, stacks and queues, trees, and advanced interfaces, such as menus, windows and cursor control.

# CSC 240 Java Programming

3 credit hours

Prerequisite: CIS 119 or instructor consent Introduces students to Java programming basics such as threads, event handlers, procedures, user interfaces and multimedia. Student will write and test multiple applets.

# CWB 101 Mastering the Web

3 credit hours

Prerequisite: CNT 204

Defines the numerous aspects of creating and managing Web sites; delineates the tasks and tools involved in building and maintaining a Web site; reviews the Web administrator's responsibilities; and prepares students for the challenges that this role brings.

# CWB 110 Web Layout and Design Concepts

3 credit hours

Prerequisite: CIS 118

Introduces the development of Web pages using structured design for page layout. Includes text manipulation, crossplatform calibration, graphics formats, data tables and file downloading requirements.

# CWB 135 Complete Web Editing/Dreamweaver

3 credit hours

Corequisite: CWB 101

Explores the creation of Web pages using Dreamweaver graphic editor. Includes Web site management, HTML, plug-ins, DHTML, tables, frames and CSS. Teaches students how to create and enhance Web pages with links, graphics, table, frames and form application.

# CWB 136 Advanced Web Editing/Flash

3 credit hours

Prerequisite: CWB 135 or instructor consent

Expands on previous fundamental Web skills using scripted animation and sound; provides strategies for building complex Flash sites with multiple movies, integrating Flash with external sources such as databases, text files, server-side scripts, duplicating Movie Clips, using preloaders, Flash forms and workflow techniques.

# CWB 140 Introduction to Multimedia/Director

3 credit hours

Introduces multimedia techniques using Macromedia Director. Topics covered include: creating, importing and sequencing media elements; incorporating graphics, sound and text; creating screen transitions; animating media elements to include movement; creating film loop animations; and using Shockwave to produce movies for playback on the World Wide Web.

# CWB 160 Graphics Technology I/PhotoShop

3 credit hours

Corequisite: CWB 135

Introduces the skills of computer graphics applications. Covers the use of hardware and software for the management of digital image media.

# CWB 161 Graphics Technology II -Premier

3 credit hours

Prerequisite: CWB 136

Continues the development of skills in graphics technology and the use of hardware and software for management of digital video and sound media. This course and CWB 101, 110, 135, 140, 160 and 173, prepare students for the NACSE Certified Webmaster (NCW) or CompTIA I-net+ certification exam.

#### CWB 173 Complete Web Authoring -HTML/JavaScript

3 credit hours

Prerequisite: CIS 118 or instructor consent

Teaches the basic of creating Web pages with graphics and links; using tables and controlling page layout with frames; cascading style sheets; programming with JavaScript and JavaScript objects and events; creating a multimedia Web page; and creating a Web page with forms.

#### JAPANESE

# JPN 101 Conversational Japanese

3 credit hours

Introduces basic vocabulary and grammar to students with no knowledge of Japanese. Includes simple vocabulary and basic sentence structure, and emphasizes practical conversational skills to develop a basic understanding of and cultural competence in the daily use of the language.

## JPN 111 First-Year Japanese I

5 credit hours

Emphasizes continued development of conversational and listening abilities, reading and writing skills and cultural competence. Includes basic and more complex grammatical forms. Intended for students having no minimum prior understanding of Japanese phrases and simple sentence structure.

#### JPN 112 First-Year Japanese II 5 credit hours

Prerequisite: JPN 111

Emphasizes conversational ability, while introducing complex grammatical structures, colloquial forms and more kanji characters. Intended for students who have a good understanding of Japanese sentence structure, vocabulary and the writing system.

#### JPN 211 Second-Year Japanese 1 3 credit hours

Prerequisite: JPN 112

Introduces complex grammatical structures, emphasizes development of conversational ability and stresses additional reading/writing skills for students who have a good understanding of Japanese sentence structure, vocabulary and the writing system.

# JOURNALISM

#### IOU 105 Introduction to Mass Media 3 credit hours

Prerequisite: ENG 121 or SPE 115 or corequisite, or instructor consent Corequisite: ENG 121 or SPE 115 or prerequisite, or instructor consent

Examines the basic concepts and principles of various mass media for the journalism student and average consumer of mass media.

#### JOU 106 Fundamentals of Reporting 3 credit hours

Examines the basic principles of print media reporting. Designed for journalism students and for other students interested in learning to write clearly, succinctly and accurately.

# LITERATURE

#### LIT 115 Introduction to Literature 3 credit hours

Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading.

# LIT 150 The Bible as Literature

3 credit hours

Prerequisite: ENG 121 or instructor consent

Introduces various Biblical texts and exegetical methods of reading and interpreting such texts. The course emphasizes the aesthetics and multiplicity of meaning in Biblical literature through the discussion of various Biblical writings, published academic exegeses and student interpretation.

#### LIT 201 Masterpieces of Literature I

3 credit hours

Prerequisite: ENG 121

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

#### LIT 202 Masterpieces of Literature II 3 credit hours

Prerequisite: ENG 121

Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

## LIT 225 Introduction to Shakespeare

3 credit hours

Prerequisite: ENG 121 or instructor consent Provides guided reading and interpretation of Shakespeare's most popular plays. Examines their cultural background, as well as their significance to contemporary society.

#### LIT 235 Science Fiction

3 credit hours

Examines the techniques and issues of science fiction through a close reading of a variety of writers in the genre.

#### MACHINE AND CNC TOOL OPERATOR

#### MTO 130 Introduction to Machine Shop 2 credit hours

Provides basic instruction on the use of bench tools, power saws, drill presses, pedestal grinders, lathes, mills, heat-treat equipment, belt sanders and hardnesstesting equipment.

#### MTO 131 Machine Math and Prints I 3 credit hours

Provides instruction for basic math and blueprints for machine tool operation. Includes whole numbers, fractions, decimals, direct and computer measure, English and metric measure, blueprint fundamentals, drawing views and tolerances.

# MTO 132 Mills 1

4 credit hours Prerequisite: MTO 130

Introduces the parts and functions of horizontal and vertical mills, including feeds and speeds settings, cutter selection and identification, vise usage, and edge locator and indicator uses.

#### MTO 133 Engine Lathes I

4 credit hours

Prerequisite: MTO 130

Introduces the student to the engine lathe, including how to use and mount the three-jaw chunk on the spindle of the lathe; how to set lathe tools on center drill; and drill, ream, knurl, tap and chamfer.

# MTO 140 Metrology

2 credit hours

Introduces the student to English and metric measurements by using outside, inside, depth and internal micro-meters, scales, combination square set, protractors, vernier gauges, sine bar, gauge blocks, indicators, inspection devices, optical comparator, and telescoping and small hole gauges.

## MTO 141 Mills II

4 credit hours

Prerequisite: MTO 132

Develops advanced skills and knowledge of horizontal and vertical mills, including rotary table operation, computation of coordinate locations for hole circles, slots and angles and the selection of metals.

#### MTO 142 Machine Math and Prints II 1 credit hour

Prerequisite: MTO 131

Provides advanced machine shop math. Includes decimal fractions, speed and feed calculations for cylindrical tools, taper calculations, equations, print sketching, geometric tolerancing, datums, ANSI symbols and numerical control drawing fundamentals.

# MTO 143 Engine Lathes II

3 credit hours

Prerequisite: MTO 133

Provides the knowledge and skills required to perform lathe operations at tolerances of plus/minus .005". Includes single point external and internal threads holding tolerances of class 2 and 3, and use of the taper attachment and "radius" forming.

# MTO 150 Machine Shop Lab

1 - 5 credit hours

Allows students to practice on basic machine equipment for the purpose of upgrading job skills.

### MTO 221 Engine Lathes III

2 credit hours

Prerequisite: MTO 143

Provides advanced skills and knowledge on the engine lathe, holding to tolerances of 002" and .0005".

# MTO 223 Job Shop Machining I

3 credit hours

Prerequisite: MTO 221

Covers the fabrication process. Students will produce machine parts and machinist tools from an already prepared shop blueprint, write process sheets, select metal and estimate machining time to performance level expected in industry.

# MTO 250 AutoCAD 1

3 credit hours

Prerequisite: MTO 251

Provides more advanced instruction on the use of the CNC for production of parts, and introduces the student to the use of AutoCAD software.

## MTO 251 CNC Operations

3 credit hours

Prerequisite: MTO 221 Provides introductory skills in the use of CNC digital readouts and the operations of a CNC vertical mill and CNC lathe.

### MTO 252 CNC Principles

4 credit hours

Prerequisite: MTO 141, 221 Provides skills and knowledge on preparatory functions and operations of a CNC milling machine and a CNC lathe. Includes safety, system start up, and use of prewritten programs, as well as macros.

# MTO 253 CNC Mathematics I

2 credit hours

Prerequisite: MTO 142

Provides skill in calculations and mathematical operations used in the operation of CNC mills and lathes. Includes circles, polygons, angles, geometric figures, trigonometry and numerical control fundamentals.

#### MTO 261 DOS and Windows for CNC 1 credit hour

Provides an overview of the basic use of the computer Disk Operating System.

# MTO 262 CNC Office 97 Word

1 credit hour

Provides basic instruction in the use of Office 97 Word software for wordprocessing activities in CNC operational programming.

# MTO 263 CNC Programming I

3 credit hours Prerequisite: MTO 251, 252, 253

Provides beginning instruction, using BOSS 10, on programming for the CNC, including word-processing skills, language, blocks, coordinate words, and functions of G and M Codes.

# MTO 264 AutoCAD II

3 credit hours Prereauisite: MTO 250

Provides advanced instruction in the use of AutoCAD computer software and DXF files.

### MTO 265 CNC Programming II

3 credit hours

Prerequisite: MTO 261, 263

Provides advanced instruction in CNC programming. Includes Z-Axis canned cycles, canned milling cycles, cutter diameter compensation, feed functions, auxiliary machine control functions and CAD/CAM EZ feature mill 3-D.

# MASSAGE THERAPY

#### MST 100 Self Care for Massage Professionals

I credit hour

Corequisite: HWE 102, MST 110, 111, 114, 118 and 195

Provides information for the massage professional in therapeutic exercise, movement exercises and stretching for self-care and client care. Designed to reduce the risk of injury to the practitioner due to overuse or misuse. Identifies problems and how to avoid them.

# MST 110 Anatomy for Massage Therapists

4 credit hours

Provides students with conceptual and factual understanding of the interrelationship between massage therapy and the relative position and function of anatomical structure within the body. Includes an in-depth study of the neuromuscular and musculoskeletal systems, as well as anatomical terminology with an emphasis on pertinence to massage therapy.

#### MST 111 Basic Massage Therapy

3 credit hours Corequisite: HWE 102, MST 100, 110, 114, 118 and 195

Provides the student with an overview of massage therapy, including basic strokes, general principles of massage, Swedish massage and chair massage that will be taught and practiced by the students. Presents the benefits, effects, indications, cautions and contraindications.

# MST 112 Ethics of Massage Therapy

2 credit hours Prerequisite: HWE 102, MST 100, 110, 111, 114, 118 and 195 Corequisite: HWE 103, MST 208, 211 and 216

Examines historical, societal and personal views surrounding appropriate and respectable behavior in professions that cross the normal boundaries of touch. Indepth study of legal and professional implications of using touch in the profession. Students explore their own history of touch through an autobiography and journal.

# MST 114 Massage for the Elderly

2 credit hours

Corequisite: HWE 102, MST 100, 110, 111, 118 and 195

Examines techniques that massage professionals use to help those with special needs in the geriatric and chronically/critically ill populations.

#### MST 116 Neuroanatomy

3 credit hours

Prerequisite: HWE 102 and 103, MST 100, 110, 111, 112, 114, 118, 195, 208, 211 and 216

Corequisite: MST 212, 215, 218 and 222

Provides students with a comprehensive overview of the gross anatomy and physiology of the human nervous system in preparation for the application of therapeutic massage protocols.

# MST 118 Massage Therapy Clinic I

2 credit hours

Corequisite: HWE 102, MST 100, 110, 114, 118 and 195

Provides students with an orientation to the management of the massage therapy clinics procedures and practices, theory and application of hydrotherapy procedures in a clinical setting and the application of Swedish massage in a supervised clinical setting.

#### MST 195 Success Seminar

1 credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

### MST 208 Massage Therapy Clinic II

2 credit hours Prerequisite: HWE 102, MST 100, 110, 111, 114, 118 and 195 Corequisite: HWE 103, MST 112, and 216

Provides students with an orientation to the clinical management of massage therapy clinic procedures and practices, theory and application of hydrotherapy procedures in a clinical setting, and the application of Swedish and geriatric massage and craniosacral therapy in a supervised clinical setting.

# MST 211 Pathophysiology for Massage Therapists

2 credit hours Prerequisite: HWE 102, MST 100, 110, 111, 114, 118 and 195 Corequisite: HWE 103, MST 112, 208 and 216

Prepares students to recognize the major characteristics of diseases and injuries to understand how massage therapy would be beneficial or detrimental when applied. Students will be able to communicate with clients and health care professionals intelligently and accurately about disease and its response to massage therapy.

# MST 212 Neuromuscular Therapy

3 credit hours Prerequisite: HWE 102 and 103, MST 100, 110, 111, 112, 114, 118, 195, 208, 211 and 216

Corequisite: MST 116, 215, 218 and 222

Provides students with a comprehensive overview of the gross anatomy and physiology of dense and soft tissues, mechanisms of injury and healing, and common presentations and conservative management strategies for treating soft and dense tissue disorders. Clinical settings will be utilized to demonstrate and apply postural analysis, direct and indirect palpation techniques, muscle-releasing techniques, muscle energy techniques, friction massage and joint mobilization.

#### MST 215 Business for Massage Therapists 3 credit hours

Prerequisite: HWE 102 and 103, MST 100, 110, 111, 112, 114, 118, 195, 208, 211 and 216 Corequisite: MST 116, 212, 218 and 222

Introduces students to fundamental business principles as they apply to massage therapy.

#### MST 216 Craniosacral Therapy

3 credit hours Prerequisite: HWE 102, MST 100, 110, 111, 114, 118, 195 Corequisite: HWE 103, MST 112, 208 and 211

Provides students with a comprehensive overview of the gross anatomy and physiology of the craniosacral system and its relationship to other body systems. Craniosacral direct and indirect palpation techniques are combined with releasing techniques along the cranial internal and external suture systems, the diaphragm, thoracic inlets, pelvic and sacral outlets.

#### MST 218 Massage Therapy Clinic III 2 credit hours

Prerequisite: HWE 102 and 103, MST 100,

110, 111, 112, 114, 118, 195, 208, 211 and 216

Corequisite: MST 116, 212, 215 and 222 Provides students with continuing

skills development in clinical management of massage therapy clinic procedures and practices, and the application of Swedish, craniosacral, neuromuscular, geriatric and prenatal/neonatal massage forms in a supervised clinical setting.

#### MST 222 Prenatal/Neonatal Massage 2 credit hours

Prerequisite: HWE 102 and 103, MST 100, 110, 111, 112, 114, 118, 195, 208, 211 and 216

Corequisite: MST 116, 212, 215 and 218

Provides the student with the theory and application of prenatal and neonatal massage to support the physiological, structural and emotional well-being of both mother and fetus.

# MATHEMATICS

#### MAT 005 Basic Operations

1 - 5 credit hours

Provides review of basic math beginning with addition and working through introduction of multiplication. Designed for students with little or no math education.

# MAT 030 Fundamentals of Mathematics

2 credit hours

Includes the vocabulary, basic operations and applications of whole numbers, decimals, an introduction to English and metric measurement, and an introduction to areas and perimeters.

#### MAT 060 Pre-algebra

3 credit hours

Prerequisite: MAT 030 or minimum assessment score in math

Includes the vocabulary, basic operations and applications of fractions, mixed numbers, ratio, proportion, percent, integers, algebraic expressions, and the solution of basic first-degree equations and inequalities. Includes a brief review of whole number and decimal operations and applications.

## MAT 090 Introductory Algebra

4 credit hours

Prerequisite: MAT 060 or minimum assessment score in math

Includes solution of first-degree equations, inequalities and formulas; polynomials; factoring polynomials and solving quadratic equations by factoring; algebraic fractions; coordinate geometry; systems of linear equations; graphing linear equations and inequalities; radical expressions; and applications.

## MAT 103 Contemporary College Mathematics

3 credit hours

Prerequisite: MAT 060 or minimum assessment score

Presents a practical approach to basic operations in arithmetic, fractions, decimals, percents, elements of algebra, geometry, ratios and proportion, triangular trigonometry, graphing, business applications and problem solving. Optional material may include one or more of the following topics: inequalities, probability and statistics, and sets and logic.

## MAT 109 Survey of Algebra

#### 4 credit hours

Prerequisite: Minimum assessment score in math or MAT 090

Emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing, applications and an introduction to logarithms.

# MAT 121 College Algebra

#### 4 credit hours

Prerequisite: Minimum assessment score in math or MAT 109

Includes a brief review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series, progressions, permutations and combinations, the binomial theorem and theory of equations.

# MAT 122 College Trigonometry

3 credit hours

Prerequisite: MAT 121 or equivalent

Designed prmarily for students who are continuing into the calculus sequence. This course examines trigonometric functions and their graphs, identities and equations and solutions of triangles. Vectors, polar coordinates and equations of conic sections are introduced.

#### MAT 124 Finite Mathematics

3 - 4 credit hours

Prerequisite: Minimum assessment score in math or MAT 109

Designed primarily for students majoring in business, social science, or computing. Includes function evaluation and graphing, matrix operations, linear equations and inequalities, and introduction to set theory, combinatorics and probability. Fourth credit hour is used for extended topics and applications.

#### MAT 125 Survey of Calculus

4 credit hours

Prerequisite: MAT 121 or 124

Includes derivatives, integrals and their applications, with attention restricted to algebraic, exponential and logarithmic functions. For business, life science and/or social science majors.

## MAT 135 Introduction to Statistics

3 credit hours

Prerequisite: Minimum assessment score in math or MAT 109

Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis-testing comparison of populations, correlation and regression.

#### MAT 155 Math for Elementary Educators I 4 credit hours

Prerequisite: MAT 109 or Accuplacer score of 72 in Elementary Algebra

Develops a sound background in the concepts underlying the pre-secondary mathematics curriculum, including set theory, whole numbers (properties and operations), fractions, statistics, probability, problem-solving and geometric concepts.

#### MAT 156 Math for Elementary Educators II 4 credit hours

Prerequisite: MAT 155

Expands students' understanding of the math concepts underlying a mathematics curriculum aligned with the Colorado Model Content Standards for Mathematics to the level needed by K-6 teachers. This is the second in a sequence of math courses for prospective elementary teachers.

#### MAT 201 Calculus I

5 credit hours Prerequisite: MAT 121 and 122 Introduces single-variable calculus and analytic geometry.

#### MAT 202 Calculus II

5 credit hours

Prerequisite: MAT 201

Extends and further develops concepts of single-variable calculus and analytic geometry studies as found in MAT 201. Emphasis is on applications of differentiation, integration, and techniques of integration and infinite series.

#### MAT 203 Calculus III

4 credit hours

Prerequisite: MAT 202

Completes the traditional subject matter of single-variable calculus not covered in MAT 201 and MAT 202, and introduces vector analysis, multi-variable calculus, solid analytic geometry and dimensional vector space.

### MAT 265 Ordinary Differential Equations 3 credit hours

Prereauisite: MAT 202

Introduces ordinary differential equations. Includes equations of first and second order with applications, linear equations, series methods and transformation methods.

### MEDICAL OFFICE TECHNOLOGY

#### MOT 102 Introduction to Medical Terminology

2 credit hours

Emphasizes verbal and written communication of medical terms, including defining, spelling, pronunciation and analysis of component parts.

### MOT 104 Law and Ethics for Health Professions

2 credit hours

Advances student knowledge in the study and application of medico-legal concepts in medical careers and establishes a foundation for ethical behavior and decision making.

# MOT 110 Medical Office Administration

4 credit hours Prereauisite: MOT 119

Introduces students to the administrative duties specifically used in medical offices.

### MOT 112 Advanced Medical Terminology

2 credit hours

Prerequisite: MOT 102

Expands on commonly used medical abbreviations, symbols and word parts used in medical specialties, such as surgery, pathology and radiology.

# MOT 119 Medical Office

# Communication

3 credit hours

Develops skills for expressing ideas while speaking or writing. Addresses listening skills and improves awareness of correct speech patterns.

# MOT 120 Medical Office **Financial Management**

3 credit hours

Prerequisite: BTE 101, CIS 118 Develops skills for the practical use of accounts and records with emphasis on accounting principles and analysis for use in a medical office.

#### MOT 124 Medical Filing

2 credit hours

Introduces the student to the basic rules and principles of filing in medical facilities. Topics include numeric filing, terminal digit filing, cross-referencing, colorcoding, alphabetic filing, medical records control, computer-assisted filing and interactive participation in a model unit.

## MOT 130 Insurance Billing and Coding 3 credit hours

Prereauisite: BIO 120, MOT 102 and 112

Introduces students to outpatient coding with an ultimate goal to present a clear picture of medical procedures and services performed (CPT codes), correlating the diagnosis, symptom, complaint or condition (ICD-9 codes), thus establishing, the medical necessity required for thirdparty reimbursement.

# MOT 131 Advanced Insurance **Billing and Coding**

3 credit hours

Prerequisite: MOT 112

Prepares the student to code correctly and optimize reimbursements for a full range of medical services by expanding coverage of diagnostic and therapeutic procedures, official coding guidelines, APGs and APCs, DRGs, medicare fraud and abuse.

# MOT 132 Medical Transcription I

4 credit hours

Prerequisite: BTE 101, CIS 118, MOT 119 Provides basic knowledge, under-

standing and skills required to transcribe medical dictation with accuracy, clarity, and timeliness, applying the principles of professional and ethical conduct.

# MOT 134 Medical Unit Coordinating

7 credit hours

Prerequisite: BTE 101 CIS 118, MOT 102 Introduces the history, growth and

development of medical unit coordinating and provides an orientation to the work environment. Student will transcribe laboratory, diagnostic, treatment and miscellaneous doctors' orders.

#### MOT 136 Introduction to Clinical Skills 2 credit hours

Prerequisite: BIO 120, MOT 102

Provides hands-on experience with the basic clinical skills required for assisting

with patient care. Delivers the theory behind each skill presented, as well as proper technique for performing each skill. Includes knowledge and/or performance of blood borne pathogens/OSHA regulations, medical asepsis, procedural gloving, patient gowning, positioning and measurement of vital signs.

# **MOT 138 Laboratory Skills**

4 credit hours Prerequisite: MOT 112, 136 or 140

Introduces the student to basic routine laboratory skills and techniques for collection, handling and examination of laboratory specimens often encountered in the ambulatory care setting. Emphasizes hands-on experience.

### MOT 139 Medical Records

4 credit hours

Prerequisite: CIS 118, MOT 120

Explores the development and content of the hospital medical record, medical records for ambulatory care, long-term care and mental health. Also presents management of record content, medical forms and filing methods.

## MOT 140 Clinical Skills

4 credit hours Prerequisite: MOT 136, 112

Provides hands-on experience with the clinical skills required for assisting with patient care. Delivers the theory behind each skill presented, as well as proper technique for performing each skill,

# MOT 141 First Aid/CPR:

**Emergency Response** 

2 credit hours

Provides knowledge and skill in procedures for emergency care, accident prevention, injury and/or sudden illness until medical help is available. Students will earn an American Red Cross card for first aid and cardiopulmonary resuscitation for infant, child and adult.

# MOT 142 Medical Transcription II

4 credit hours

Prerequisite: MOT 132

Using a simulation approach, this course builds student vocabulary and speed, while providing actual medical transcription of a variety of health care and medical reports at progressively increasing accuracy and productivity standards.

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#### MOT 150 Pharmacology Practices 3 credit hours

Prerequisite: MOT 112, 140

Provides an overview of pharmacology language, abbreviations, systems of measurement and conversions. The Controlled Substances Act, prescriptions, forms of medications, patient care applications, drug classifications/interactions, and safety in drug therapy and patient care are presented. Information regarding the measurement of medication, dosage calculations, routes of administration, and commonly prescribed drugs in the medical office is provided.

# MOT 151 Orthopedic Assisting

8 credit hours

Prerequisite: Completion of Clinical or Comprehensive Medical Assistant Certificate

Provides the knowledge and skills necessary to perform orthopedic assistant duties, including terminology, orthopedic conditions, casting materials and procedures, splint and sling procedures, wound care and professionalism.

#### MOT 152 Patient Care

3 credit hours

Prerequisite: MOT 136

Provides student with knowledge of clinical skills essential for assisting with patient care in the role of nursing assistant/nurse aide.

#### MOT 182 Medical Transcription Internship 3 credit hours

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Prerequisite: MOT 142

Provides supervised placement in contracted facility for guided experience in the application of knowledge and skills acquired in the classroom.

### MOT 184 Administrative Internship

2 credit hours Prerequisite: MOT 133 or 135, or 110 and 120

Provides supervised placement in contracted facility for guided experience in the application of knowledge and skills acquired in the classroom. Positions are non-paid for students seeking administrative medical assistant certification as per CAAHEP requirements. Students must have permission of the program coordinator to begin internship.

# MOT 186 Clinical Internship 3 credit hours

Prerequisite: MOT 138 and 140

Provides supervised placement in contracted facility for guided experience in the application of knowledge and skills acquired in the classroom. Positions are non-paid as per CAAHEP requirements. Students must have permission of the program coordinator to begin internship.

#### MOT 188 Medical Assistant Internship 5 credit hours

Prerequisite: MOT 110, 120, 130, 138 and 140

Provides supervised placement in contracted facility for guided experience in the application of knowledge and skills acquired in the classroom. Students assist with a variety of business and clinical procedures. Positions are non-paid due to CAAHEP requirements. Students must have permission of program coordinator to begin internship.

## MOT 190 Orthopedic Assisting Internship

3 credit hours

Prerequisite: Completion of Clinical or Comprehensive Medical Assistant Certificate

Provides supervised placement in contracted facility for guided experience in the application of knowledge and skills acquired in the classroom. Positions are non-paid. Students must have permission of program coordinator to begin internship.

# MUSIC

# MUS 100 Fundamental Music Theory 3 credit hours

Places particular emphasis on the basic skills of reading and writing music. Assumes students have no prior knowledge of music, and is appropriate for nonmajors or as an introductory course for majors. Presents notation, meter, scales and modes, intervals, triads, seventh chords, and the basic principles of melodic writing, accompaniment, harmonization, transposition and instrumental transposition.

# MUS 101 Music Theory I

3 credit hours

Corequisite: MUS 111 Reviews music fundamentals and emphasizes diatonic, four-part harmony, analysis, ear training and keyboard harmony.

#### MUS 102 Music Theory II

3 credit hours Prerequisite: MUS 101 Corequisite: MUS 112

Continues the study of harmony from MUS 101 and the study of diatonic harmony in the area of common practice.

#### MUS 111 Ear Training and Rhythm Drill 1 2 credit hours

Coreauisite: MUS 101

Provides instruction and drill in the aural perception of intervals, chords, rhythmic patterns and the interpretation of these in performance.

# MUS 112 Ear Training and Rhythm Drill II

2 credit hours Prerequisite: MUS 111 Corequisite: MUS 102

Continues instruction and drill in the aural perception of intervals, chords and rhythmic patterns and the interpretation of these in performance.

# **MUS 120 Music Appreciation**

3 credit hours

Emphasizes the development of tools needed for intelligent appreciation of music. Introduces students to basic musical terms and concepts and discusses selected historical eras and their musical styles.

### MUS 121 Introduction to Music History I 3 credit hours

Studies the various periods of music history with regard to the composers, aesthetics, forms and genres of each period. Considers music from the Middle Ages through the classical period.

#### MUS 122 Introduction to Music History II 3 credit hours

Continues Introduction to Music History I with a study of music from the early romantic movement to the present.

# MUS 130 Chorus

2 credit hours Provides instruction in choral singing.

#### MUS 131 Performance Class I (Guitar, Piano, Voice or Woodwinds) 2 credit hours

Prerequisite: MUS 100

Applies the fundamentals of music to the piano, voice or guitar, plus introduces basic technique, repertoire and sight reading. Evaluation will be on written and practical skills.

#### MUS 132 Performance Class II (Guitar, Piano, Voice or Woodwinds) 2 credit hours

Prerequisite: MUS 131 or 141

Continues the application of fundamentals of music to the piano, voice or guitar, and continues basic technique, repertoire and sight reading.

### MUS 141 Private Instruction I (Guitar, Piano, Voice or Woodwinds)

1-2 credit hours

Prerequisite: MUS 100 or instructor consent Emphasizes practical skills and information relevant to performing and includes the study of techniques and repertory. Intended for musicians with more than an elementary knowledge of performance techniques. Consists of one, 30-minute lesson a week, and 30-plus minutes of practice.

# MUS 142 Private Instruction II (Guitar, Piano, Voice or Woodwinds)

1 - 2 credit hours

Prerequisite: MUS 141 or instructor consent Emphasizes practical skills and information relevant to performing and includes the study of techniques and repertory. Intended for musicians with more than an elementary knowledge of performance techniques. Consists of one, 30-minute lesson a week, and 30-plus minutes of practice.

#### MUS 143 Private Instruction III (Guitar, Piano, Voice or Woodwinds) 1 - 2 credit hours

Prerequisite: MUS 100 or instructor consent Emphasizes practical skills and infor-

mation relevant to performing and includes the study of techniques and repertory. Intended for musicians

with more than an elementary knowledge of performance techniques. Consists of one, 30-minute lesson a week and 30-plus minutes of practice. Continues practical skills and information relevant to performing.

# MUS 144 Private Instruction IV (Guitar, Piano, Voice or Woodwinds)

1 - 2 credit hours

Prerequisite: MUS 143

Emphasizes practical skills and information relevant to performing and includes the study of technique and repertory. Intended for musicians with more than an elementary knowledge of performance techniques. Consists of one, 30-minute lesson a week, and 30-plus minutes of practice. Continues to enhance practical skills and information relevant to performing.

# MUS 180 Music and the Media 3 credit hours

Provides students with an understanding of career opportunities and survival skills within the music industry and an understanding of the relationship of music to the media world.

### MUS 201 Music Theory III

3 credit hours Prerequisite: MUS 102 and 112 Corequisite: MUS 211

Presents chromatic and harmonic materials, form, and analysis and modulation formulae.

#### MUS 202 Music Theory IV

3 credit hours

Prerequisite: MUS 201 and 211 Presents 20th century composition techniques.

#### MUS 209 Introduction to Salsa Music 1 credit hour

Introduces music of the Caribbean, in general, with a specific focus on Salsa music, including history and development of the music of the area, traditional instruments and how to use them, and specific dances and dance steps.

# MUS 211 Performance (Ear Training and Rhythm Drill) III

2 credit hours Prerequisite: MUS 102, 112 Corequisite: MUS 201

Provides the student with instruction and drill in the complex rhythmic and melodic patterns of 20th century musical performance.

# MUS 212 Performance (Ear Training and Rhythm Drill) IV

2 credit hours Prerequisite: MUS 201 and 211 Corequisite: MUS 202

Provides instruction and drill in the complex rhythmic and melodic patterns of 20th century musical performance.

#### MUS 220 Computer Sound and Music 3 credit hours

Acquaints the student with the fundamentals of writing music on the personal computer, including sequencing and music engraving.

# NURSE AIDE

#### NUA 101 Nurse Aide Theory and Lab 4 credit hours

Corequisite: NUA 102

Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, restorative services, personal care skills, safety, and emergency care issues are covered in theory and Iab. The student will learn skills that address mental health needs, as well as patient/resident/client rights.

# NUA 102 Nurse Aide Clinical

1 credit hour Corequisite: NUA 101 Applies knowledge gained from NUA 101 in a clinical setting.

# NUA 184 Long-Term Care Internship

1 credit hour Prerequisite: NUA 101 and 102 Applies knowledge of nurse aide practices in the long-term care health organization.

# NURSING

# NUR 100 Nurse Aide Procedures and Patient Care

# 1 - 9 credit hours

Demonstrates and provides practice of clinical skills essential for five nurse aide roles. Focuses on basic understanding of health care principles for the patient, including illness and patient needs, patient care skills, critical thinking, and effective oral and written communication skills for nursing.

# NUR 102 Pharmacology Math

#### 1 credit hour

Prerequisite: Conditional acceptance into the Nursing program

Builds on basic math principles to develop the skills required for conversion between drug-dosing systems and calculation of drug doses when administering medications.

# NUR 103 Pharmacology for Nursing 2 credit hours

Prerequisite: NUR 101, 109, 111 and 113 Corequisite: NUR 112 and 114

Continues the concepts and ethical/legal implications of pharmacology from NUR 101, including the nursing process and biopsychosocial aspects of medication administration. Emphasis also is placed on caring as the core of nursing practice, while developing skills of critical thinking, communication and health care education.

# NUR 108 Introduction to Nursing 5 credit hours

Prerequisite: BIO 201, 202, ENG 121, MOT 102, NUR 102, NUT 100, PSY 235 and acceptance into the Nursing program Corequisite: NUR 109

Introduces concepts and behaviors of nursing roles within the contexts of the nursing process, holistic health care and the health care community. It emphasizes caring as the core of nursing practice, while students develop skills in critical thinking, communication and health care education.

## NUR 109 Basic Nursing Skills

#### 3 credit hours

Prerequisite: BIO 201, 202, ENG 121, MAT 090 or higher, NUT 100, PSY 235 and acceptance into NUR or LPT program Corequisite: NUR 101 and 111 for Nursing students; NUR 101, BIO 114, HSE 113 and LPT 110 for Psychiatric Technician students

Demonstrates and provides practice of clinical skills essential for the nursing role of care provider, including maintenance of a safe, effective clinical environment, skill preparation, implementation and documentation. Emphasizes using caring, critical thinking and communication while delivering nursing skills.

# NUR 110 Clinical Concepts of Nursing

4 credit hours Prerequisite: NUR 108 Corequisite: NUR 109

Provides theory and practice of generalized nursing care with emphasis on caring, communication skills, critical thinking, providing a safe environment, and protecting physiological and psychosocial integrity. It includes cause, pathology, treatment, rehabilitation, ethical dilemmas and practical nursing care of selected disorders.

# NUR 112 Nursing Care of the Hospitalized Client I

7 credit hours Prerequisite: NUR 114 Corequisite: NUR 103

Provides theory and practice of nursing care for the hospitalized client, while maintaining a safe environment and protecting physiological and psychosocial integrity. Includes causes, pathology, treatment, potential ethical dilemmas and practical nursing care of commonly occurring

diseases. Encourages caring, while developing skills of critical thinking, communication and health education.

# NUR 114 Family-Centered Nursing I

5 credit hours Prerequisite: NUR 101, 109, 113

Corequisite: NUR 103

Presents concepts of and provides practice for the nursing care of growing families, including obstetrical care, growth and development across the life span, common health problems in children, and health promotion and maintenance of the entire family. Caring, effective communication, critical thiking and nursing roles are emphasized.

#### NUR 126 Nursing Process Concepts and Skills

2 credit hours

Prerequisite: BIO 201 and 202, MAT 090 or higher Corequisite: ENG 121, PSY 235 and BIO 205 if not already completed

Prepares the advanced placement student to enter the Nursing program through orientation to the program, introduction to the nursing process and exploration of the role change from practical to professional nurse. Reviews practical nursing concepts of communication, mental health, basic nursing skills, care of the hospitalized adult and family-centered nursing.

#### NUR 195 Success Seminar

1 credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

#### NUR 208 Nursing Assessment and Diagnosis

3 credit hours

Prerequisite: BIO 205 and acceptance into Level II of Nursing program Coreauisite: NUR 210 and 211

Develops skills of nursing assessment of the health client across the life span, using effective communication, interviewing and examination. Develops critical thinking skills of data analysis to identify actual or potential health needs or nursing diagnoses. Reinforces concepts of the

caring environment, health promotion, and maintenance of physiologic and psychosocial integrity.

#### NUR 210 Family-Centered Nursing II

6 credit hours Prerequisite: NUR 211 Corequisite: NUR 208

Provides theory and practice in the nursing care of families facing health concerns in clinical and community settings. Includes family theory concepts, issues of contraception, infertility, unwanted pregnancy, teen pregnancy, and disturbances of psychosocial and physiologic integrity of family members. Emphasizes caring, communication, critical thinking and health teaching.

#### NUR 211 Principles of Psychiatric Nursing

5 credit hours

Prerequisite: BIO 205 and acceptance into Level II of the Nursing program Corequisite: NUR 208

Develops introductory concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families. Heavy emphasis in communication and caring through the use of the therapeutic relationship and nursing process. Critical thinking skills are applied throughout course work in classroom and clinical exercises.

# NUR 212 Nursing Care of the Hospitalized Client II

8 credit hours Prerequisite: NUR 210 Corequisite: NUR 214

Presents causes, pathology and collaborative treatment of complex illnesses of adults requiring hospitalization. Provides clinical practice of professional nursing care, while maintaining a safe environment and protecting physiological and psychosocial integrity. Emphasizes caring nursing practice, while developing skills of critical thinking, communication and health care education.

# NUR 214 Leadership and Management in Nursing

2 credit hours Prerequisite: NUR 210 Corequisite: NUR 212 and 285

Examines basic principles of leadership and management, including creation of a caring environment, effective communication, leadership styles, management issues, professional responsibilities and critical thinking in decision making.

# NUR 285 Comprehensive Nursing Internship

3 credit hours Prerequisite: NUR 212 Corequisite: NUR 214

Facilitates transition from student to graduate nurse through application of nursing principles and skills. Faculty, preceptor and student design an internship to individualize student's learning needs and prepare for job readiness. Reviews nursing theory, while applying test-taking skills. Competencies emphasize caring, critical thinking and communicating during nursing care.

# NUR 295 Nursing Review for Licensure Exam

3 credit hours Prerequisite: NUR 208, 211, 212 Corequisite: NUR 210, 214 and 285, or instructor consent

Reviews nursing concepts, information and clinical competencies expected of the professional nursing graduate to prepare for licensure examination.

# NUTRITION

#### NUT 100 Foundations of Nutrition 2 - 3 credit hours

Prerequisite: ENG 090, REA 090 Introduces basic nutrition with empha-

sis on personal nutrition. Satisfies the nutrition requirement for students entering the health care professions. Attendance at first session is required.

#### NUT 101 Nutrition as Therapy

2 credit hours

Prerequisite: NUT 100

Provides the student with an understanding of the ways in which modifications of the normal diet can assist in attaining or maintaining total well-being of the individual. Suggestions for specific interventions and client teaching will be provided for such conditions as arthritis, diabetes and heart disease.

#### NUT 250 Human Nutrition

3 credit hours

Prerequisite: BIO 201, CHE 101 or higher Corequisite: BIO 202

Provides the student with an understanding of the fundamental concepts of human nutrition, including digestion, absorption, metabolism and function of macro- and micro-nutrients as they relate to maintenance of cellular homeostasis, human health and disease.

# **OPERATING ROOM NURSE**

#### ORN 230 Perioperative Nursing 4 credit hours

Prerequisite: Registered Nurse, Colorado license, or graduate Registered Nursing pending licensure. Basic skills assessment test will be waived. Corequisite: ORN 231

Prepares the student for an entry-level position as an operating room nurse. Focuses on intraoperative nursing care. Includes traditional, endoscopic and laser surgical procedures in specialty areas.

# ORN 231 Perioperative Nursing Clinical Applications

3 credit hours Prerequisite: Registered Nurse, Colorado license, or graduate Registered Nursing pending licensure. Basic skills assessment test will be waived.

Corequisite: ORN 230

Provides Perioperative Nursing students with basic supervised laboratory and clinical experience. Includes a directed introduction to the operating room environment with nursing process applications. Includes standards and recommended practices in operating room technique to create conditions necessary for assessment of technical and cognitive objectives of the course.

### ORN 299 Elective Perioperative Nursing Clinical Applications

1-3 credit hours

Prerequisite: Acceptance into the ORN program. Basic skills assessment test will be waived.

Corequisite: ORN 230, 231

Provides Perioperative Nursing students with supervised clinical experience for additional credit. This elective course provides students who desire more handson experience with an opportunity to gain an additional 45 hours (1 credit hour), 90 hours (2 credit hours), or 135 hours (3 credit hours) of clinical experience in perioperative nursing.

# PARALEGAL

# PAR 101 Legal Writing

3 credit hours

Begins development of critical legal thinking skills and the effective use of legal terminology in legal writing.

#### PAR 105 Torts

3 credit hours

Introduces basic area of law dealing with civil wrongs, with emphasis in negligence, defamation and products liability.

#### PAR 109 Property

3 credit hours

Emphasizes substantive legal rules related to property law with added emphasis in real estate law practice.

#### PAR 115 Domestic Relations

3 credit hours

Emphasizes substantive legal rules related to domestic relations law with an emphasis in dissolution of marriage.

#### PAR 121 Introduction to Paralegal 3 credit hours

Introduces students to the paralegal field, including, but not limited to, legal terminology and scope of paralegal skills and responsibilities, vis-à-vis the practice of law.

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## PAR 124 Legal Research

3 credit hours

Introduces basic concepts and methods of legal research, emphasizing practical applications by the preparation of two case opinion briefs and two memorandums.

# PAR 126 Creditor/Debtor/Bankruptcy

3 credit hours

Gives students basic understanding of bankruptcy law, covering the various types of bankruptcy cases with emphasis on the documentation used in such cases.

# PAR 185 Paralegal Synthesis I (Capstone)

3 credit hours

Prerequisite: PAR 124, 221, 222

Emphasizes a synthesis of the information and skills that students have learned throughout their paralegal studies.

#### PAR 201 Business Organizations

3 credit hours

Emphasizes substantive legal rules related to corporations, partnerships, agency and securities law.

#### PAR 205 Probate

3 credit hours

Emphasizes the drafting of wills, settling estates and the creation of trusts, plus the impact of tax law in these areas.

# PAR 207 Legal Research Seminar I

3 credit hours

Prerequisite: PAR 124

Introduces students to computer-assisted legal research. Students will draft legal memorandums and a trial court brief.

# PAR 208 Legal Research Seminar II

3 credit hours

Prerequisite: PAR 124, 207

Continues from Legal Research Seminar I with computer-assisted legal research used in drafting appeals and court briefs.

# PAR 214 Administrative Law

3 credit hours

Introduces administrative and regulatory agencies, their jurisdiction, rule-making and decision-making processes and how the paralegal can work within the legal context.

# PAR 221 Civil Procedures

3 credit hours

Provides students with an introduction to civil procedural rules and their application by use of a trial notebook assignment and other related exercises.

# PAR 222 Evidence

3 credit hours

Introduces the student to the basic concepts and terminology of evidence as they apply in Colorado courts and to the basic methods of marshaling evidence and investigative procedures.

# PAR 231 Investigation

3 credit hours

Prerequisite: Instructor consent

Introduces general techniques of investigation of cases pertaining to a wide variety of law situations, civil and criminal.

## PAR 239 Criminal Law

3 credit hours

Introduces basic concepts of criminal law and criminal procedure, including Colorado and procedural rules related to this area.

## PAR 241 Environmental Law

3 credit hours

Emphasizes federal and Colorado regulations and their application in environmental cases.

#### PAR 252 Constitutional Law

3 credit hours

Introduces basic concepts of constitutional law, including information relating to federal government structure and powers and individual liberties granted under the U.S. Constitution.

# PAR 258 Contracts

3 credit hours

Introduces basic terminology and concepts in contract law as applied in Colorado and a basic system for contract preparation.

#### PAR 280 Paralegal Internship

6 credit hours

Prerequisite: To be taken in student's last semester in program

Introduces students to an on-site experience as an "Intern in Training" in a wide variety of law situations.

#### PAR 285 Paralegal Synthesis II (Capstone)

3 credit hours

Prerequisite: All required courses in certificate and AAS degree programs

Emphasizes a synthesis of the information and skills that students learned throughout their paralegal studies.

# PERSONAL GROWTH AND DEVELOPMENT

# PGD 098 Career Exploration

1 credit hour

Directs students to select a career using interest testing, aptitude testing, values clarification, field trips, market research and job opportunity evaluation.

# PHILOSOPHY

#### PHI 111 Introduction to Philosophy 3 credit hours

Prereauisite: ENG 121

Introduces significant human questions. Emphasizes understanding the meaning and methods of philosophy. Includes the human condition, knowledge, freedom, history, ethics, the future and religion.

#### PHI 112 Ethics

3 credit hours

Prerequisite: ENG 121

Examines human life, experience, and thought to discover and develop the principles and values for pursuing a more fulfilled existence. Applies ethical theories to a selection of contemporary social issues.

# PHI 113 Logic

3 credit hours

Prerequisite: ENG 121, REA 090, or minimum assessment score in reading

Studies effective thinking. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problemsolving skills.

#### PHI 115 World Religions - West 3 credit hours

Introduces students to the concepts predominant in religions originating in the Middle East, which became major religions of the Western Hemisphere. Includes sociological, political, psychological and philosophical aspects of a variety of belief systems.

# PHI 116 World Religions - East

3 credit hours

Introduces students to the variety of Eastern beliefs and social practices. Philosophical concepts such as fate, free will, moral accountability, the problem of evil and reincarnation will be analyzed. The application and relevance of such beliefs to contemporary society and the human condition will be emphasized.

# PHYSICS

# **PHY 105 Conceptual Physics**

4 credit hours

Prerequisite: Minimum assessment score in reading or REA 060

Studies mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Includes laboratory. Some algebra is desired, but not required.

# PHY 111 Physics: Algebra-Based I

5 credit hours

Prerequisite: MAT 121 and minimum assessment score in reading or REA 090 Corequisite: MAT 122

Offers the first semester of a twosemester sequence of classical physics, namely mechanics, heat and thermodynamics and wave motion.

#### PHY 112 Physics: Algebra-Based II

5 credit hours

Prerequisite: PHY 111

Offers the second semester of a twosemester sequence of classical physics, including electromagnetism, optics and modern physics.

# PHY 211 Physics: Calculus-Based I

5 credit hours

Prerequisite: MAT 201

Studies mechanics and heat. Includes laboratory experience.

#### PHY 212 Physics: Calculus-Based II 5 credit hours Prerequisite: PHY 211

Studies wave motion, electricity, and magnetism and light. Includes laboratory experience.

# POLITICAL SCIENCE

# POS 105 Introduction to Political Science

3 credit hours

Prerequisite: ENG 121 or instructor consent

Surveys political science, including political philosophy and ideology, democratic and nondemocratic governments and processes and international relations.

# POS 111 American Government

3 credit hours

Prerequisite: ENG 121 or instructor consent Introduces the theoretical and practical

workings of the U.S. government. Examines a practical history of the nation's founding; the background and general principles of the U.S. Constitution: civil liberties; public opinion; political parties and the electoral process; the functions of the national government; and domestic and foreign policy patterns.

### POS 125 American State and Local Government

3 credit hours

Prerequisite: ENG 121 or instructor consent

Studies structure and function of state, county and municipal governments, including their relations with each other and with the national government. Emphasizes Colorado government. and politics.

# **POS 205 International Relations**

3 credit hours

Prerequisite: ENG 121 or instructor consent Examines relations among modern

nation-states, including diplomacy, nationalism, ideologies, power and influence, conflict and cooperation, the role of non-state actors and theoretical attempts at international behavior.

#### POS 215 Current Political Issues 3 credit hours

Prerequisite: ENG 121 or instructor consent

Analyzes critical issues in political science. Topics determined each term.

# **PSYCHIATRIC TECHNICIAN**

#### LPT 100 Fundamental Concepts and **Clinical Applications**

4 credit hours Prereauisite: NUR 109 Corequisite: BIO 119, HSE 113, NUR 101, NUR 109

Introduces concepts of wellness, death/dying, culture, communication, nutritional aspects of care and dual diagnosis of developmental disabilities. Nursing process is introduced as the framework in which the psychiatric technician cares for clients.

#### LPT 101 Core Concepts of Pharmacology 1 credit hour

Corequisite: BIO 119, NUR 109

Introduces core concepts of pharmacology, including basic principles of drug actions and dosage calculations, with an emphasis on developing communication and critical thinking skills when administering medications within a caring health care environment.

#### LPT 109 Essential Concepts of Care 6 credit hours

Prerequisite: BIO 119, NUR 101, NUR 109 Corequisite: LPT 111

Develops introductory concepts of caring, wellness, death/dying, communication, nutritional aspects of care, issues of retardation for clients with psychiatric disabilities and dementia, particularly of the Alzheimer's type. Nursing process is presented as critical-thinking context in which psychiatric technicians perform role and function.

# LPT 110 Nursing Concepts for Advanced Placement PT

I credit hour

Prerequisite: Admission to LPT program

Introduces the concepts of the nursing process and critical thinking for the advanced placement psychiatric technician. Reviews medication administration, emphasizing fundamental skills, ethical/ legal and biopsychosocial implications, and providing practice of parenteral medication administration and dose calculations.

# LPT 111 Principles of Psychiatric Nursing

7 credit hours Prerequisite: BIO 119, HSE 113, LPT 100, LPT 101 NUR 109 Corequisite: LPT 110

Develops the concepts of psychosocial integrity and emphasizes the function and responsibility of the psychiatric technician in promoting and maintaining mental health of individuals and families through the use of the therapeutic relationship and nursing process.

# PSYCHOLOGY

# PSY 101 General Psychology I

3 credit hours

Examines the psychosocial foundations of behavior, including motivation, emotion, biological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory.

# PSY 102 General Psychology II

3 credit hours

Examines the psychosocial foundations of behavior, including child, adolescent and adult development, motivation, emotion, personality, psychological disorders, psychotherapy, social psychology, stress, mental health, diversity and research methods. As a survey course, the goal is to expose students to the broad subdisciplines of psychology and to stimulate further interest in the field.

## **PSY 109 Career Development**

1 - 3 credit hours

Explores Individual Interests, abilities, personality types, values and decisionmaking techniques. Examines tools that help access current labor market information and market trends to match career options with the realities of the current labor market. Develops professional goals that assist in strategically managing professional development.

# **PSY 115 Psychology of Adjustment**

1 - 3 credit hours

Studies how individuals act, react, cope and interact with the surrounding environment. Teaches the development of interpersonal skills and focuses on a practical application of psychological theory and principle.

# **PSY 201 Health Psychology**

3 credit hours

Prerequisite: HWM 101

Provides systematic introduction to explore the psychological procedures in prevention, diagnosis, and treatment of such medical problems as cardiovascular disorders, headaches, obesity, asthma and chronic pain. Explores psychological factors that contribute to promotion and maintenance of good health and to recovery from existing illness.

#### PSY 227 Death and Dying

3 credit hours

Prerequisite: PSY 101, or PSY 102, or SOC 101, pr SOC 102, or instructor consent

Examines concepts, relationships, organizations and statistics as they relate to the American experience of death and dying. Attention is given to cross-cultural and historical influences on the American attitude toward death. Health care systems' response to death, the political economy and right-to-die and euthanasia issues also will be examined.

# PSY 235 Psychology of Human Growth and Development

3 credit hours

Surveys human development from conception to death, emphasizing physical, cognitive, emotional and psychosocial factors.

# PSY 249 Abnormal Psychology

3 credit hours

Prerequisite: PSY 101, or PSY 102, or instructor consent

Cives a comprehensive study of psychological disorders. Focuses on psychological theory, assessment, treatment and current definitions of mental illness in Western society.

# PSY 260 Psychology of Aging

3 credit hours

Prerequisite: PSY 101 or 102

Studies adult development and aging with specific focus on middle and late adulthood. Emphasis is placed on biological, cognitive, emotional and psvchosocial factors of aging.

## PSY 265 Violence and Culture

3 credit hours

Prerequisite: ANT 101, or PSY 101, or PSY 102, or SOC 101, or SOC 102

Examines violence in multiple cultural contexts. Develops an understanding of societal and institutional causes of violence, explores resources for intervention and treatment, and provides service-learning applications in violence treatment. Topics include culture, gender and ethnicity, the media, family violence, sexual violence, the state, prevention and treatment.

## **PSY 285 Leadership Development** (Capstone)

3 credit hours Prerequisite: ENG 121, MAT 135 and SPE 115

Studies and applies the theories and lechniques of leadership and group processes. Introduces leadership skills and experience with applications that loster problem-solving strategies and integrative skills. Summarizes the associate degree educational experience and skills useful for future careers.

# RADIATION THERAPY

#### RTH 221 Principles of Radiation Therapy I 3 credit hours

Prerequisite: MAT 121, BIO 201, 202 Corequisite: RTH 281

Introduces the radiation therapy profession. Develops understanding of the principles of the cancer management team, emphasizing patient care and assessment, detection and diagnosis, and imaging and processing. Introduces treatment machines and quality assurance fundamentals for treatment procedures.

# RTH 241 Principles of Radiation Therapy II

2 credit hours

Prerequisite: RTH 221, 281

Corequisite: RTH 242, 243, 282

Develops ability to think critically about therapist's role for continuous quality improvement in radiation oncology. Emphasizes the simulation process for localization of target and treatment volumes. Categorizes treatment machines, immobilization devices, and relates surface and sectional anatomy for simulation and treatment procedures.

#### **RTH 242 Radiation Physics**

3 credit hours Prerequisite: RTH 221, 281 Corequisite: RTH 241, 243, 282

Presents radiation oncology physics as it is practiced in the clinic: structure of matter, nuclear transformations, production of X-rays and interactions, measurement of ionizing radiation and absorbed dose, quality of X-ray beams, radiation protection and brachytherapy.

#### RTH 243 Oncology Principles and Practice

4 credit hours Prerequisite: RTH 221, 281 Corequisite: RTH 241, 242, 282

Examines and evaluates the management of neoplastic disease, applying concepts and principles of the patient condition, treatment and prognosis. Uses case studies to integrate physiology, histology, grading, and staging with treatment of anatomical regions and outcomes.

## **RTH 261 Treatment Planning**

3 credit hours

Prerequisite: RTH 241, 242, 243, 282 Corequisite: RTH 262, 283, 285

Analyzes principles of multiple-beam planning to determine dose distribution for specific anatomic sites. Applies complex dose calculations. Constructs and compares isodose distributions. Interprets and critiques treatment plans and brachytherapy procedures.

### **RTH 262 Radiation Biology**

2 credit hours

Prerequisite: RTH 241, 242, 243, 282 Corequisite: RTH 261, 283, 285

Studies the biologic effects and sequence of events following the absorption of energy from ionizing radiation. Discusses theories and principles of tolerance doses, time-dose relationships and fractionation schemes.

#### RTH 281 Internship I

7 credit hours

Prerequisite: MAT 121, BIO 201 and 202 Corequisite: RTH 221

Introduces radiation therapy program policies. Applies didactic learning for interpreting patient records, performing nursing skills, and assisting with simulation and treatment procedures. Includes a scheduled, weekly, two-hour lab for equipment and patient record use.

#### RTH 282 Internship II

8 credit hours Prerequisite: RTH 221 and 281 Corequisite: RTH 241, 242 and 243

Applies didactic learning with practice in patient simulation and treatment procedures. Students begin core competency documentation and participate in a brachytherapy procedure. Includes a scheduled, weekly, two-hour lab for equipment and patient record use.

#### RTH 283 Internship III

11 credit hour

Prerequisite: RTH 241, 242, 243, 282 Corequisite: RTH 261, 262, 285

Synthesizes didactic learning with competencies in patient simulation procedures, treatment planning and prescribed courses of treatment. The student will assist with a brachytherapy procedure. A scheduled two-hour lab allows the learner to use the computer for treatment-planning assignments.

# RTH 285 Radiation Therapy Capstone 2 credit hours

Prerequisite: RTH 241, 242, 243, 282 Corequisite: RTH 261, 262, 283

Culminates the theory and quality management of radiation therapy treatments. Prepares the student for job readiness and applies test-taking skills in preparation for the national registry examination.

#### RADIOLOGY TECHNOLOGY

# RTE 101 Introduction to Radiography/Patient Care

3 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285

Corequisite: RTE 121, 141, 181

Provides an introduction to radiology and the knowledge necessary for the radiography student to provide safe patient care. Includes communication skills, legal and ethical issues in medicine, body mechanics, patient transfer, medical terminology, valuing diversity, universal precautions and radiography as a profession.

#### RTE 111 Radiographic Patient Care II 2 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 101, 121, 141, 181 Corequisite: RTE 122, 142, 182

Expands the information presented in RTE 101 and includes lecture and laboratory experience in the patient care areas of asepsis, vital signs, medical emergencies, assistance with drug administration, patients with special needs, EKG, and death and dying.

## RTE 120 Radiography Limited Scope Internship

3 credit hours

Prerequisite: RTE 111, 122, 142, 182 Corequisite: RTE 185

Applies knowledge learned in the classroom and previous internship experience to the practice of radiography in the private medical office.

#### **RTE 121 Radiologic Procedures I**

3 credit hours Prerequisite: BIO 201 and 202 or 120, ENG 121, MAR 103 or higher, PSY 101 or SOC 101, PSY 285

Corequisite: RTE 101, 141, 181

Introduces fundamentals of radiographic positioning, including use of radiographic equipment and safety, positioning terminology, anatomy, pathology, and skill necessary to perform radiographic procedures of the chest, abdomen, upper extremity, gastrointestinal and urinary systems.

#### RTE 122 Radiographic Procedures II 3 credit hours

Prerequisite: BIO 201 and 202, or BIO 120; ENG 121; MAT 103 or higher; PSY 101 or SOC 101; PSY 285; RTE 101, 121, 141 and 181 Corequisite: RTE 111, 142, 182

Introduces additional material to that covered in RTE 121, including the knowledge of anatomy, pathology, and skills necessary to perform radiographic procedures of the lower extremity, pelvis, spine and boney thorax.

# RTE 141 Radiographic Equipment/Imaging I

3 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAR 103 or higher, PSY 101 or SOC 101, PSY 285 Corequisite: RTE 101, 121, 181

Introduces the fundamental aspects of radiographic equipment, including a basic review of physics fundamentals pertaining to X-ray production, the X-ray machine, image receptors and control of scatter radiation.

# RTE 142 Radiographic Equipment/Imaging II

3 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 101, 121, 141, 181 Corequisite: RTE 111, 122, 182

Introduces material in addition to that covered in RTE 141 and gives the student an in-depth knowledge of radiographic exposure technique and the factors affecting radiographic film quality, including radiographic film quality and quality control, technique chart formulation, sensitometry, film processing, flouroscopic equipment and how pathophysiological change relates to exposure.

#### RTE 181 Radiographic Internship I 5 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285 Corequisite: RTE 101, 121, 141

Introduces the clinical education experience at the Clinical Education Center. Students will apply knowledge learned in the classroom to the actual practice of radiography.

#### RTE 182 Radiographic Internship II 5 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 101, 121, 141, 181 Corequisite: RTE 111, 122, 182

Introduces additional concepts and more complex radiographic procedures to those learned in Internship 1.

# RTE 183 Radiographic Internship III 7 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 111, 122, 142, 182 Reinforces the basic concepts of Radiographic Internships 1 and II.

# RTE 185 Radiography

Limited-Scope Capstone 2 credit hours Prerequisite: RTE 111, 122, 142 Corequisite: RTE 120

Introduces the concepts of radiobiology necessary to practice radiation safety. Prepares the student for job search and provides a comprehensive review of the state of Colorado Limited-Scope Radiography exam.

# **RTE 195 Success Seminar**

### I credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test-taking specific to health care professional programs.

### RTE 221 Advanced Medical Imaging 3 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 183 Coreauisite: RTE 231, 281

Introduces advanced imaging techniques, including radiography of the cranium, facial bones and special radiographic procedures. Combines these concepts with the basic oral communication techniques necessary for the professional radiographer.

# RTE 231 Radiation Biology/Protection 2 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 183 Corequisite: RTE 221, 281

Provides the basic knowledge and understanding of the biologic effects of ionizing radiation protection and safety.

#### RTE 281 Radiographic Internship IV 8 credit hours

Prerequisite: BIO 201 and 202 or 120, ENG 121, MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 181, 182, 183 Corequisite: RTE 221, 231

Encourages independent assessment, develops proficiency in the radiographic procedures introduced in Internships I, II and III and applies the knowledge learned in the classroom during the first year of the program.

#### RTE 282 Radiographic Internship V 11 credit hour

Prerequisite: BIO 201 and 202, or BIO 120; ENG 121; MAT 103 or higher; PSY 101 or SOC 101; PSY 285; RTE 181, 182, 183 and 281 Corequisite: RTE 289

Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, as well as increasing proficiency in general radiography.

# **RTE 289 Radiographic Capstone**

3 credit hours

Prerequisite: BIO 201 and 202 or 120. ENG 121. MAT 103 or higher, PSY 101 or SOC 101, PSY 285, RTE 181, 182, 183, 281 Corequisite: RTE 282

Prepares the student for a job search and emphasizes the five major areas covered during the two-year study program, prior to the student sitting for the National Registry examination.

# READING

# AAA 090 Academic Achievement Strategies

## 3 credit hours

Prerequisite: Score below 70 on CSSAT test or minimum CPT Reading score of 60 Corequisite: CPT 40-59 if enrolled in REA 060

Develops personalized approaches to learning and success for students transitioning into college.

### AAA 109 Advanced Academic Achievement

3 credit hours

Prerequisite: CPT Reading score of 83 or Compass 75, or a grade of C or better in REA 090 or AAA 090, or instructor consent

Examines theories and practices associated with successful learning and adopting those that enhance the student's college success. Critical areas for study include education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership and techniques for successful academic performance.

#### **REA 006 ACT Exam Preparation**

3 credit hours

Prepares students to take the American College Test, a college admissions test frequently required of matriculating students by colleges and universities.

## REA 005 Basic Reading Fundamentals

1 - 5 credit hours

Includes beginning phonics, spelling, vocabulary, comprehension and writing skills.

#### REA 020 Vocabulary Development I 3 credit hours

Emphasizes vocabulary strategies, dictionary skills, words in context, word analysis, sight vocabulary and pronunciation, personalized vocabulary cards, spelling, analogies and other unique vocabulary improvement strategies.

## **REA 030 Basic Skills Reading**

#### 2 credit hours

Prerequisite: CPT score of 39 or less

Provides skills for effective reading and clear thinking. Includes vocabulary development, phonics, dictionary use, finding main ideas and supporting details, and understanding the relationship between main ideas and supporting details.

#### REA 060 Foundations of Reading 3 credit hours

Prerequisite: CPT score of 40 or less

Provides strategies for vocabulary development, improved reading comprehension, and enrichment activities.

## REA 080 Workshop in Reading, Writing and Speaking

3 credit hours

Prerequisite: Minimum assessment scores in English and reading

Provides students with an understanding of the interrelationship among reading, writing and speaking. Aids students in developing language fluency necessary in other communication-based classes.

#### REA 090 College Preparatory Reading 3 credit hours

Prerequisite: CPT Reading score of 60-82 Applies strategies for improving

comprehension, developing vocabulary, and

increasing reading rate for college textbooks.

## REA 151 College Reading

3 credit hours

Prerequisite: REA 090, or CPT score of 85, or Compass score of 75, or instructor consent Covers information processing

systems, analytical reasoning strategies, concept development and retention, and patterns of organization with emphasis on applying reading strategies to college expository test.

#### **REA 223 Critical Analysis Reading**

#### 3 credit hours

Prerequisite: REA 090 or REA 151 and minimum assessment scores in English, reading and study skills

Designed for those who want to sharpen their abilities to think and read critically when analyzing, synthesizing, and evaluating reading material in various fields of study. Some areas of emphasis are problem solving, argumentation, logic, reasoning processes, and evaluating inferences, judgments, facts, and opinions.

## **REA 225 Exploring Diversity Issues**

3 credit hours

Prerequisite: CPT 80, REA 151, or REA 223 or instructor consent

Assists college students in developing diversity awareness. Emphasizes the strengths inherent in mastering a developmental framework for awareness, understanding and application of diversityrelated concepts to a wide variety of reading situations.

## **RECREATIONAL ASSISTANT**

## RAE 201 Introduction to Recreational Leisure

3 credit hours Prerequisite: (for degree or certificate enrollees only): ENG 121 or 131, SPE 115, SOC 101, PSY 101, BIO 201, AAS Humanities requirement, PSY 235, MAT 135, plus BUS 115, CIS 118 for degree enrollees Corequisite: (for degree or certificate enrollees only): RAE 202, 205, MOT 104 Introduces the field of Recreational Leisure. Topics include an overview, health benefits, practical applications in public and private facilities, and choices and opportunities in recreation and leisure. Open to any student considering the Recreational Assistant program.

## RAE 202 Recreation and Leisure in Special Populations

3 credit hours Prerequisite: RAE 201 Corequisite: RAE 204, 285

Examines and analyzes each of six recreational processes and models (e.g., medical, long-term care, youth centers, recreational centers, etc.) from the perspective of the recreational assistant, recreational therapist, private business manager and recipient of recreational services. Open only to Recreational Assistant program students.

#### RAE 203 Introduction to Therapeutic Recreation 3 credit hours

Corequisite: RAE 201, 205

Introduces the field of Therapeutic Recreation. Topics include an overview, communication skills in special populations, facilitating special needs, practical applications in public and private facilities, and choices and opportunities as an assistant in recreational therapy. Open only to Recreational Assistant program students.

## RAE 204 Health and Safety in Recreation and Leisure

3 credit hours

Prerequisite: RAE 201, 202, 205, MOT 104 Corequisite: RAE 203, 285

Provides instruction and practice in recognition, prevention and treatment of medical emergencies. Topics include an overview, practical applications in public and private facilities and facilitating special needs. Open to Recreational Assistant program students only.

## RAE 215 Recreational Assistant Externship I

4 credit hours Prerequisite: RAE 201 and 202 Corequisite: RAE 203

Provides the opportunity to practice basic skills in services and care giving in three different field settings. Open only to Recreational Assistant program students.

## RAE 285 Recreational Assistant Externship II (Capstone)

5 credit hours

Prerequisite: RAE 201, 202, 205, MOT 104 Corequisite: RAE 203, 204

Continues RAE 205, Recreational Assistant Extenship I. Provides the opportunity to continue practices, refine skills and specialize in a leisure service or recreational care-giving area. Students select one specific field setting. Open only to Recreational Assistant program students.

## SCIENCE

#### SCI 285 Critical Thinking (Capstone) 3 credit hours

Prerequisite: AS core courses, minimum of 45 credit hours

Shows interconnections among the various courses required for CCD's AA, AS and AGS degrees. Focuses on the common and unique properties of courses in the sciences, arts, humanities and social sciences. Activities foster problemsolving strategies and integrative and critical-thinking skills. Summarizes the associate degree educational experience, stressing those skills that are useful to further studies and the world of work.

## SOCIOLOGY

#### SOC 101 Introduction to Sociology 3 credit hours

Examines the attitudes, behaviors and social structures of people in groups, including norms, values, cultures, institutions and social issues of gender, race, ethnicity, class and stratification.

#### SOC 102 Introduction to Sociology II 3 credit hours

Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements and conflicts, and trends within education, religion, family, political and economic structures.

## SOC 201 Survey of Gerontology

3 credit hours Prerequisite: PSY 101 or 102 or SOC 101 or 102

Acquaints students with the major issues and concepts pertinent to the field of gerontology. Introduces various theoretical perspectives on aging, changing trends in life expectancy and other demographic considerations and the interrelationships between factors associated with aging.

#### SOC 203 Urban Socio-Anthropology 3 credit hours

Prerequisite: ANT 101 or SOC 101 or SOC 102

Examines how cities and city life are shaped by cultural, social, political and economic forces operating at many different levels. Examines the history and theoretical roots of urban anthropology and sociology, ethnographic fieldwork in urban environments, and urban social organization in cross-cultural perspective. Students will apply general principles in a global context. Studies the nature and origin of deviant behavior, including crime, mental disorders and counter-cultural lifestyles. Theories of deviance and problems in social control are examined.

#### SOC 265 Violence and Culture

3 credit hours Prerequisite: ANT 101, SOC 101, SOC 102

Examines violence in multiple cultural contexts. Develops an understanding of societal and institutional causes of violence, explores resources for intervention and treatment, and provides service learning applications in violence treatment. Topics include culture, gender and ethnicity, the media, family violence, sexual violence, the state, prevention and treatment.

## SPANISH

#### SPA 101 Conversational Spanish I 3 credit hours

Introduces the student to basic vocabulary, grammar, sentence structure, expressions, and practical communication skills used in daily situations and travel.

#### SPA 102 Conversational Spanish II

3 credit hours Prereausite: SPA 101

Continues to cover basic conversational patterns, expressions and grammar in a second course of sequence for beginning students who wish to understand and speak Spanish.

#### SPA 111 First-Year Spanish I

5 credit hours

Introduces a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the Spanish language.

## SPA 112 First-Year Spanish II

5 credit hours

Prerequisite: SPA 111 or instructor consent Continues Spanish 1 in the develop-

ment of functional proficiency in listening, speaking, reading and writing the language.

#### SPA 211 Second-Year Spanish 1 3 credit hours

Prerequisite: SPA 111, 112

Reviews and reinforces skills and abilities gained in first-year Spanish courses. Emphasis will be on the works of Nobel Prize-winning Spanish language authors, discussing them, and writing reactions to each piece studied.

#### SPA 212 Second-Year Spanish II

3 credit hours

Prerequisite: SPA 211

Reviews and reinforces skills and abilities gained in first-year Spanish courses. Emphasizes reading, discussing and producing written responses to Spanish language literature. The goal is to expand functional proficiency in speaking, reading, writing and listening to the language.

## SPECIAL LEARNING SUPPORT PROGRAM (SLSP)

## SLS 001 Spelling Strategies I

3 credit hours

Corequisite: SLS 005

Develops techniques to improve spelling strategies and to increase basic spelling skills. Includes structured word analysis, rule analysis and word attack for words not governed by rules.

## SLS 002 Process and Procedures in Mathematics I

3 credit hours

Provides special learning techniques and compensatory strategies, including retention of math facts, organization of materials and conceptualization of principles. Emphasizes alternative approaches to basic operations on whole numbers, decimals, fractions and percentages.

## SLS 004 Reading, Writing and Study Skills

6 credit hours

Provides special learning techniques for students with learning disabilities to develop and integrate oral communication, reading and writing skills and reasoning ability.

## SLS 005 Learning and Skills Development

1 credit hour

Emphasizes compensatory strategies for attention and concentration, organization skills, memorization, following directions and instructions, problem solving and time management. Serves students with learning disabilities and other special learning needs.

#### SLS 011 Spelling Strategies II

3 credit hours

Corequisite: SLS 005

Reviews skills introduced in SLS 001 and develops advanced strategies for English spelling exceptions. Includes analysis of words with difficult spellings, frequently misspelled words and commonly confused word pairs.

## SLS 012 Process and Procedures in Math II

3 credit hours

Prerequisite: SLS 002

Designed for students with learning disabilities who require alternative approaches to learning mathematics, including the use of manipulatives and an emphasis on problem solving and field perception.

#### SLS 015 Evaluation of Learning Strengths and Weaknesses

#### 2 - 3 credit hours

Prerequisite: Instructor or program coordinator consent

Provides students with learning disabilities the opportunity to receive an individual evaluation of their learning strengths and weaknesses. This is used to develop an individualized instructional support system with the use of the SLS lab to help students be successful in their studies.

## SPEECH

## SPE 115 Principles of Speech

3 credit hours

Combines the basic theory of speech communication with public speech performance skills. Emphasizes speech delivery, preparation, organization, support and audience analysis.

#### SPE 125 Interpersonal Communication 3 credit hours

Introduces students to the theory and practices of interpersonal communication. The course will teach students to observe and analyze basic interpersonal communication concepts in family, social and organizational settings.

## SPE 205 Voice and Diction

3 credit hours

Studies the physiological production of the speaking voice and methods for improving the quality of the spoken word in general American speech.

## SPE 216 Principles of Speech Communication II

3 credit hours

Prerequisite: SPE 115

Emphasizes the intensification of ideas and styles with a focus on persuasive speaking. Includes additional studies in rhetorical analysis and oral interpretation of speeches.

#### SPE 219 Group Dynamics

3 credit hours

Prerequisite: SPE 115

Examines group communication theories with an emphasis on leadership and group behaviors. Provides opportunities for group participation.

## SURGICAL TECHNOLOGY

#### STE 100 Introduction to Surgical Technology

5 credit hours

Prerequisite: BIO 119, or BIO 201 and 202, ENG 121, MOT 120

Introduces principles of surgical technology. Emphasizes theoretical and clinical applications in areas of asepsis, anesthesia, hemostasis, diagnostic criteria, ethics, interpersonal communication, stress management, positioning, medical terminology and care of the surgical patient in the operating room.

## STE 105 Pharmacology for Surgical Technology

2 credit hours

Prerequisite: STE 100 or instructor consent Corequisite: STE 106, 107, or instructor consent

Explores pharmaceutical therapy used preoperatively, intraoperatively and postoperatively for the patient undergoing surgical intervention. Emphasizes drug types, effects/side effects, principles of administration and appropriate personnel actions.

## STE 106 Operating Room Skills

7 credit hours

Prerequisite: STE 100, BIO 119 or 201, MOT 102, or instructor consent

Presents principles and applications of basic operating room skills with emphasis on safe and efficient use of mechanized and non-mechanized equipment common to surgery.

#### STE 107 Surgical Instrumentation 3 credit hours

Prerequisite: STE 100, BIO 119 or 201, and BIO 202; or instructor consent Corequisite: STE 106

Presents applications of principles related to use and management of instruments, sutures, needles, sponges and dressings commonly used in major surgical procedures.

#### STE 109 Surgical Technology Clinical Practicum 1

3 credit hours

Prerequisite: STE 105, 106, 107, or instructor consent

Corequisite: STE 110, 115

Applies surgical principles in the clinical setting. Emphasizes skill refinement and performance evaluation before completion of the final 11 clinical weeks.

## STE 110 Surgical Technology Clinical Practicum II

8 credit hours Prerequisite: STE 105, 106, 107, or instructor consent Coreauisite: STE 109, 115

Refines the interdependent functions of the surgical technologist related to surgical procedures, instrumentation, supplies and equipment, with appropriate interventions by operating room staff. Presents surgical intervention theory related to pathology of body systems, focusing on preoperative, intra-operative and postoperative surgical patient care.

## STE 115 Surgical Pathology and Intervention

4 credit hours Prerequisite: STE 105, 106, 107, or instructor consent Coreauisite: STE 109, 110

Reinforces and expands principles of surgical technology acquired in the clinical practicum. Pathophysiology requiring surgical intervention is emphasized. Additionally, this course prepares students for the Surgical Technologist National Certifying examination.

## STE 150 Surgical Technology Certification Examination Review

3 credit hours

Prerequisite: Graduate of a Surgical Technology program or instructor consent

Reviews principles of anatomy, physiology, microbiology, infection control pharmacology, asepsis, suture and wound management, instrumentation and surgical procedures for the Surgical Technologist National Certifying examination.

## STE 195 Success Seminar

1 credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

## THEATRE

## THE 105 Introduction to Theatre Arts 3 credit hours

Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory.

## THE 106 Cross-Cultural Storytelling 4 credit hours

Prerequisite: Instructor consent

Offers international students and American students the opportunity to share ethnic/cultural experiences by using the theatre techniques of storytelling, improvisation, mime, verbal and non-verbal language, scripting and staging techniques resulting in performance projects.

## THE 107 Elements of Theatrical Craft and Design

3 credit hours

Explores the theory and practice of technical theatre craft and design. Through lecture, discussion and class projects, students learn about evolving forms and styles of architecture, scenery and decoration, properties, costume/make-up, lighting and sound.

## THE 108 Play Reading

2 credit hours

Introduces methods of reading plays fluently. Through discussions and projects, students analyze texts and exercise their imaginations on how a play can look and sound when produced.

## THE 109 Stagecraft

3 credit hours

Introduces hands-on methods of constructing and painting scenery and properties and operating stage lighting. Students also learn the proper procedures of using shop equipment and serving on stage crews.

## THE 111 Acting I

3 credit hours

Introduces fundamentals of stage acting. The course helps students develop technique, write and analyze scripts, evaluate performances, and develop a personal aesthetic sense through rehearsal, performance, readings, exercises and observations.

## THE 112 Acting II

3 credit hours

Helps students refine basic techniques, develop character vision, orchestrate performances, project character and develop a personal aesthetic sense through rehearsal, performance, readings, exercises and constructive criticism.

### THE 115 Stage Movement for Actors 3 credit hours

Introduces the vocabulary of human movement, techniques of physical training, and anatomy and kinesiology for the actor. The course includes forms of basic dance and the coordination of movement with vocal delivery.

## THE 116 Practicum in Stage Acting

1 - 3 credit hours

Prerequisite: Instructor consent Offers credit to students who gain hands-on experience in theatre by researching, rehearsing and performing roles in college theatre productions.

## THE 118 Practicum in Technical Theatre

1 - 3 credit hours Prerequisite: Instructor consent

Offers credit to students who gain hands-on experience in college productions in areas of the technical capacities, including settings, lighting, sound, costumes, properties, house management or stage management.

## THE 206 Oral Interpretation

3 credit hours

Prerequisite: Pre- or Corequisite: SPE 205 Explores writers' experiences in drama,

prose and poetry, and employs performance techniques that make the literature come alive for readers and audiences.

## THE 211 Development of the Theatre I 3 credit hours

Traces the evolution of the theatre in the Western world from primitive rites in prehistoric times through theatre of the European Renaissance. Emphasizes historical developments and major plays written in key periods.

## THE 212 Development of the Theatre II 3 credit hours

Traces the evolution of the theatre of the Western world from the neo-classic period through modern drama. Emphasizes historical development and major plays written in key periods.

## **THE 218 Readers Theatre**

#### 3 credit hours

Prerequisite: SPE 205 and THE 206, or instructor consent

Studies ensemble interpretation of literature — poetry, prose and drama primarily through the medium of the spoken word.

## THE 297 Theatre Internship

Variable credit hours

Introduces the student to an on-site experience as an intern, working in a theatre production facility.

## TRAVEL AND TOURISM

#### TRA 110 The Travel Industry

3 credit hours

Introduces the student to the career opportunities and job requirements of all segments of the travel and tourism industry, including travel agencies, airlines, car and hotel rental companies, cruise lines, corporate travel and conference planning,

## TRA 111 Domestic Destinations

3 credit hours

Corequisite: TRA 110 or instructor consent Develops skills to identify and locate

popular domestic travel destinations. Covers the elements that determine the popularity of various types of destinations and factors to consider in the selection of various destinations. Students develop an in-depth analysis of a domestic destination.

#### TRA 112 International Destinations 3 credit hours

Corequisite: TRA 110 or instructor consent

Develops skills to identify and locate popular international travel destinations. Covers the elements that determine the popularity of various types of destinations and factors to consider in the selection of various destinations. Students develop an in-depth analysis of an international destination.

## TRA 113 Selling Cruises and Leisure Travel

## 3 credit hours

Corequisite: TRA 110 or instructor consent

Develops skills to identify potential consumers of cruise and leisure travel products. Covers cruise and ship types, deck plans, ship activities, shore excursions, cruise itineraries, cruise promotional materials and methods to convert customers to higher-yield cruise vacations.

#### TRA 150 Destination Specialist — Latin America

#### 2 credit hours

Prerequisite: TRA 110 or instructor consent Develops skills needed for certification

as a Latin America destination specialist as required by the Institute of Certified Travel Agents (ICTA).

#### TRA 151 Destination Specialist — Hawaii

2 credit hours Prerequisite: Instructor consent (none for

travel professionals)

This course certifies the student as a Hawaii destination specialist. It significantly enhances travel-client confidence and emphasizes closing the sale. Includes CCD and Institute of Certified Travel Agents certification.

## TRA 152 Destination Specialist — Special Interest Travel

2 credit hours

Prerequisite: TRA 110 or instructor consent

Develops skills needed for certification as a Special Interest destination specialist as required by the Institute of Certified Travel Agents (ICTA).

## TRA 153 Destination Specialist — Western Europe

2 credit hours

Prerequisite: TRA 110 or instructor consent Develops skills needed for certification

as a Western Europe destination specialist as required by the Institute of Certified Travel Agents (ICTA),

## TRA 154 Destination Specialist — North America

2 credit hours

Develops skills needed for certification as a North American destination specialist as required by the Institute of Certified Travel Agents (ICTA).

## TRA 155 Destination Specialist – Caribbean

#### 2 credit hours

Prerequisite: Instructor consent (none for travel professionals)

This course certifies the student as a Caribbean destination specialist. It significantly enhances travel-client confidence and emphasizes closing the sale. Includes CCD and Institute of Certified Travel Agents certification.

#### TRA 210 Travel Sales and Customer Service

#### 3 credit hours

Corequisite: TRA 110 or instructor consent Requires the student to apply the basics of sales and customer service to maximize customer retention. Emphasizes the selling cycle to properly qualify the client. Emphasizes the requirement to be knowledgeable about travel products.

#### TRA 211 Corporate Travel and Conference Planning

3 credit hours

Corequisite: TRA 110 or instructor consent Introduces the student to the work environment in a corporate travel agency. Introduces opportunities and skills required for meeting and conference planning.

#### TRA 212 Computer Reservations 2 credit hours

Prerequisite: TRA 110 or instructor consent

Develops skills needed to effectively use the United Airlines Apollo reservation system. Includes basic and advanced ticketing formats, reservation planning, fares and fees. Rental car and hotel sales also are covered.

## VETERINARY TECHNOLOGY

### VET 101 Introduction to Veterinary Technology

4 credit hours

Corequisite: VET 195, 205

Introduces the field of veterinary technology, the role of veterinary technicians and their responsibility as an integral part of the veterinary team. Studies include hospital orientation and administration, basic and clinical sciences, clinical applications, and principles and practical application of aseptic technique.

## VET 111 Diagnostic Imaging

3 credit hours Prerequisite: VET 101, 195, 205 Corequisite: VET 120, 206

Gives the student a basic understanding of radiographic equipment and film development, develops skills in taking diagnostic radiographs for evaluation by a veterinarian, and teaches how to evaluate quality of radiographs and to troubleshoot problems in radiography.

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## VET 120 Client, Employee Relations/ Office Procedures

2 credit hours Prerequisite: VET 101, 195, 205 Corequisite: VET 111, 206

Presents hospital orientation, office tasks, techniques in dealing with the client, client counseling, working effectively among coworkers, telephone etiquette and job-search skills. Explores human interactions in the veterinary workplace to ensure professional behavior when dealing with clients or fellow employees.

## VET 195 Success Seminar

#### 1 credit hour

Prerequisite: Official acceptance into one of the allied health programs.

Explores and engages success strategies for students entering the allied health programs. Includes topics related to support team building, learning styles, study skills, note taking and test taking specific to health care professional programs.

## VET 201 Surgical Nursing

2 credit hours Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206 Corequisite: VET 202, 206, 224, 225, 230 Provides instruction in surgical nursing skills.

## VET 202 Veterinary Nursing

3 credit hours Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206 Corequisite: VET 201, 206, 224, 225, 230

Provides instruction in nursing skills of common medical conditions encountered in a veterinary hospital.

## VET 205 Veterinary Anatomy and Physiology I

4 credit hours

Prerequisite: BIO 111 or waiver test Corequisite: VET 101, 195

Reviews the cells, tissues and pertinent medical terminology. Provides instruction in the structure and function of the skeletal, muscular, circulatory, respiratory and integumentary systems of domestic animals.

## VET 206 Veterinary Anatomy and Physiology II

4 credit hours Prerequisite: VET 101, 195, 205 Corequisite: VET 111, 120 Provides instruction in structure and function of the digestive, neurologic, urinary and acid/base balance and reproductive systems of domestic animals.

## VET 208 Parasitology

## 2 credit hours

Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206

Corequisite: VET 201, 202, 224, 225, 230 Presents the biology, clinical appearance and laboratory diagnosis of parasitic diseases of veterinary and zoonotic

# importance.

## VET 215 Veterinary Critical Care

2 credit hours

Prerequisite: VET 201, 202, 224, 225 Provides instruction in appropriate nursing assessment, monitoring and intervention with emergencies. Uses knowledge and understanding of overall anatomy, physiology, and the disease or accident process to diagnose and treat the emergency patient.

## VET 224 Pharmacology for Veterinary Technology

#### 3 credit hours

Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206

Corequisite: VET 201, 202, 206, 225, 230 Provides instruction in fundamentals of pharmacology, drug dosage, calculations and therapeutic use of drugs.

## VET 225 Anesthesiology

2 credit hours Prerequisite: BIO 206, VET 101, 195, 205,

111, 120, 206

Corequisite: VET 201, 202, 208, 224, 230 Provides the student with a basic

understanding of anesthetic methods and equipment.

## VET 230 Veterinary Internship I

4 credit hours Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206

Corequisite: VET 201, 202, 206, 224, 225 Provides opportunities for students to gain experience performing practical tasks encountered in a veterinary facility.

## VET 240 Veterinary Medicine and Surgery

3 credit hours

Prerequisite: BIO 206, VET 101, 195, 205, [11, 120, 206, 201, 202, 208, 224, 230 Corequisite: VET 24J, 242, 285

Presents commonly encountered medical and surgical conditions of domestic animals, emphasizing nursing skills required for treatment and management by the veterinary technician.

## VET 241 Clinical Pathology

4 credit hours

Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206, 201, 202, 208, 224, 230 Corequisite: VET 240, 242, 285

Instructs the student in methods and procedures used in a veterinary diagnostic laboratory,

#### VET 242 Veterinary Clinical Care 2 credit hours

Prerequisite: BIO 206, VET 101, 195, 205, 111, 120, 206, 201, 202, 208, 224, 230 Corequisite: VET 240, 241, 285

Provides instruction in appropriate nursing assessment, monitoring and intervention with emergencies. Uses knowledge and understanding of overall anatomy, physiology, and disease or accident process to diagnose and treat the emergency patient.

## VET 285 Veterinary Internship II

4 credit hours

Prerequisite: BIO 206, VET 101, 195, 205. 111, 120, 206, 201, 202, 208, 224, 230 Corequisite: VET 241, 242, 285

Facilitates transition from student to graduate veterinary technician through application of veterinary nursing and laboratory principles and skills. Competencies emphasize critical thinking, communication and common tasks carried out in a veterinary facility.



## WELDING AND FABRICATION

#### WEF 100 Oxyacetylene Welding I 3 credit hours

Provides the student with a thorough technical understanding of oxyacetylene welding, flame cutting and brazing fundamentals and welding safety.

#### WEF 102 Air Arc Gouging

2 credit hours

Prerequisite: WEF 100

Provides the student with the fundamentals of carbon air arc cutting and gouging, including equipment set-up operations.

#### WEF 108 SMAW Set Up and Padding 4 credit hours

Provides the student with a thorough technical understanding of arc welding fundamentals, welding safety, arc welding machines, electrode classifications and selection.

#### WEF 109 SMAW Welding I

#### 4 credit hours

Prerequisite: WEF 108

Continues WEF 108, SMAW Set Up and Padding. Provides reinforcement on safety and health in welding and practical application of arc welding fundamentals.

#### WEF 110 SMAW Welding II

4 credit hours

Prerequisite: WEF 109

Continues WEF 109, SMAW Welding I. Provides review in health and safety for welding, practical application of welding techniques and an introduction to structural welding.

#### WEF 111 SMAW Structural Welding I 4 credit hours

Prerequisite: WEF 110

Continues WEF 110, SMAW Welding II. Provides review of major health and safety issues and continues development of application skills necessary to produce quality welds.

#### WEF 112 SMAW Structural Welding II

3 credit hours

Prerequisite: WEF 111

Continues WEF 111, SMAW Structural Welding I. Provides continued practical application of welding skills and ways to recognize destructive testing and nondestructive testing.

## WEF 114 Welding Math and Blueprints

3 credit hours Prereauisite: WEF 109

Provides the student with an understanding of the principles, systems of views, lines and symbols, and dimensional data for fit up and welding, as provided on engineered drawings of blueprints.

#### WEF 130 GMAW Set Up

2 credit hours Prerequisite: WEF 100

Provides the student with a thorough technical understanding of welding safety, gas metal arc welding fundamentals, gas metal arc equipment adjustments, metal transfer and shielding gases. Develops skills to produce high quality GMA welds in all positions on mild steel using short-circuit transfer.

#### WEF 150 Welding Lab

1 - 5 credit hours

Allows students to practice on all welding skills to prepare for certification tests for upgrading job skills.

#### WEF 203 Pipe Welding

3 credit hours Prereauisite: WEF 110

Prepares students to weld pipe using SMAW, Oxyfuel, GTAW and GMAW processes.

## WEF 205 GMAW Thin Gauge and Structural

4 credit hours

Prerequisite: WEF 140

Provides the student with a thorough technical understanding of welding safety and gas metal arc welding of aluminum, including basic fundamentals, types of equipment and metal transfers.

#### WEF 207 GTAW Set Up

2 credit hours Prerequisite: WEF 130

Provides the student with a thorough technical understanding of gas tungsten arc welding fundamentals, preparation for welding pipe and pipe-welding defects.

#### WEF 208 GTAW Thin Gauge and Alloy 3 credit hours

Prerequisite: WEF 130

Provides training to develop the manual skill necessary to make high-quality gas tungsten arc welds in all positions on 16- and 11- gauge mild steel, 16-gauge stainless and 11-gauge aluminum, using both direct and alternating current.

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NOTES

## APPLY ONLINE AT: CCD.RIGHTCHOICE.ORG

## 

Campus Box 201 P.O. Box 173363 Denver, CO 80217-3363 (303) 556-2430

# Application for Admission

\*Responses to items marked by an asterisk (•) are voluntary, will be kept confidential, will not be used in discriminatory manner, and are intended to support actions designed to promote students participation in the education programs offered by the College. They will not be used as a factor in acceptance to the College. The information will not be used as a factor in acceptance to the College. If you do not elect to respond to the request for this information you will not be subject to any adverse treatment.

INSTRUCTIONS - Please complete all sections of this application in Black Ink.

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5	SELECTIVE SERVICE STA	TEMENT	
Information on Selective Service registration statuto penalty of law.	us must be provided in order to comply with	Colorado state la	w. Individuals providing false information are subje
Are you required to be registered with the Selection	ve Service? Yes No		
If yes, are you registered? Yes No			
TUITION	CLASSIFICATION: (Has no effect o	n admission to	the college)
	COMPLETE FOR COLORADO RESIDEN	CY CLASSIFICAT	ION
Please answer the following questions carefully, tional sheets as necessary. Use the word "presen may result in your being misclassified. Please co	nt" for month/year if the date extends to the	time you are com	Ite explanatory notes on this form and/or attach ac pleting this application. Failure to answer a question
CURRENT AGE	YOU	and	<ul> <li>YOUR PARENT or</li> <li>LEGAL GUARDIAN (if you are under 23)</li> </ul>
Dates of continuous physical presence in Colorado.	mo day yr mo day	yr ,	mo day yr mo day yr
Dates of extended absences from Colorado during the last two years	mo yr mo yr		mo yr to yr
List the last two years Colorado income taxes have been filed	yr and yr	E	yr yr
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Date current Colorado Driver's License or Colorado I.D. was issued	mo yr New Renewa		no yr New Renewal
List the last two years of Colorado Motor Vehicle Registration	mo yr mo yr	Ę	no yr mo yr
Date of Colorado Voter Registration	ma yr	Ę	
*Date of marriage (answer this question only under the age of 23 by the initial enrollment			
*Response to these items is voluntary, and will be kept cont	fidential. Marital status may be relevant to determine	whether you are entit	led to be declared a Colorado resident for fuition purposes.
If you are on active duty military or a depend be eligible for in-state tuition rates. Contact y	lent of an active duty military and assig your Military Base Education Office.	ned to a Perma	nent Change of Station in Colorado, you ma
All items are subject to change without notic	е.		
STUDENTS WHO CLAIM A CHANGE IN TUI REGISTRATION.	TION CLASSIFICATION OR EMANCIP	ATION MUST FI	LE A PETITION FOR RESIDENCY PRIOR TO

I hereby certify that, to the best of my knowledge, the information furnished in this application is true and complete without intent of evasion or misrepresentation. I understand the above information is submitted under penalty of perjury and false or misrepresented data is sufficient cause for rejection or dismissal.

Student Signature

AND Parent or Legal Guardian Signature if applicant is under 18

Institutions using this application form do not discriminate on the basis of race, color, national origin, sex, age, or disability in admission or access to, or treatment or employment in its educational programs or activities. Inquiries concerning Title VI, Title IX, and Section 504 may be referred to the affirmative action officer of the institution to which you are applying.

THANK YOU FOR YOUR INTEREST IN OUR COLLEGE

COMMUNITY COLLEGES OF

Date