Community College of Denver

The 1998-1999 Catalog

community college of denver

1998-99 CATALOG

Published by
Community College of Denver
Office of Institutional Advancement

July 1998

Web Site
http://www.ccd.cccoes.edu/

This publication is available in alternative formats. Call 303-556-3300

community college of denver

GOVERNANCE AND LOCATIONS

Dr. Byron McClenney, President

CCD Auraria Campus

1111 W. Colfax Ave.
P. O. Box 173363
Denver, CO 80217-3363
Information 303-556-2600
Voice/TDD 303-556-3622
FAX 303-556-8555

Technical Education Centers

TEC North
6221 Downing St.
Phone 303-289-2243 / Fax 303-289-1044

TEC East
3532 Franklin St.
Phone 303-293-8737 / Fax 303-292-4315

TEC West
2420 W. 26th Ave., Suite 100D
Phone 303-477-5864 / Fax 303-477-5894

CCD Dental Hygiene Center

Lowry Higher Education Center
960 Xanthia St., Building 753
Phone 303-365-7771/Fax 303-364-4836

Division of Continuing Education

Parkway Center
1391 N. Speer Blvd., Suite 200
Denver, CO 80204-2552
Phone 303-620-4433 / Fax 303-620-4942

CCD Advisory Council

Bruce Rockwell, Chair
James H. Daniels
Tony Hernandez
Jeanne M. Orrben
Adele Phelan

Colorado State Board for Community Colleges and Occupational Education

Dr. Dorothy Horrell, System President

Susan Ayres Davies, Durango
Glenda C. Barry, Northglenn
John M. Frew, Denver
Julianne F. Haefeli, Chair, Greeley
William H. Hornby, Denver
James D. Lucas, Colorado Springs
Kristy A. Schloss, Arapahoe County
Ralph G. Torres, Vice Chair, Denver

table of contents

CCD Governance and Locations ii
Telephone Directory iv
CCD Auraria Campus Map v
Off-campus Site Maps vi
Academic Calendar vii
Degree and Certificate Programs viii
College Guarantees xiii
Guarantee for Job Competency
Guarantee for Transfer
CCD Accountability xiv

General Information 1
CCD's History
Our Philosophy
CCD's Mission Statement
Cultural Pluralism
Statement of Values for Teaching Excellence
Campus Choices
Campus Security
Campus Crime Information
Notice of Nondiscrimination
Americans with Disabilities Act
Approval
Accreditation
Alumni Association
African-American Council
Hispanic Council
Getting Started 4
Campus Visits
Advising Philosphy
Admissions Policy
Directory Information
Release of Information
Transcripts Request
Transferring Credit to CCD
Credit for Prior Learning
Add/Drop/Withdrawal
Transferring to Four-year Institutions
Veterans' Academic Standards of Progress
Extra Services Available
Money Matters 9
Tuition
Fees
Financial Aid
Financial Aid Programs
Refund and Repayment Policies
Need More Help? 14
Student Services
Career Development Center
Center for Persons with Disabilities
Child Care Services
Educational Opportunity Center
Education Planning and Advising Center
Evening Services
GED Institute
Health Services
Insurance
International Student Services
PLACE
ROTC Information
Student Assistance Center and Women's Services
Student Life and Activities
Student legal Services
Testing Center
Veterans Affairs Office
Work and Family Resource Center

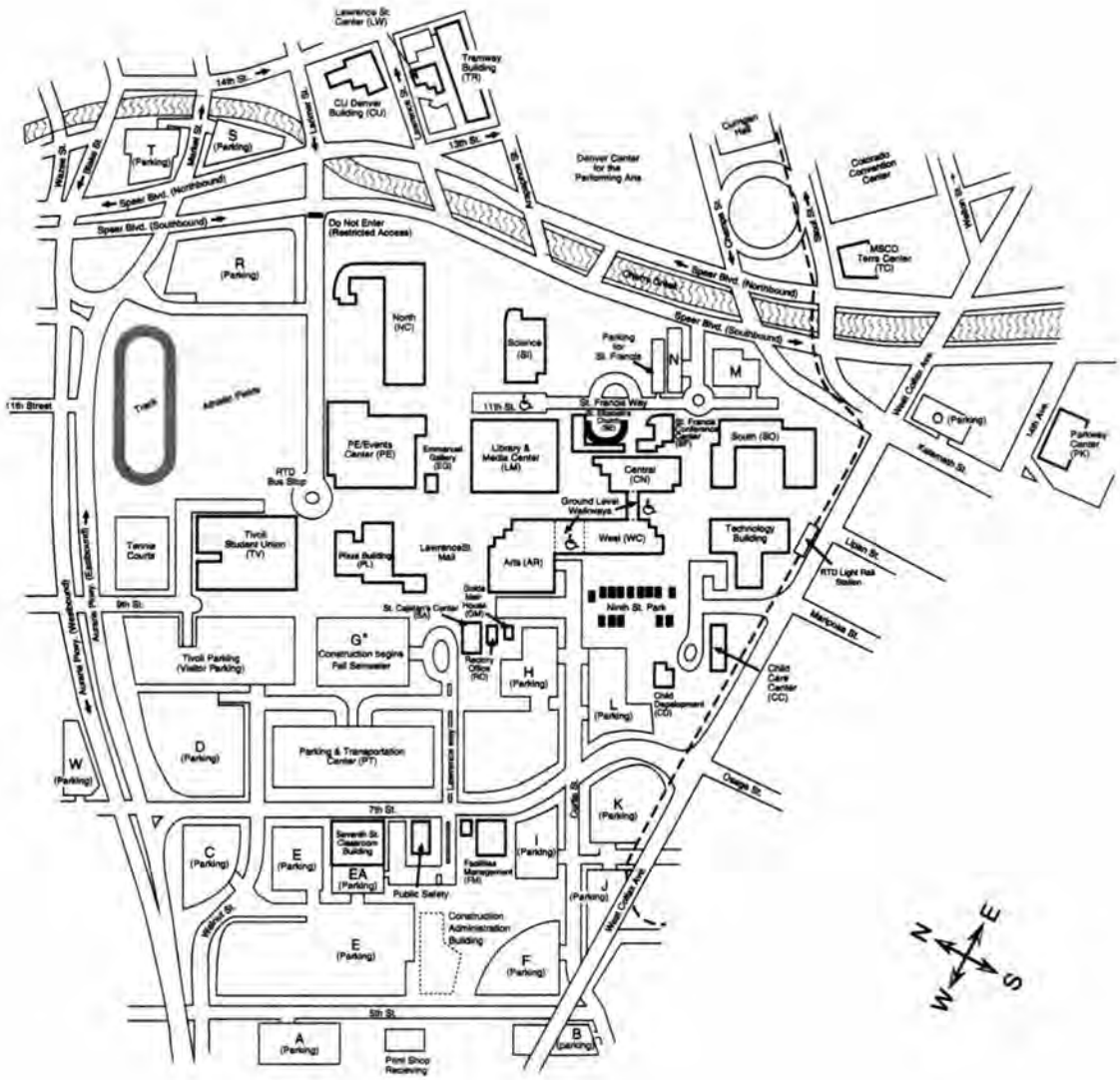
Academic Support Center 18
Lab Tutoring
Special ASC Programs
Special Programs 19
Computer Training for People with Disabilities
Cooperative Education Program
Developmental Studies Program
Honors Program
Denver Education Network
International Study Programs
La Familia Scholars Program
Summer Bridge Program
Postsecondary Enrollment Options Program
Auraria Campus Facilities 21
Auraria Library
Campus Recreation
Auraria Child Care Center
Real Kids Center
Interfaith Ministry
Parking and Transportation Services
Public Safety
College Policies and Academic Standards 23
Academic Standards
Academic Standards of Progress
Appeal Procedure
Assessment
CCD Rights
Cooperative Programs with Emily Griffith Opportunity School
Drug-Free Schools
Family Education Rights and Pricy Act of 1974
Grades
Grade Changes
Grade Point Average
Recognition of Achievement/Continuing Education Units (CEU)
Repeating Courses
Student Code of Conduct
Student Grievance Procedure
Student Recognition
Students Rights and Responsibilities
Student Right-to-Know Information
Grievance Procedure for Students 30
Definitations
Graduation Requirements 32
Degree Requirements
General Education Requirements
Certificate Requirements
Graduation Requirements
Other Graduation Policies
Catalog Requirements for Graduation
Petitioning for Waivers and/or Program Substitutions
Graduation Checklist
Continuing Education Programs 35
Non-Traditional Learning Programs
Guided Independent Study: Home Study
Guided Independent Study: On-line Courses
Guided Independent Study: Television Courses
Weeken d College
Extended Campus
Business and Industry Services
Computer Consulting and Training Services
The Small Business Development Center
Work and Family Resource Center
Workplace Learning
Reading Guide to Degrees & Certificates 37
Degrees and Certificate Programs 39
Course Descriptions 111
College Staff 163
Index . . . . . .

telephone directory

Admissions, Registration and Records 303-556-2430
Arts and Humanities 303-556-2473
Arabic; Art; American Sign Language; Communication; Chinese; English; French; Graphic Arts; Graphic Design; History; Humanities; Journalism; Japanese; Literature; Multimedia; Music; Paralegal; Philosophy; Photography; Spanish; Speech; Theatre
Auraria Interfaith Center 303-556-8591
Book Center, Auraria 303-556-3230
Business and Governmental Studies 303-556-2487
Accounting; Business Administration; Business Technology: Office Management & Secretarial Studies; Computer Information Systems; Computer Training for People with Disabilities; Construction Trades; Economics; Political Science
Business and Industry Services 303-620-4427
Cashier 303-556-2075
Campus Closure 303-556-2401
Campus Operator 303-556-2400
Campus Recreation 303-556-3210
Career Development Services Center 303-556-3609
Center for Persons with Disabilities 303-556-3300
Child Development Center 303-556-2439
Computer Labs 303-556-3628
Computer Training for People with Disabilities 303-556-3300
Continuing Education 303-620-4433
Extended-Campus Credit Classes; Guided Independent Study: Home Study, Television Courses, On-line Courses; Weekend College
Cooperative Education 303-556-3607
Dental Hygiene, Lowry Campus 303-364-4821
Education and Academic Services 303-556-8455
Academic Support Center; Early Childhood Education; Education; English as a Second Language; General Education Development; Pre-collegiate English; Pre-collegiate Mathematics; Reading; Special Learning Support Program; Test Center; Supplemental Services; Student Support Services
Educational Opportunity Center 303-629-9226
Educational Planning and Advising 303-556-2481
Financial Aid 303-556-2420
Health and Human Services 303-556-2472
Anthropology; Dental Hygiene; Gerontology; Health and Wellness Management; Human Services; Magnetic Resonance Imaging; Mammography; Nuclear Medicine Technology; Nursing; Nutrition; Perioperative Nursing; Psychiatric Technician; Psychology; Radiologic Technology; Recreational Assistant; Sociology; Surgical Technology
Information 303-556-2600
International Student Services 303-556-2481
Learning Development Center 303-556-2497
Library, Auraria 303-556-2741
Office of Institutional Advancement 303-556-3380
Parking and Transportation, Auraria 303-556-2000
President of CCD 303-556-2411
Public Safety 303-556-3271
Emergency 911
Real Kids Center 303-556-2439
Recruitment and Outreach 303-556-2600
Refugee Student Services 303-556-2600
Science and Technology 303-556-2460
Biology; Chemistry Computer-Aided Drafting; Computer Science; Drafting for Industry; Electronics; Geography; Geology; Mathematics; Physics; Environmental and Refrigeration Technology
Student Life and Activities 303-556-2597
Student Assistance Center and Women's Services 303-556-2343
Teaching/Learning Center 303-556-3598
Technical Education Centers
East 303-293-8737
North 303-289-2243
West 303-477-5864
Testing Center 303-556-3810
Veteran's Office 303-556-2430
VP for Instruction 303-556-2414
VP for Student Services 303-556-2413
VP for Technical Education Centers 303-289-2243

CCD on the auraria campus

MAP



RTD Light Rail Station on Auraria Campus
West Colfax Avenue, between Lipan and Mariposa Streets

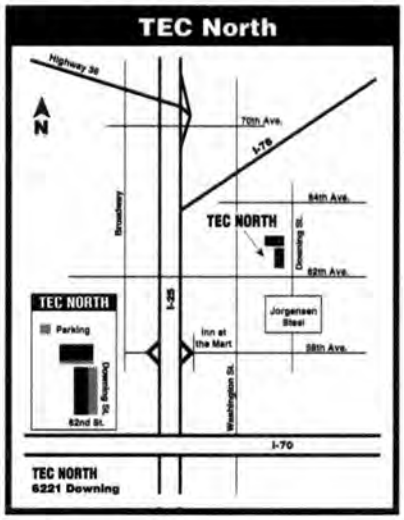
RTD Routes to the Auraria Campus
Via Auraria Parkway: #0, #15 • Via Colfax: #1, #9, #16, #29L, #30, #31, #36L • Via 7th Street: #10

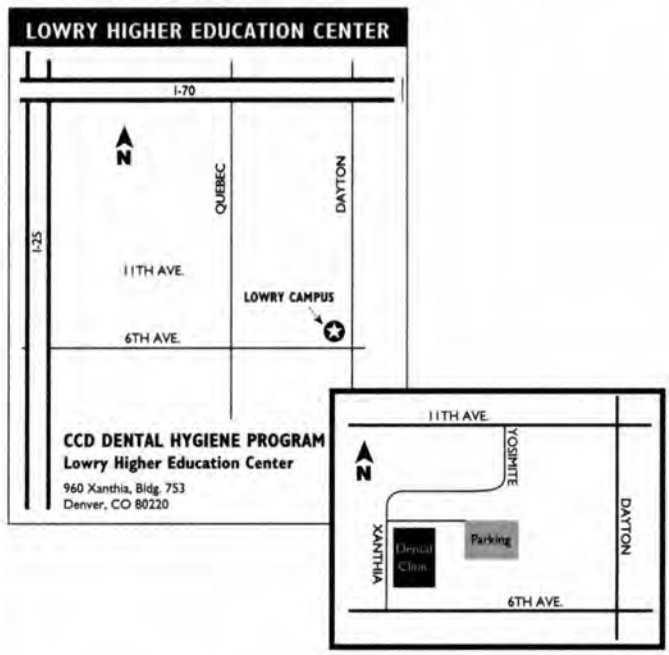
***4 Hours of Free Parking**
in Lot G for prospective students who are being assessed and/or registering. Bring your ticket to South Classroom Building 134 for validation. Once construction begins, visitor parking moves to the Tivoli lot.

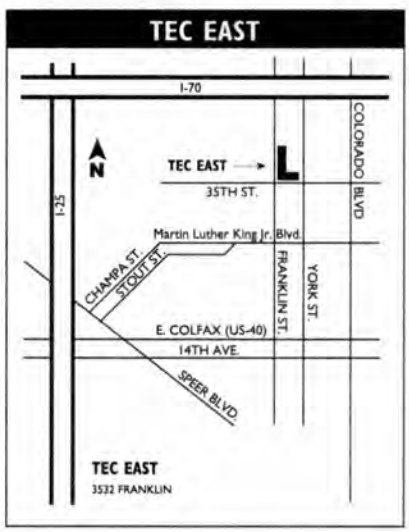
Your student fee-paid Regional Transportation District (RTD) bus pass entitles you to ride buses and Light Rail free in the Denver area. For an additional fee, your bus pass also gives you regional service.

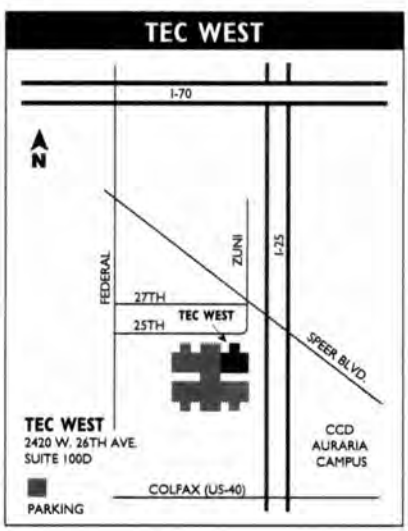
off-campus sites

TECHNICAL EDUCATION CENTERS & DENTAL HYGIENE PROGRAM









TEC East

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

TEC North

6221 Downing St., Denver, CO 80216
303-289-2243

TEC West

Diamond Hill Complex
2420 W. 26th Ave., #100D, Denver, CO 80211
303-477-5864

CCD Dental Hygiene Program

Lowry Higher Education Center
960 Xanthia, Bldg. 753
Denver, CO 80220
303-365-7771

1998/99 ACADEMIC CALENDAR

Fall 1998

Registration . . . . . .July 1-Aug. 28
Fall Graduation application deadline . . . . . .Aug. 3
Classes begin . . . . . .Aug. 24
Labor Day Holiday . . . . . .Sept. 7
Campus Closed
CCD Project Success Day . . . . . .Oct. 7
CCD Advising Day . . . . . .Nov. 17
Thanksgiving Day Holiday . . . . . .Nov. 26
Campus Closed
Friday after Thanksgiving . . . . . .Nov. 27
Campus Open, No Classes
Classes End Dec.12
MSCD/UCD Final Exams Start . . . . . .Dec. 14
MSCD/UCD Final Exams End . . . . . .Dec. 19

Spring 1999

Registration . . . . . .Nov. 18, -Jan. 25
Spring Graduation application deadline . . . . .Dec. 1
Martin Luther King Jr. Holiday . . . . . .Jan. 18
Campus Open, No Classes
Classes Begin . . . . . .Jan. 19
CCD Project Success Day . . . . . .March 3
Spring Break . . . . . .March 15-20
CCD Advising Day . . . . . .April 20
Classes End . . . . . .May 12
MSCD/UCD Final Exams Start . . . . . .May 10
MSCD/UCD Final Exams End . . . . . .May 15

Summer 1999

Registration . . . . . .April 21-June 5
Summer Graduation application deadline . . . .May 4
Memorial Day Holiday . . . . . .May 31
Campus Closed
Classes Begin . . . . . .June 1
Independence Day Holiday . . . . . .July 5
Campus Closed
Classes End . . . . . .Aug. 7

degree & certificate programs

Associate of Arts Degrees
- Art Emphasis
- Communications Emphasis
- Economics Emphasis
- English/Literature Emphasis
- Gerontology
- History Emphasis
- Humanities/Philosophy Emphasis
- Music Emphasis
- Photography Emphasis
- Political Science Emphasis
- Speech Emphasis
- Theatre Emphasis

Associate of Science Degrees
- Anthropology Emphasis
- Behavioral Sciences
- Biology Emphasis
- Chemistry Emphasis
- Earth Science Emphasis
- Engineering Cluster
  - Pre-Engineering General Emphasis
- Gerontology Emphasis
- Mathematics Emphasis
- Medical Cluster
  - Pre-Dental Emphasis
  - Pre-Medical Emphasis
  - Pre-Medical Technology Emphasis
  - Pre-Pharmacy Emphasis
  - Pre-Physical Therapy Emphasis
  - Pre-Physician Assistant Emphasis
  - Pre-Veterinary Science Emphasis
- Physics Emphasis
- Psychology Emphasis
- Sociology Emphasis

Associate of General Studies Degrees
- Business Administration
- General Studies - Generalist
- Graphic Design (MSCD)
- Human Services (MSCD)
- Paralegal (CU-Denver), AAS
- Photography (MSCD/CU-Denver)
- Teacher Education: Early Childhood Education
- Teacher Education: Early Childhood Education/Violence Counseling
- Teacher Education: Elementary Education

Associate of Applied Science Degrees
- Accounting
- Administrative Assistant
- Administrative Assistant/Office Manager
- Business Administration
- Business Applications Programmer
- Business Emphasis
- Business Generalist Emphasis
- CNC Machine Tool Operator
- Clinical Medical Assistant
- Commercial/Industrial Refrigeration, Heating and Air Conditioning
  - Environmental Controls Technician Option
- Comprehensive Medical Assistant
- Computer Graphics Emphasis
- Computer Science Emphasis
- Computer Specialist
- Computer Specialist Emphasis
- Computer Training for People with Disabilities
- Dental Hygiene
- Drafting for Industry
- Early Childhood Education
- Electrical Emphasis
- Electronics Technology
- Fabrication Welder
- Finance Emphasis
- General Accounting Emphasis
- Graphic Arts (Printing)
- Graphic Arts Emphasis
- Graphic Design
- Graphic Design Emphasis
- Health and Wellness Management
- Health Information Specialist
- Insurance Emphasis
- International Business Emphasis
- Internet Specialist Emphasis
- Legal Secretarial/Legal Assistant
- Management Emphasis
- Marketing Emphasis
- Mechanical Emphasis
- Medical Secretarial
- Medical Secretary
- Medical Transcriptionist
- Medical Unit Coordinator
- Multimedia Design
- Music Emphasis
- Network Administration Emphasis
- Nursing

Nursing: Advanced Placement
Photography Emphasis
Postal Service Management
Process Piping Emphasis
Radiography
Radiology/Orthopedic Assistant
Real Estate Emphasis
Structural Emphasis
Trades
Travel and Tourism, Business of
Video Production/Communications

Certificates

Accounting
Accounting Clerk
Accounting with Computer Applications
Administrative Assistant
Arc Welder
Bookkeeper
Broadcast Technologist
Business Applications Programmer
CNC Machine Tool Operator
Case Management/Residential Service Aide
Clinical Medical Assistant
Comprehensive Medical Assistant
Computer Graphics
Computer Specialist
Computer-Aided Drafting (CAD)
Computerized Accounting Technician
Customer Service Representative
Customer Service Specialist
Data Entry Clerk
Drafting for Industry
Early Childhood Education Director
Early Childhood Education Group Leader
Early Childhood Education Group Leader/Child Development Associate (CDA)
Electronics Technology
Entrepreneurship
Environmental and Refrigeration Technology
Executive Assistant
Fabrication Welder
Finance/Commercial Credit Management
General Clerical
General Office Clerk
Gerontology (See Behavioral Sciences)
Graphic Arts (Printing)
Graphic Design
Health Information Specialist
International Business
Lathe Operator
Machine Tool Operator
Marketing
Massage Therapy
Medical Clerk
Medical Secretarial
Medical Secretary
Medical Transcriptionist
Medical Unit Coordinator
Microsoft Office Specialist
Mill Operator
NT Network Specialist
Novell 3x Network Administration
Novell 4x Network Administration
Nurse Aide
Nurse Assistant
PC Specialist/LAN Administrator
PC Repair Specialist
PC Help Desk Specialist
Paralegal: General
Payroll Clerk
Perioperative Nursing
Photography
Practical Nursing
Prepress
Principles of Electronics
Programming Emphasis
Psychiatric Technician
Psychiatric Technician: Advanced Placement
Radiologic Health Sciences
Radiology/Orthopedic Assistant
Recreational Assistant
Refrigeration and Air Conditioning
Secretarial/Computer Applications
Service Bureau
Special Education Paraprofessional
Special Education Aide
Stenographic
Supermarket Management
Surgical Technology
Travel and Tourism
Web Page Specialist
Welder
Windows NT Network Administration
Word Processor

degree & certificate programs

BY OCCUPATION OR EMPHASIS AREA

Accounting
- Accounting ..... AAS, C
- Commercial Credit Management Emphasis ..... AAS
- General Accounting Emphasis ..... AAS
- Accounting Clerk C
- Accounting with Computer Applications C
- Bookkeeper C
- Computerized Accounting Technician C
- Payroll Clerk C

Anthropology
- Anthropology (See Behavioral Sciences)

Art
- Art Emphasis ..... AA

Behavioral Sciences
- Anthropology Emphasis ..... AS
- Gerontology Emphasis ..... AS
- Psychology Emphasis ..... AS
- Sociology Emphasis ..... AS

Biology
- Biology Emphasis ..... AS

Business Administration
- Business Administration ..... AGS-BUS, AAS
- Business Generalist Emphasis ..... AAS
- Entrepreneurship C
- Finance Emphasis ..... AAS
- Finance/Commercial Credit Management C
- Insurance Emphasis ..... AAS
- International Business C
- International Business Emphasis ..... AAS
- Management Emphasis ..... AAS
- Marketing C
- Marketing Emphasis ..... AAS
- Postal Service Management ..... AAS
- Real Estate Emphasis ..... AAS
- Supermarket Management C
- Travel and Tourism, Business of ..... AAS, C

Business Technology: Office Management & Secretarial Skills
- Administrative Assistant ..... AAS, C
- Administrative Assistant/Office Manager ..... AAS
- Clinical Medical Assistant ..... AAS, C
- Comprehensive Medical Assistant ..... AAS, C
- Customer Service Representative C
- Customer Service Specialist C
- Data Entry Clerk C
- Executive Assistant C
- General Clerical C
- General Office Clerk C
- Health Information Specialist ..... AAS, C
- Legal Secretarial/Legal Assistant ..... AAS
- Medical Clerk C
- Medical Secretarial ..... AAS, C
- Medical Secretary ..... AAS, C
- Medical Transcriptionist ..... AAS, C
- Medical Unit Coordinator ..... AAS, C
- Nurse Aide C
- Nurse Assistant C
- Microsoft Office Specialist C
- Radiology/Orthopedic Assistant ..... AAS, C
- Secretarial/Computer Applications C
- Stenographic C
- Word Processor C

Chemistry
- Chemistry Emphasis ..... AS

Communications
- Communications Emphasis ..... AA

Computer Information Systems
- Business Applications Programmer ..... AAS, C
- Business Emphasis ..... AAS
- Computer Specialist ..... AAS, C
- Computer Specialist Emphasis ..... AAS
- Computer Training for People with Disabilities AAS
- Internet Specialist Emphasis ..... AAS
- NT Network Specialist C
- Network Administration Emphasis ..... AAS
- Novell 3x Network Administration C
- Novell 4x Network Administration C
- PC Specialist/LAN Administrator C
- PC Repair Specialist C
- PC Help Desk Specialist C
- Programming Emphasis C
- Web Page Specialist C
- Windows NT Network Administration C

Computer Science
- Computer Science Emphasis ..... AAS

KEY

AA • Associate of Arts Degree
AS • Associate of Science Degree
AGS • Associate of General Studies Degree
AAS • Associate of Applied Science Degree
C • Certificate

Drafting
Computer-Aided Drafting (CAD) C
Drafting for Industry . . . . . .AAS, C
Electrical Emphasis . . . . . .AAS
Mechanical Emphasis . . . . . .AAS
Process Piping Emphasis . . . . . .AAS
Structural Emphasis . . . . . .AAS

Early Childhood Education
Teacher Education: Early Childhood Education
(See Teacher Education)
Teacher Education:
Early Childhood Education/Violence Counseling
(See Teacher Education)
Early Childhood Education
(See Teacher Education)
Early Childhood Education Director
(See Teacher Education)
Early Childhood Education Group Leader
(See Teacher Education)
Early Childhood Education Group Leader/
Child Development Associate (CDA)
(See Teacher Education)

Earth Science
Earth Science Emphasis . . . . . .AS

Economics
Economics Emphasis . . . . . .AA

Electronics Technology
Broadcast Technologist C
Electronics Technology . . . . . .AAS, C
Principles of Electronics C

Engineering
Engineering Cluster . . . . . .AS
Pre-Engineering General Emphasis

English
English/Literature Emphasis . . . . . .AA

Environmental and Refrigeration Technology
Commercial/Industrial Refrigeration,
Heating and Air Conditioning . . . . . .AAS
Environmental Controls Technician Option
Environmental and Refrigeration Technology C
Refrigeration and Air Conditioning C

General Studies
General Studies - Generalist . . . . . .AGS

Gerontology
Gerontology (See Behavioral Sciences) . . . . .AA, C

Graphics
Graphic Arts (Printing) . . . . . .AAS, C
Graphic Design . . . . . .AGS-GRD (MSCD), AAS, C
Computer Graphics C
Prepress C
Service Bureau C

Health Related
Clinical Medical Assistant
(See Business Technology)
Comprehensive Medical Assistant
(See Business Technology)
Dental Hygiene . . . . . .AAS
Health and Wellness Management . . . . . .AAS
Health Information Specialist
(See Business Technology)
Nurse Assistant (See Business Technology)
Nurse Aide (See Business Technology)
Nursing . . . . . .AAS
Nursing: Advanced Placement . . . . . .AAS
Practical Nursing C
Massage Therapy C
Medical Clerk (See Business Technology)
Medical Cluster . . . . . .AS
Pre-Dental Emphasis
Pre-Medical Emphasis
Pre-Medical Technology Emphasis
Pre-Pharmacy Emphasis
Pre-Physical Therapy Emphasis
Pre-Physician Assistant Emphasis
Pre-Veterinary Science Emphasis
Medical Secretarial (See Business Technology) . . . .
Medical Secretary (See Business Technology) . . . . .
Medical Transcriptionist (See Business Technology)
Medical Unit Coordinator
(See Business Technology)
Perioperative Nursing C
Psychiatric Technician C
Psychiatric Technician: Advanced Placement . . .C
Radiography . . . . . .AAS
Radiologic Health Sciences C

Radiology/Orthopedic Assistant
(See Business Technology)
Recreational Assistant C
Surgical Technology C

History
History Emphasis . . . . . .AA

Humanities
Humanities/Philosophy Emphasis . . . . . .AA

Human Services
Case Management/Residential Service Aide C
Human Services . . . . . .AGS-HSE (MSCD), AAS
Special Education Paraprofessional C
Special Education Aide C

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

Mathematics
Mathematics Emphasis . . . . . .AS

Multimedia
Computer Graphics Emphasis . . . . . .AAS
Graphic Arts Emphasis . . . . . .AAS
Graphic Design Emphasis . . . . . .AAS
Multimedia Design . . . . . .AAS
Music Emphasis . . . . . .AAS
Photography Emphasis . . . . . .AAS
Video Production/Communications . . . . . .AAS

Music
Music Emphasis . . . . . .AA

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

Physics
Physics Emphasis . . . . . .AS

Political Science
Political Science Emphasis . . . . . .AA

Printing
Graphic Arts (See Graphics)
Prepress (See Graphics)

Psychology
Psychology (See Behavioral Sciences)

Sociology
Sociology (See Behavioral Sciences)

Speech
Speech Emphasis . . . . . .AA

Teacher Education
Early Childhood Education . . . . . .AAS
Early Childhood Education Director C
Early Childhood Education Group Leader C
Early Childhood Education Group Leader/
Child Development Associate C
Teacher Education:
Early Childhood Education . . . . . .AGS-ECE
Teacher Education: Early Childhood
Education/Violence Counseling . . .AGS-ECE/VC
Teacher Education:
Elementary Education . . . . . .AGS-EE

Theatre
Theatre Emphasis . . . . . .AA

Trades and Industry
Arc Welder C
CNC Machine Tool Operator . . . . . .AAS, C
Fabrication Welder . . . . . .AAS, C
Lathe Operator C
Machine Tool Operator C
Mill Operator C
Trades . . . . . .AAS
Welder C

KEY

AA • Associate of Arts Degree
AS • Associate of Science Degree
AGS • Associate of General Studies Degree
AAS • Associate of Applied Science Degree
C • Certificate

college guarantees

Guarantee for Job Competency

To graduates of Certificate programs and Associate of Applied Science (AAS) degrees, CCD 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 skills 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, Community College of Denver (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, CCD guarantees that the articulated AGS degrees or credits, as identified in the CCD catalog, will transfer into the 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 lower division 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 a given four-year school.

CCD accountability

Excellence Through Accountability

- Between 1987 and 1997, CCD increased total graduates by 81 percent.
- Between 1987 and 1997, people of color as a percent of total graduates increased from 20 percent to 44.4 percent.
- Between 1987 and 1997, CCD increased graduates of color by 369 percent (from 83 to 306 graduates).
- 91.3 percent of all CCD graduates between 1992 and 1996 who applied for transfer were accepted into Colorado four-year public colleges and universities.
- The average cumulative GPA of CCD transfer graduates in 1995-96 at four-year schools was 2.9 on a four-point scale.
- 94 percent of 1995-96 graduates are satisfied with their CCD educational program.
- 98 percent of 1997 currently enrolled students and 1995-96 graduates are satisfied with the teaching they received.
- 100 percent of employers surveyed in 1996 are satisfied with the skills of CCD graduates.

Of vocational graduates who completed their educational goals at CCD in 1995-96:

- 95 percent either continue their education or are employed within one year of program completion.
- 76 percent of those who enter the job market, enter directly into degree-related employment.
- 9 percent are unemployed, seeking employment.

Of CCD students who transferred to public colleges or universities in 1996:

- 51.9 percent transferred to The Metropolitan State College of Denver.
- 32.9 percent transferred to the University of Colorado at Denver.
- 15.2 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 1991-1994:

- 73.3 percent had either attained a bachelor's degree or were still enrolled at their transfer institutions as of fall 1996.

You have taken a step in the right direction to prepare for the future — your future.

Welcome to Community College of Denver (CCD) on the downtown Auraria Campus. You have taken a step in the right direction to prepare for the future — your future.

Our doors are open and our faculty, administration and staff will steer you onto the right educational track. They also will help you stay on track, whether you are taking a few refresher courses or you are working toward a certificate or associate degree. CCD provides many student support services, including tutoring, advising and career planning, and you'll get individualized attention from award-winning faculty. CCD guarantees transferability of credits from our school to four-year Colorado public colleges and universities. (See CCD Guarantees section of this catalog.) We even guarantee job competencies. We are here to help you succeed, because your success is our success.

Education at CCD is affordable: we have the lowest tuition rate on the Auraria Campus. We offer convenient payment options and financial aid is available to qualified students. You can choose from day, evening or weekend classes, classes on the Auraria Campus or at three Technical Education Centers (TEC), classes on TV or over the Internet. The choice is yours. The future is yours!

CCD is in the heart of the city and within walking distance of myriad downtown activities. At CCD you are close to Larimer Square and the 16th Street Mall; Mile High Stadium, home of the NFL Broncos; Coors Stadium, home of the Colorado Rockies baseball team; McNichols Sports Arena and the new Pepsi Center, home of the NHL Avalanche and NBA Nuggets; and the Colorado Convention Center and the Denver Center for the Performing Arts complex.

We know you'll get a lot out of your CCD experience, and we're glad you are here!

CCD's History

The Colorado legislature created CCD in 1967. Three years later, its doors opened to students in a renovated auto showroom close to Denver's Civic Center. Enrollment increased so rapidly, the college immediately expanded into rental store fronts near the main building. In 1975, CCD moved to the 171-acre Auraria Higher Education Center campus in downtown Denver 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, Emmanuel Gallery, used today as exhibition space for student and faculty art work.

CCD is one of 13 institutions in the Colorado Community College and Occupational Education System and the third largest with 6,000-plus students enrolled in its Auraria Campus programs. CCD is the only community college in the city and county of Denver and the only truly urban community college in Colorado. 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 the University of Colorado at Denver. The three institutions share classroom buildings, a regional library, recreational facilities, student union, and other amenities. At Auraria, CCD provides all two-year programs, awards all two-year degrees and occupational certificates and implements remedial instruction, adult basic education and GED preparation.

In 1985, CCD took over the system's fast-track skills center, the Technical Education Center (TEC) at 6221 Downing in Adams County, six miles northeast of Auraria. TEC, now known as TEC North, is an open-entry/open-exit fast-track training center that meets industry employment needs. TEC East at 3532 Franklin St. in the Cole neighborhood, opened in 1993. TEC West, at 2420 W. 26th Ave. in the Diamond Hill Complex, also opened in 1993, the same year all TEC sites began offering traditional general education college courses.

With a minority student body of more than 50 percent, CCD has the most diverse student population of all higher education institutions in Colorado. It no longer has an ethnic majority and its diversity truly reflects the city's population. At CCD, our students can choose from more than 90 programs that will

prepare them for a new career, allow them to earn a certificate or associate degree, or enable them to transfer to four-year schools.

Our Philosophy

CCD is a comprehensive, student-oriented urban college, providing open access to a diverse population. CCD pledges open admissions and appropriate support to every individual who seeks the opportunities available at the college for life-long education and personal development.

Educated citizens make a significant and positive impact on the economy, their local communities and the nation. CCD strives for excellence in transfer educational and occupational programs, seeks to meet the needs of employers, and finds new and effective ways of extending educational opportunities throughout its service area.

CCD's Mission Statement

Community College of Denver pledges, responsibility for the following:

- 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 Community College of Denver

CCD believes all students are entitled to a quality education. This education must provide the student with an understanding and appreciation of our interdependence as individuals and nations.

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 Excellence

CCD faculty are committed to a teaching/learning process that:

1. Enables students to become independent learners.
2. Demonstrates a commitment to student outcomes (job readiness, skill levels, mastery of subject matter).
3. Provides an opportunity for critical thinking and problem solving.
4. Provides linkages between instruction and real-world applications.
5. Demonstrates an excitement about teaching and learning.
6. Maintains high but realistic expectations.
7. Demonstrates appreciation of a diverse student population.
8. Encourages growth in students' self-esteem.

Campus Choices

We offer traditional semester courses, English as a second language, GED preparation and a number of "enroll-anytime" courses on the downtown 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 three TEC sites. In addition, the college offers adult basic education, GED prep., and English as a second language at more than 10 community sites around the city. The college's Division of Continuing Education offers homestudy, television courses, on-line courses, evening and weekend courses and employee training programs at the work site or other convenient locations. All major CCD facilities are accessible to individuals with disabilities.

Campus Security

The Auraria Higher Education Center Public Safety 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 the Auraria Higher Education Center 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 Services in South Classroom Building, room 305.

Campus Crime Information

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

Occurrences of criminal offenses on campus:

Offense	1997	1996	1995
Murder	0	0	0
Rape	0	0	0
Robbery	4	1	4
Aggravated Assault	3	7	6
Burglary	13	23	24
Vehicle Theft	31	11	10
Sexual Assault*	2	5	4
Hate Crimes	0	0	2 **

* *Includes sexual assaults other than first- and second-degree sexual assaults (rape), such as indecent exposure and third-degree sexual assaults.*

** *One incident, two offenses, simple assault and intimidation.*

Number of Arrests for the following crimes on campus:

Arrests	1997	1996	1995
Liquor Law Violation*	12	10	2
Drug Abuse Violation	36	40	6
Weapons Possession	14	4	1

* Excludes DUI arrests

Statistics provided by the Auraria Campus Police and Security Division in compliance with the Crimes Awareness and Campus Security act of 1990.

Notice of Nondiscrimination

CCD does not discriminate on the basis of race, color, creed, national origin, sex, age or handicap 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 Services, Campus Box 203, 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 Michael Poindexter, Campus Box 200, P.O. Box 173363, Denver, CO 80217-3363, 303-556-3595.

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 Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

Comprehensive Medical Assistant/TEC East
- American Association of Medical Assisting

Dental Hygiene
- American Dental Association

Nursing
- Colorado State Board of Nursing

Radiography 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

Community College of Denver is a member of the American Association of Community Colleges.

Alumni Association

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

The alumni sponsor special events, a yearly reunion picnic, and an annual meeting and reception. Scholarships, mentoring and other programs help current students succeed and promote recognition of their achievements.

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 303-556-2891.

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 Genevievie Martinez, 303-556-2420.

CCD guarantees transferability of credits from our school to four-year Colorado public colleges & universities.

Campus Visits

For individual and group tours of the campus or to visit classes, contact the Educational Planning and Advising Center at 303-556-2481.

Advising Philosophy

Advising is critical to your success, so our 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 advisor share responsibility for the advising process.

After taking 12 credits of courses numbered 100 or above, you should have a major field of study, a faculty advisor and a signed educational planning guide.

We recommend the Educational Planning and Advising Center be your first point of contact at CCD. Our advisors 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 any time.

The Educational Planning and Advising Center staff also conducts orientation sessions, provides information on and interpretation of assessment programs, and advises students who have not been accepted into a major area of programs and courses. Advisors also can refer you to community and campus resources. Special advisors assist refugee and international students.

The Educational Planning and Advising Center is in the South Classroom Building room 134, 303-556-2481.

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.

Follow These Steps

1. If you are a new student, submit an Application for Admission (form at end of the catalog) to the Office of Admissions, Registration and Records. A permit to test will be given to you to allow you to take the Basic Skills Assessment Test. You also will receive official notification by mail of your acceptance to CCD.
2. Next, make an appointment to take the Basic Skills Assessment Test. A permit from the Office of Admissions, Registration and Records is required for admission to the testing session. Under certain conditions, as listed in this catalog (see College Policies and Academic Standards section), the assessment may be waived. For assessment dates and times, check the current Schedule of Classes, stop by room 230 in South Classroom Building, or call 303-556-3810. After you take the test, sign up in the Testing Center or South Classroom Building 134 to attend an orientation .
3. If you are enrolling for the first time at CCD and plan to be a full-time student, you also must complete the Academic Profile, which assesses your general education knowledge and skills. It takes only 45 minutes to complete. Students should call the Testing Center at 303-556-3810 to make a test appointment. Results do not affect entry to the college or placement in classes. Profile results help evaluate student learning between entering CCD and graduation.

4. After you attend an orientation, stop by the Educational Planning and Advising Center (South Classroom Building, room 134, 303-556-2481) and make an appointment with an advisor to help you plan your educational goals and schedule classes.
5. Your next step is to register for your classes, either by telephone or at the Office of Admissions, Registration and Records during scheduled registration dates each semester. Call Admissions, Registration and Records at 303-556-2430, or stop by the South Classroom Building, room 133, for more information.
6. If you are a new student and wish to attend one of the three TEC campuses, make an appointment with a case manager at any TEC campus. Your case manager will assist you in all the registration and enrollment processes. TEC East, 303-293-8737; TEC North, 303-289-2243; TEC West, 303-477-5864.

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 Students on F, M, J, B, or H visas must make an appointment with the International Student Advisor before submitting any documents. International students must submit the following documents in addition to an official International Application for Admission:

1. an official, certified English translation of a high school, college, or equivalent transcript.
2. a statement of sufficient financial resources to provide for staying in the United States.
3. proof of a minimum score of 475 on the Test of English as a Foreign Language (TOEFL), or a score of 75 on the Michigan Test of English Language Proficiency. Students still must take the levels of English Proficiency (LOEP) Computerized Placement Test.

All students on F, M, J, B, or H visas do not qualify for financial aid or scholarships. These students will pay Colorado nonresident tuition.

For more information, contact the International Student Advisor in the South Classroom Building, room 134, 303-556-3605.

Directory Information

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

- student name,
- permanent address,
- dates of attendance,
- degrees and
- awards received.

The college may disclose any of these items without prior written consent, unless notified in writing to the contrary by the 5th day of classes each semester.

CCD complies fully with the Family Educational Rights and Privacy Act (FERPA), which is designed to protect the privacy of students' educational records. Refer questions to the Office of Admissions, Registration and Records, South Classroom Building, room 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 are to be released.

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

Student may request copies of their academic records accumulated while at CCD. Transcripts are available from the Office of 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 those students whose financial and academic records at the college are not cleared.

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 the Office of Admissions, Registration and Records upon receipt of an official transcript. 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 the Admissions, Registration and Records Office. Evaluation is done for general acceptance of all transferrable credit and is not confined to any specific degree or certificate program. Students will need to meet

with their program advisors 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.

3. 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 CCCOES-approved institutions with which CCD has current articulation agreements. (See the catalog section on associate degree programs.)
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 shall be accepted as meeting degree or certificate requirements in comparable or equivalent programs at CCD.
5. Lower division credits earned by students enrolled in baccalaureate-granting institutions which are applicable to BA or BS 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 the Office of 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

You 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 your 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.

1. Standardized Tests

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

b. *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, room 134, 303-556-4614. The CLEP examination may be taken in the CCD Testing Center.

2. Challenge Examinations

Currently enrolled students may challenge a course by taking a comprehensive examination. Only one exam for a particular course will be arranged for 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 (PONSI), 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 for during any one semester. ($15/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, room 134, 303-556-4614.

Add/Drop/Withdrawal

The final date to add or drop a course is predetermined and printed in the current semester's Schedule of Classes. After the first week of classes, you may not add courses without the written approval of the faculty member whose class is being added. Weekend College, Extended Campus and Telecourses require the written approval of an advisor in the Educational Planning and Advising or the director of the Non-Traditional Learning 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 the Office of Admissions, Registration and Records, South Classroom Building, room 133. To add courses after the first week of classes, obtain the appropriate form from the Office of 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 open-entry 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 a number of programs leading to the AGS Degree that transfers to Metropolitan State College of Denver or to the University of Colorado at Denver. Consult the Associate Degree Program 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, familiarize yourself with the requirements of the school you wish to attend. You also should consult the advisor in the Transfer Center in South Classroom Building, room 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 times 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, room 136A.

Veterans' Academic Standards of Progress

The following policy applies to all students who are veterans and other eligible persons receiving VA benefits:

1. **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, you will be suspended for one academic term. Reinstatement 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 Veterans Administration. 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.
2. **Other Special Grades**
   AU Grade — indicates the student "audited" the course. No credit is allowed for audited courses,

nor is the grade certifiable 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 "I," incomplete grade.

3. Attendance

Veterans who stop attending class, but do not officially withdraw, may be dropped administratively. VA certification will be adjusted accordingly.

4. 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.
f. Withdrawal from a course or receipt of a nonpunitive 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 Veterans Administration counselor, or consulted a CCD academic counselor or advisor 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 Veterans Administration.

Extra Services Available

We encourage you to take advantage of CCD's many student services, listed under the Need More Help? section of this catalog. For all your academic, personal and career needs, you can save time by regularly talking to your adviser.

Good luck!

Education at CCD is affordable. We have the lowest tuition rate on the Auraria Campus.

Tuition

Tuition is determined by the State Board for Community Colleges and Occupational Education and is subject to change annually. Fees also can change.

Tuition for 1998-99 is set at $55 per credit hour for resident students and $260.55 for non-resident students. In addition, fees are set at $8.50 per credit hour. Community College of Denver (CCD) also charges a $9 non-refundable registration fee per semester per student, and $16.70 per semester fee is charged for the Regional Transportation District Bus Pass (Auraria classes only). The college will continue to assess a "bad check" fee of $17 for checks returned by the banking system. Rates are subject to change without advance notice.

Residency Classification

For residency classification, you must have lived in Colorado for 365 days prior to the first day of the term in which you wish to 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 the Office of 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 the Office of Admissions, Registration and Records by the first day of the term. Late petitions are not accepted.

Senior Citizens

In-state residents over the age of 60 may take courses for credit and pay 50 percent of the tuition charges and 100 percent of student fees. In-state senior citizens who are not interested in receiving credit may attend classes on a space-available basis at no charge as long as they are residents. Visit the Office of Admissions, Registration and Records, South Classroom Building, room 133, for a Senior Citizen/Non-Credit form, or call 303-556-2430. Senior citizens may not take courses listed as "non-credit" free of charge.

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

VA educational benefits may apply for an 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 the Office of Admissions, Registration and Records, South Classroom Building, room 133, or call 303-556-2430.

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 the Office of 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 the Office of 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 the Office of Admissions, Registration and Records.

CCD normally mails tuition refund checks each Friday to all 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.

Fees

All students on the Auraria Campus pay student fees. This money is for student activities and benefits, including student publications, operation of student government, cultural activities, recreational activities, and clubs and organizational activities. Student fees also help pay off construction debts for the Auraria Student Union, Child Care Center and the Physical Education and Recreation Building. Student Government approves expenditure of student fee monies.

Students enrolled in certain courses may be required to purchase individual supplies and materials, and to rent uniforms. A $17 fee is charged for bad checks.

Financial Aid

Early Application

The Office of Financial Aid 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 at the Office of Financial Aid, South Classroom Building, room 135, 303-556-2420, and at all Technical Education Centers (see listing/addresses on page vi).

Application Procedures

Applications are available from the Office of Financial Aid. To apply for grants, scholarships, work-study employment, William D. Ford Federal Direct Loans and PLUS, 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 welfare, social security, vocational rehabilitation benefits, employment, etc.

Priority in awarding financial aid goes to students who apply early. To be on time, you must have mailed your application by March 1, and completed your file and submitted 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 applying, 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.

Check with the Office of Financial Aid for the school year priority dates.

Student Budget

The cost of a CCD education includes tuition, fees, books and supplies. In addition, you may have expenses for 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. Standard monthly living allowances:

Living with parents	$ 660
Living away from parents	$1040

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

Ability to Benefit

If you are entering CCD without a high school diploma or GED and are applying for financial aid, you are classified as an Ability to Benefit Student. Ability to Benefit Students:

1. are admitted as regular students, seeking a degree or certificate.
2. must complete the regular assessment process and plan a schedule with an advisor.
3. must meet minimum qualifications on a test approved by the U.S. Department of Education for determining eligibility to receive financial aid.
4. are eligible to apply for financial aid for up to 30 credits of remedial courses (numbered 099 or below). Students who have not successfully completed the required remedial courses by the end of 30 attempted remedial credit hours may no longer apply for financial aid.

If you pass the GED test before attempting 30 credit hours, you no longer are classified as an Ability to Benefit Student.

Eligibility

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.

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, after you complete 12 credits at CCD. Contact the Office of Financial Aid.

You must complete applications for financial aid once each year to determine eligibility.

Financial aid applicants must maintain satisfactory academic and measurable progress both prior to applying for financial 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. Students denied aid based on this policy may file an appeal. Appeal forms and copies of the complete policy are available from the Office of Financial Aid, South Classroom Building, room 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.

All financial aid programs except Pell Grants require a minimum enrollment of 6 credits. Pell Grants require 3 credits.

Students registering for CCC ONLINE classes should check with the Office of Financial Aid regarding procedures for this on-line 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 $3,000 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 Student Incentive Grant (CSIG)* — Available on a need 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.
- *Diversity Grant* — Colorado provides grants of $200 to $5000 to members of underrepresented populations. Awards are based on financial need.
- *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 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, using a separate application available at their high schools.

Institutional and community scholarships are posted on the Office of Financial Aid scholarship board. Other scholarship listings and information resources include: The Educational Opportunity Center, 303-629-9226; Career Services Center, 303-556-6202; and Student Assistance Center and Women's Services, 303-556-3300.

William D. Ford Federal Direct Loan Programs
Loan applicants first must complete the FAFSA form. In addition, you must attend an entrance and an exit loan counseling interview to ensure you understand your loan repayment responsibilities.

CCD recommends first-year students' loan borrowing from all loan programs be limited to $2,625 per academic year, or $1,313 per semester. We also recommend total student loan borrowing be limited to a maximum of $10,000, including any loans borrowed at other schools. Call the Office of Financial Aid, 303-556-2420, to learn more about student loan eligibility.

- Federal Direct Subsidized Loan — This program provides loans at a variable 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 Unsubsidized Stafford Loan — The Direct Unsubsidized Loan program provides loans for students' remaining Stafford eligibility. The federal limits are $4,000 for freshmen and sophomores. 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 Direct Loans to Parents — Parents may borrow for their students from the Federal Direct 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.

Refund and Repayment Policies

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 date.

If you receive financial aid from CCD and then withdraw from classes or stop attending, you may be subject to repayment of a portion of the financial aid you received.

You may be eligible for a tuition refund if you withdraw from classes. (See Tuition Refund Policy.) If any portion of the your tuition and fees was paid from any financial aid fund, the refund will be returned to the account(s) from which you were paid in the order listed under Distribution of Refunds. An administrative fee, not to exceed the lesser of 5 percent of the institutional charges or $100, will be charged.

If you only receive Colorado state financial aid, you are subject to CCD's Institutional Refund Policy outlined in this catalog and the Financial Aid Repayment Policy.

Refund/Repayment Policies do not apply to students who do not begin attendance in classes. These students are considered ineligible, and any financial aid disbursed must be repaid. Students who fail to withdraw from classes prior to the published census date will be held responsible for any tuition/fee charges and repayment of disbursed financial aid.

Pro-Rata Refund

If you are enrolling at CCD for the first time and are a Title IV financial aid recipient, and withdraw or cease to attend prior to completing 60 percent of your first semester, you will have a pro-rated portion of your tuition/fees calculated. The amount refunded will be the greater of the institutional, pro-rata or federal refund.

Pro-Rata Calculation

Number of weeks not attended by student divided by number of weeks in the term (rounded down to the nearest 10%) = percentage of term not attended.

The amount to be refunded is the "percentage of term not attended" multiplied by the institutional charges (tuition and fees) minus an administrative fee not to exceed the lesser of 5 percent of the institutional charges or $100.

Federal Refund

Title IV recipients who are not eligible for pro-rata refund and who withdraw from CCD during the first 50 percent of the semester may be eligible for a refund of charges to the financial aid programs in accordance with the following schedule:

Percentage of Time Prior to Withdrawal	Percentage to be Refunded
0-15%	100%
16-25%	50%
26-50%	25%
51%	0%

Distribution of Refunds

Refunded amounts are distributed in the following order:

1. Unsubsidized Federal Direct Stafford Loan
2. Subsidized Federal Direct Stafford Loan
3. Federal Direct Plus Loan
4. Federal Pell Grant
5. Federal Supplemental Educational Opportunity Grant
6. Other Title IV Programs
7. Other Federal Sources of Aid
8. Colorado Student Incentive Grant
9. Colorado State Financial Aid
10. Private Funds
11. CCD Funds
12. The Student

Repayment

If you receive cash disbursements from federal and/or state financial aid programs and withdraw prior to mid-term (approximately the seventh or eighth week), you must repay a portion of the financial aid received if the disbursement exceeds educational expenses. Total financial aid disbursed (less student loans and work-study earnings) minus eligible expenses will equal the amount of your financial aid repayment.

Repayments are applied to a financial aid account(s) in the following order:

1. Federal Pell Grant
2. Federal SEOG
3. Other Title IV Federal Programs
4. Other Federal Sources of Aid
5. Colorado Student Incentive Grant
6. Colorado State Financial Aid
7. Private Funds
8. CCD Funds

If you withdraw and owe a repayment of financial aid funds, you will not be eligible for further financial aid from CCD or any other postsecondary educational institution until payment is made.

Contact the Financial Aid Office, 303-556-2420, for more detailed policy information and application examples.

need more help?

Student Services

Community College of Denver (CCD) offers an array of student services that have one goal — to increase your access to quality education and help you achieve your educational objectives. They are listed in alphabetical order for your convenience.

Career Development Center

The Career Development Center in South Classroom Building, room 136, offers:

- full-time career placement;
- part-time employment;
- career counseling and testing;
- cooperative (Coop) education;
- job search skills: resume writing and interviewing;
- career Resource Library;
- colorado Career Information System;
- career planning; and
- career laboratory.

For an appointment, call 303-556-3609.

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, note-taking 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, room 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 disabilites, 303-556-3300.
- 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 — Specialized computers for students with disabilities, 303-556-4607.

CCD is in the heart of the city & within walking distance of myriad downtown activities.

CCD complies with and fully supports Section 504 of the Rehabilitation Act of 1973, with amendments of 1974, regarding nondiscrimination on the basis of handicap. Inquiries concerning Title VI, TITLE IX and Section 504 may be referred to the Lil Hunsaker, CCD Campus Box 203, P.O. Box 173363, Denver, CO 80217-3363, South Classroom Building, Room 134, 303-556-2413, or to the Office for Civil Rights, U.S. Department of Education, 1961 Stout Street, Denver, CO 80294.

Child Care Services

CCD provides quality child care at three sites: the Auraria Campus, TEC North and TEC West. Each 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 Real Kids 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.

TEC North and TEC West Centers are licensed by the Colorado Department of Human Resources. Hours are Monday through Friday, 7 a.m. to 6 p.m. TEC sites accept children between the ages of 6 weeks and 6 years. For information, call TEC North 303-289-2243; TEC West 303-477-0191.

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 at the Parkway Center, 1391 Speer Blvd., 4th floor, Suite 430. Call 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, conducts orientation sessions, provides information on and interpretation of assessment programs, and advises students who have not been accepted into a major on programs and courses. Advisors 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 advisors assist refugee and international students.

EPAC is located in the South Classroom Building, room 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, room 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

The GED Institute has off-campus sites in the City and County of Denver. Students 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 the instructor. For further information including location, days times and admission requirements, please call 303-556-3805 at Auraria, 303-293-8737 at TEC East, 303-289-2243 at TEC North and 303-477-5864 at TEC West.

Health Services

CCD students may use the outpatient Metropolitan State College of Denver Student Health Clinic at a low cost. The clinic provides direct, confidential health care services that emphasize wellness and preventive medicine. The Tivoli Student Health Clinic is in the Student Union, room 140, 303-556-2525.

Insurance

Students may purchase an accident and sickness insurance plan after registering. Brochures are available at the Student Health Clinic, the Student Life and Activities Office (Tivoli Student Union) and the Office of the Vice President for Student Services, South Classroom Building, room 305, 303-556-2413.

International Student Services

The International Student Office assists international students from more than 50 countries, providing support services and helping bridge campus cultural gaps. Services include counseling on immigration transactions; information about American and international cultural events, on- and off-campus employment, and housing accommodations; pre- and post-admissions advising; and liaison with various consulates, embassies and other international organizations. For more information, contact the International Student Advisor in South Classroom Building, room 134, 303-556-2600.

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 Education and Academic Services Division for further information at 303-556-8455.

ROTC Information

CCD students may participate in two Army ROTC programs that lead to a commission in the active Army, the Army Reserve, or the Colorado National Guard. CCD students may participate through inter-institutional registration in the ROTC program. Contact the Department of Military Science, Metropolitan State College of Denver, Campus Box 93, P.O. Box 173362, Denver, CO 80217-3363, or call 303-556-3491.

Student Assistance Center and Women's Services

The center's mission is to cultivate and foster continuing growth, success and retention of single parents, teen parents, displaced homemakers, men and women in non-traditional fields, and other individuals needing a holistic, educational approach.

Services are available to all students, but target single parents, displaced homemakers, teen parents, and men and women in non-traditional/vocational fields. The center offers academic and crisis counseling, traditional counseling for students who are making a change from home to the workforce and provide assistance to TANF clients.

The center hosts a variety of workshops, with topics such as women's health issues, self-esteem and time management. Support groups offer help with divorce adjustment, personal growth and single parenting. Advocacy also is provided to social services clients.

The center houses a lending library and books on women's issues. It also provides referrals to legal assistance, day care, health, housing and employment resources, and also helps students with abuse and economic issues.

The Student Assistance Center and Women's Services is in South Classroom Building, room 134. For more information call 303-556-2343.

Student Life and Activities

The Student Life and Activities Office develops and implements programs and activities to meet the academic, social and recreational interests of CCD students and the community.

Programs offered through or supported by the Student Life and Activities Office include: Student Government and student organizations, intramural and recreational activities, social and cultural activities, health services, student leadership training programs, and student publications and student newspaper. These activities provide constructive experiences to stimulate personal growth and social development and add to students' enjoyment of life. Student Life and Activities is located on the third floor of the Tivoli Student Union, room 309, 303-556-2597.

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 self-help 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 regarding dates, times, applications and registration fees, South Classroom Building, room 230, 303-556-3810.

Academic Profile

The Academic Profile is a test of general education knowledge and skills. It is required of all first-time freshmen and 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. Counselors and instructors advise students based on the results of the assessments.

Class Testing
Self-paced and Continuing Education course exams are administered in the center. Make-up exams can be taken with faculty permission. Students may also take exams from other colleges or universities from their Continuing Education Departments.

CLEP – College-level Examination Program
A national program of credit by examination that offers the opportunity to obtain recognition for college-level achievement. (See pages 5-6, Credit for Prior Learning.)

Official GED Test Center
TEC North is an official, state-sanctioned GED test 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. TEC West is a satellite test center with testing on Friday from 8:30 a.m. to 4:30 p.m. TEC East is also a satellite test center with testing on Tuesday from 12:30 p.m. to 4:30 p.m. 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 TEC North GED test center at 303-289-2243.

Nursing Mobility Profile
Required of students designated by the Nursing Department. Includes three subjects: Foundations of Nursing; Nursing Care During Childbearing; and Nursing Care of the Child.

Psychological
Available by referral to the Special Learning Support program.

Workman's Compensation
Physicians Accreditation Test required by the State of Colorado for certain specialties. Assesses knowledge of Workman's Compensation Laws as it relates 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, Room 133, 303-556-2452.

Work and Family Resource Center

Because child care issues can have an impact on student success directly and dramatically, CCD's Work and Family Resource Center provides child care information and referral services to help students find child care. One of the Work and Family Resource Center's national award-winning services is the 4 Parents Helpline 303-620-4444, a free, non-medical telephone "warmline" that provides information and support for parents to further the healthy development of their children and deal with the complexities of modern family life. The 4 Parents Helpline is available Monday-Friday from 9 a.m. to 5 p.m. Messages may be left at any time.

academic support center

We are here to help you succeed, because your success is our success.

Located in South Classroom Building, room 142, the Academic Support Center (ASC) provides free tutorial assistance in basic skills to all CCD students. Other tutoring in various subjects is available.

You may request tutoring in any course at the college. For some classes, you may be referred to the divisions 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:

Lab Tutoring*

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 142, room M)

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 142, room J)

Reading and Study Skills
Tutors and computerized assistance help you to 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)

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 142, rooms Q, R & S)

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

Writing Center
Tutors work with you on all types of writing at every level. You can use Macintosh computers in the center to plan, compose and revise your papers. (South Classroom Building 142, rooms N, P & T)

* *Lab schedules are posted at the entrance of South Classroom 142 and outside each lab.*

Special ASC Programs**

For more information on ASC services, or to make an appointment for counseling or tutoring, call 303-556-2497.

Special Learning Support Program (SLSP)
Learning disabled adults can take specialized classes and receive individualized tutoring through this program. You receive diagnostic evaluations and counseling related to your unique needs. This provides the foundation for counseling and specialized educational planning. (Office: Room 142L; Lab: Room 142U & V)

Supplemental Services (SS)
You may request tutorial assistance for your vocational classes through this program. Specialized services include small group or one-on-one tutoring, English as a Second Language for vocational classes and referrals to other programs. (Room 142F)

** *Students apply for these services.*

CCD is a comprehensive, student-oriented urban college, providing open access to a diverse population.

Computer Training for People with Disabilities

The Computer Training for People with Disabilities (CTPD) program is a nationally recognized and award-winning computer training program. You can apply for both certificate and associate degree programs in either application programmer or PC specialist/LAN administrator. If you have a disability, we encourage you to apply to the CTPD program. Our program offers special services, support and placement for participants.

CTPD admission requirements include:

1. successful completion of a computer aptitude test battery.
2. 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, room 134, 303-556-3300, or from the Division of Business and Governmental Studies, Plaza Building, room 262, 303-556-2487.

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 or drop by the Cooperative Education Office, South Classroom Building, room 136, 303-556-3607.

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. They include:

1. assessment of basic academic skills;
2. test results interpretation by skilled faculty and counselors;
3. a variety of skill development courses in reading, mathematics, writing and study skills;
4. support with computer-assisted instruction;
5. preparation for GED; and
6. english as a Second Language instruction and support.

For more information, contact the Division of Education and Academic Services, South Classroom Building, room 313, 303-556-8455.

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 resume. For more information, visit the Honors program office in South Classroom, room 244A, or contact Stephen Thomas, Honors Program Coordinator, at 303-556-3861.

Denver Education Network

Started in 1992, the Denver Education Network is one of 17 urban projects across the United States funded by the Ford Foundation. The purpose of the Ford Foundation's decade-long initiative is to increase the participation and advancement rates of urban, minority students in two-year and four-year colleges primarily through systematic

change within the public school systems — elementary, secondary and higher education. The Denver Education Network's goal is to provide a seamless web of services to Denver students, especially for those students most at-risk of academic failure. For more information, call 303-556-3786.

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 Professor Richard Hart at 303-556-3829.

La Familia Scholars Program

The La Familia Scholars program provides a model environment for first-generation students in higher education that attends to the academic, social, technological and human needs of students based on the culture of "La Familia." La Familia Scholars selected for the program must enroll in a six-hour community class that combines technology, educational and career planning and the critical skills. Learning community classes are taught in a state-of-the-art computerized classroom. Students also have access to a computerized lab for tutoring and computer support.

Case managers and peer mentors provide comprehensive advising and centralized information to students. La Familia staff also work closely with CCD faculty and staff to assist students in adapting to college life so they persist in college to receive a two-year college degree and transfer to a four-year college or university. Because this program is supported by Hispanic-Serving Institution(HSI) funding, Hispanic/Latino first-generation college students are given priority when they apply to the program; however, other first-generation students are welcome to apply until the program reaches its enrollment limit. For more information, call 303-556-4964.

Student Support Services (SSS)

Student Support Services (SSS) at the Community College of Denver is a member of the TRIO branch of federally funded programs designed to help low-income, first-generation college students and /or students with disabilities achieve academic success. SSS full-time counselors assist students on an individual basis with personal and academic concerns. Peer support is also provided by carefully selected and trained peer mentors and tutors who can assist students with school and everyday issues. SSS helps students develop responsibility, self-confidence, self-awareness, 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
- Financial Aid form assistance
- Transfer assistance
- Career guidance and exploration
- Cultural events services

The CCD SSS program 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 SSS office located in the Academic Support Center, South Classroom Building, room 142E.

Summer Bridge Program

The Summer Bridge program is a well-established, intensive program that offers participants a firm foundation on which to begin and build a successful college education. For more than eight years, CCD has worked diligently to develop the curriculum for a thorough summer program, including financial assistance, First Year Experience courses, academic development courses, student support services, career exploration, college program sampling and a variety of enrichment activities. The Summer Bridge program aims to motivate students to pursue a college education and equip them with the skills and confidence needed to complete that education. Applications are accepted from January through April; the eight-week program begins in June. Applicants must be recent high school or Colorado High School Equivalency graduates between the ages of 18 and 22. For more information and for specific entrance requirements, contact Yvonne Frye, Education and Academic Services, South Classroom Building, room 313, 303-556-8455.

Postsecondary Enrollment Options Program

The Postsecondary Enrollment Options Act allows 11th- and 12th-grade students at Colorado public high schools to enroll in courses offered by the Community College of Denver (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, room 134, 303-556-2481.

Auraria Library

The Auraria Library has more than 560,000 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, self-guided, 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.

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, snow-shoeing, 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. Make handball/racquetball reservations and check in for these activities at room 111, 303-556-3211.

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 provide a toddler, preschool and state certified kindergarten program. Call 303-556-3188.

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 Resources and accredited by the National Academy for the Education of Young Children. 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.

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 Lot G, at the corner of Lawrence Way and 9th Street. Validate your parking ticket for four hours of free parking in South Classroom Building, room 134. Once you register, you no longer are eligible for free parking.

Parking is available in daily fee lots ranging in price from $1.25 to $2 and the parking garage at Seventh St. and Lawrence Way. The $2 daily fee for the Parking Garage and Lots H ($2) and D ($1.75) may be paid in cash or by debit card. Debit cards may be purchased for $1 in the basement of the 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.

A student ID is required for parking in Lot R. A limited number of monthly permits is available. Students also may park free for 20 minutes in Lot G to go to the Parking Office. Bring your ticket with you for validation.

The Parking Office is open Monday through Friday, 7:30 a.m. to 5:30 p.m. For more information about the following services, 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.)

Public Safety

Public Safety provides professional 24-hour crime prevention and law enforcement service for the Auraria Campus. For routine calls to Public Safety, phone 303-556-3271; for emergency calls, phone 911.

college policies & ACADEMIC STANDARDS

So you'll know what you can expect of us at Community College of Denver (CCD) and what we'll expect of you, please read this alphabetized section carefully. Your counselor, advisor, or a staff member in Student Services, South Classroom Building, room 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 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 division dean.

Academic Standards of Progress

1. You are required to maintain a cumulative grade point average of 2.0 for all course work attempted.
2. 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 term of enrollment.
3. Should you fail to raise your cumulative GPA to 2.0 by the end of the probationary instructional term, CCD will consider suspending you academically for a minimum of one term.
4. If you are placed on academic suspension, you must meet with the vice president for Student Services to determine eligibility for continued enrollment.
5. 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 Office of the Vice President for Student Services, 303-556-2413.

Assessment

1. Basic Skills Assessment

If you are a first-time CCD student, you must take a basic skills assessment test for English, math, reading and study skills unless you meet one of the following criteria for an exemption.

a. You have an associate or higher degree with a "C" grade or better in English 121 and Math 121 or their equivalents.
b. You enrolled for employment in-service or upgrading.
c. You reached the 50th percentile on ACT (minimum composite score of 20 with minimum score of 20 in subject area test) or SAT (minimum scores of 900, composite; 420, verbal; 480, math).

d. You successfully completed ENG 121 and MAT 121 or their equivalents with a "C" grade or better within the last five years. (Students taking math or English must take that portion of the assessment).
e. You enrolled in one course for personal enrichment.
f. You can provide assessment and placement scores from another accredited institution that meet CCD criteria.

If you initially enrolled in one course for personal enrichment or job upgrading and have not been assessed, you must participate in assessment before entering into a certificate or degree program.

Our assessment methods include one or both of the following:

1. a comprehensive review of your past records such as standardized test results, high school and college transcripts and prior learning experiences.
2. a test battery that includes writing, study skills, reading, mathematics and English as a Second Language.

Either assessment method includes a personal interview with an advisor to review test results and your academic and personal background to determine classes for which you are academically ready.

If your score is below program-entry level in writing, study skills, reading and/or mathematics, you should take review courses beginning your first semester at CCD. You are expected to pursue basic skills until you reach college-level competency. Usually, you can enroll in certificate and degree requirement classes at the same time you take review courses. However, if the review course is a prerequisite, you must complete it before enrolling in a higher-level course.

2. English as a Second Language

If English is your second language, you should take tests to assess your level of English. You will take the Levels of English Proficiency (LOEP) Reading and Language Use tests and a listening comprehension test. If your score on the Language Use test is high, you will write a short essay. You will take these tests in the Test Center, South Classroom Building, room 232. When you receive your test scores, talk with an advisor to help you choose the classes you need to improve your English.

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 advisor 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.

I. 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 Which 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 re-entry program; expulsion from college or termination of employment; and/or referral to authorities for prosecution; 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 Re-entry Programs. Information on available counseling, treatment, rehabilitation or re-entry programs is available through the Colorado Department of Health and as follows:

For Information on Substance Abuse , contact:

MSCD Student Health Clinic
SU-140, 303-556-2525
Bethesda PsycHealth System
303-758-1123 (24 hours)
CCD Referral
SO 134, 303-556-2600

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)

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 the Office of Admissions, Registration and Records and the Office of the Vice President for Student 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 the Office of Admissions, Registration and Records, 303-556-2430.

Grades

Grade A — A distinguished grade for superior work

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

Grade B — A better-than-acceptable grade

1. 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.
2. Your work is in proper form, shows satisfactory evidence of research (where required) and is submitted punctually.
3. Where achievement in the course involves development of hand or body skills, you consistently demonstrate above average skills, ability and performance.
4. You complied with the instructor's attendance requirements.

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

1. 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.
2. You consistently make average scores in examinations, reports, projects, class participation and laboratory or training situations.
3. If the subject carries transfer credit, your work indicates sufficient competence in the content to continue in the subject field upon transfer.
4. You complete your assignments in good form and on time.
5. Where achievement in the course involves development of hand or body skills, you consistently demonstrate average skills, ability and performance.
6. You complied with the instructor's attendance requirements.

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

1. 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.
2. The competence demonstrated is insufficient to indicate success in the next course in the subject field.
3. 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.
5. You complied with the instructor's attendance requirements.

Grade F — A failing grade

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

Credit/No Credit

CCD offers some courses on a credit/no credit basis. Upon successful completion of such a course, unit credit is awarded. However, courses taken on a credit/no credit basis are not used in the computation of a student's grade point average (GPA). Regulations for such courses follow:

1. In authorized credit/no credit courses, the credit grade is granted for performance equivalent to the letter grade of "C" or better.
2. Credit/no credit-graded courses must be designated by the respective division. Each term, CCD will specify courses that fall into this category in the class schedule. Departments may require majors to obtain letter grades in that department's major subjects.

Grade SP — Satisfactory progress

Some courses, designated as open-entry/open-exit, may extend beyond the normal end of a semester. Upon successful completion of such courses, CCD will award unit credits and grades. Regulations for such courses follow:

1. In courses for which this grade is authorized, the SP will be given in either of the following cases.
   a. 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.
2. 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.
3. 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 the Office of Financial Aid for more information.
4. An SP grade will revert to NC (no credit) after the end of the next consecutive 15-week term.
5. Home study and on-line 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

1. You have not completed the course requirements due to extenuating circumstances.
2. A minimum of two-thirds of the course work has been satisfactorily completed.
3. 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.
4. You must complete the necessary course work prior to the deadline date.
5. An "I" grade that is not made up reverts to an "NC" grade.
6. Home study and open-entry/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 "I" grade.

Grade Changes

Grade changes are made by the faculty person 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 Instruction. Grade appeals go to the dean responsible for the course, then to the vice president for Instruction.

Grade Point Average

Grade points measure your achievement for the number of credits completed. To calculate your grade point average, 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 (AU, AW, F, & SP) are not calculated into the CCD GPA.

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

Course	Credits	Grade	Points
ANT 111			
Principles of Anthropology	3	A	12 (3 x 4)
BIO 111			
General College Biology	15	A	20 (5 x 4)
CIS 115			
Intro. to Computing	3	B	9 (3 x 3)
ENG 121			
English Comp. Essay Writing	3	D	3 (3 x 1)
POS 111			
American Government	3	F	0 (3 x 0)
TOTALS	**17**		**41**

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.

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 division.

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" from the Office of Admissions, Registration and Records, South Classroom Building, room 133, complete it and turn it in when registering for the class you wish to repeat.
C. All forms must be submitted prior to Census Date, posted in the class schedule.
D. You may, while enrolled at CCD, register inter-institutionally to repeat a course originally taken at CCD at Metropolitan State College of Denver or University of Colorado at Denver.
E. The GPA will be changed only once for the same class.
F. Under extenuating circumstances, you may appeal to the dean of the division responsible for offering a course for permission to retake a course and/or adjust a grade more than once.

Student Code of Conduct

Admission to CCD implies that you agree to respect the rights of others and observe moral and civil laws. Interference with the normal processes of education in the classroom or elsewhere on the campus will be regarded as unacceptable conduct, warranting suspension or dismissal.

Disciplinary proceedings for violations of standards of conduct are the responsibility of the vice president for Student Services.

Conduct for which students are subject to discipline includes the following factors:

1. Dishonesty, such as cheating, plagiarism or knowingly furnishing false information to the college.
2. Forgery, alteration or misuse of college documents, records, identification materials, educational material, or college property. (Students are required to present identification when requested by authorized college officials.)
3. 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 entry/ways 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.
4. 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.
5. 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.)
6. Unauthorized entry or use of college facilities and college equipment.
7. 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.)
8. Disorderly, indecent, or obscene conduct on college-owned or college-controlled property or at college-sponsored functions.
9. Failure to comply with the verbal or written directions of college employees acting in the performance of their duties.
10. 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.)
11. 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.
18. Violation of "No Smoking" policy within any building on campus.
19. 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.)
20. 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.
21. Possession of weapons, fireworks or explosives. (No students, except law enforcement officers, may have weapons in their possession at any time 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.)
22. Aiding and/or encouraging others in committing or inciting others to commit any act of misconduct set forth in 1 through 21 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 Services no later than 15 days after the occurrence.

The Grievance Procedure for Students begins on page 30 of this catalog. Additional copies are available in the Student Life and Activities Office (Tivoli Student Union, room 309) and the Office of the Vice President for Student Services (South Classroom Building, room 305).

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 First 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, the student must have a cumulative grade point average of at least 3.5, based on all courses attempted while enrolled at CCD. You will be notified by mail of this honor. Selection for the Second Honors List is printed on your permanent academic transcript.

Dean's Honors List

Each semester, students who take six or more credits may be considered 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. You will be notified by mail of this honor. Selection for the Dean's Honors List is printed on your permanent academic transcript.

Phi Theta Kappa

Phi Theta Kappa, the national 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 1996, Alpha Mu Mu received two international Hallmark Awards for Distinguished Chapter and Distinguished Chapter President. We scored in the top one percent of more than 1,200 chapters worldwide, based on how our members fulfilled the four hallmarks of leadership, service, scholarship and fellowship. Alpha Mu Mu also received the 1996 Most Distinguished Chapter in the Colorado Region, capturing three Hallmark Awards for outstanding programs in scholarship, leadership and service. In addition, CCD's advisor received the regional Horizon Award for outstanding chapter advisor.

For more information, interested and eligible students should contact any current executive board member or the faculty sponsors by calling 303-556-4521, 303-556-3848 or 303-556-2461.

CCD Theatre's 1996 production of **Kind Lady**.

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, which begins on page 25 of this catalog.

A detailed copy of "Students' Rights and Responsibilities" is available in the Student Life and Activities Office (Tivoli Student Union, room 309) and the Office of the Vice President for Student Services (South Classroom Building, room 305).

Student Right-to-Know Information

Of the 455 first-time, full-time, degree-seeking students who entered CCD in the fall of 1994, 29 percent either had graduated or transferred to another Colorado public postsecondary institution at the end of three academic years (by the end of summer 1997). Another 16.3 percent were enrolled still at CCD in fall 1997. The overall completion, transfer and persistence rate of 45.3 percent (29 percent plus 16.3 percent) is above the statewide community college average of nearly 41 percent during the same time period.

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 discrimination 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 the vice president for Student Services.

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 only grieve 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 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: 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 BP 4-30.

Step 1 - The Informal Grievance Procedure

Grievant is encouraged to resolve the issue with the respondent or his/her supervisor. In the case of grievances based on one's 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 SP 3-120a, 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 any time elect to go to the formal stage by following the process outlined below.

Step 2 - The 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 Services. 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 Services or designee will determine whether or not the situation states 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 Services or designee (which 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 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 the Office of 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 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 Services or designee may extend the scheduling timelines described above for good cause.

E. If the grievance is against the vice president for Student Services, the vice president of Instruction or other person designated by the president shall perform the duties of the vice president for Student Services.

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 (CCD) degree program, you must meet all of the following requirements. The vice president for Instruction may approve exceptions.

1. 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 division or advisor for information about the minimum grade point average requirement.
3. Complete a minimum of 15 credits at CCD in the program area.
4. Complete the Academic Profile, a general education assessment, during your final academic semester.
5. Complete your program's capstone course with a "C" or better grade.
6. Complete all courses taken to fulfill general education requirements with a "C" or better.
7. 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 State Board for Colorado Community Colleges and Occupational Education. They are:

1. to build skills for advanced and lifelong learning.
2. to expose students to the mainstream of thought and interpretation in the humanities, sciences, mathematics, social sciences, communications and the arts.
3. 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 and Occupational Education 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 satisfy 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, degree-granting 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 self-understanding, 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 Instruction may approve exceptions.

1. 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 division and your advisor for information about the minimum grade point average required for graduation.
3. 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 graduating class.

If you receive an (I) in a course required for graduation in your final semester, you will not graduate until the semester in which the (I) 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

1. You must apply for graduation one semester prior to the semester in which you wish to graduate.
2. You can apply no more than six semester hours of courses numbered "299" (independent study course work) toward an associate degree program.
3. 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 advisors 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") in a course required for graduation in your final semester, you will not graduate until the semester in which the ("I") 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 re-admission 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 re-admitted. The instructional division 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 instructional division office.

Please complete the request and have it approved by the program coordinator, the division dean and the vice president for Instruction. The Office of 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.)

1. Pick up an application from the Office of Admissions, Registration and Records, South Classroom 133, at any time during the semester.
2. Go to the division in your area of study (major), fill out a program application and declare a major.
3. Complete a program plan with your instructor or faculty advisor in the division.
4. Have all official transcripts from other college(s) evaluated.
5. Check with the Office of Admissions, Registration and Records to verify correct name changes to be printed on certificate or degrees applied for.
6. Students applying for Credit for Prior Learning must have all paperwork completed.
7. Students with "I" or "SP" on the unoffical transcripts must have grade changes into the Office of Admissions, Registration and Records two weeks after the semester ends.
8. Degree-seeking students must take the Academic Profile (AP) in the Test Center, SO 232.
9. All financial oblications to the college must be cleared before a diploma, certificate or a transcript will be released.

continuing education programs

The Division of Continuing Education extends campus programs into the community and makes lifelong education and personal development available to all who seek it.

Non-Traditional Learning Programs

College-level courses are offered at times, days and locations convenient for people who cannot enroll in weeday on-campus college classes. Non-Traditional Learning courses cover the same material as do traditional classes and are offered for the same credit. Most of the offerings qualify as core courses that can apply toward certificate or degree programs.

Guided Independent Study courses require an amount of work from the average student equal to 135 hours for a 3-credit course (approximating six-nine hours of work per week during a 15-week semester). Guided Independent Study credit hours are based on identical instructional outcomes and objectives as traditional classroom credit hours and on Community College of Denver's (CCD) existing curricula. These courses demand an equal commitment from you as would any class offered on campus.

For more information about CCD's Non-Traditional Learning Programs, contact the Division of Continuing Education, 1391 N. Speer Blvd., Suite 200, Denver, 303-620-4433, x322.

Guided Independent Study: Home Study

You study at home or the office for these open-entry/open-exit credit courses. You have the semester in which you register and the following 15-week semester to complete course work. If you receive financial aid, you should complete your course work in the semester in which you register. After registration, you will attend an orientation and receive a course packet. Instructors are available and course materials will explain procedures, assignments and textbook information. Student/instructor contact is by phone, mail, E-mail, fax, and optional meetings. See the Schedule of Classes Home Study section for current offerings.

Guided Independent Study: On-line Courses

These credit courses are identical to the home-study courses (see above) except that the primary form of communication is via E-mail and/or the Internet's World Wide Web (WWW). Students must have access to a computer and an Internet service provider. See the Schedule of Classes On-line Courses section for complete listings.

Guided Independent Study: Television Courses

Televised credit classes (telecourses) offered through Channel 6 and Channel 54 allow maximum flexibility for the busy, self-motivated student. After registration, you'll attend an orientation and receive a course packet. Instructors are available and you'll receive course materials, assignments and textbook information. Student/instructor contact is by phone, mail, fax, E-mail and optional meetings. See the Schedule of Classes Television Courses section for complete listings.

Weekend College

Weekend College offers a variety of traditional credit classes on Friday evenings and Saturdays. These courses are offered for students who may not be able to attend classes during the week or have weekday scheduling conflicts. See the Schedule of Classes Weekend College section for complete listings.

Extended Campus

CCD offers Extended Campus courses for credit at off-campus locations. Credit courses apply toward certificate or associate degree programs.

CCC Online

CCD is part of a consortial group of Community Colleges in Colorado offering an Associate of Applied Science (AAS) degree in Business. All classes are offered on-line. Tuition is $115 per credit hour for in-state and out-of-state students. Access information is available at: ccconline.org.

Business and Industry Services

Business and Industry meets our business community's training needs through credit and non-credit offerings at the work site or at CCD's training center. Companies may select from current college programs or tailored courses and workshops. Customized training programs are developed to meet the needs of the business. Contact Business and Industry Services at the Corporate Training Center, 1391 N. Speer Blvd., Suite 200, Denver, 303-620-4427, x319 or x320.

Computer Training Services

CCD's state-of-the-art, networked, Pentium-based computer lab offers beginning, intermediate and advanced computer instruction in an expanding range of software packages. The computer lab is also available for rental at extremely competitive rates. Call the CIS coordinator at 303-620-4433, x331.

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 package preparation, bid package preparation, contract identification and marketing plan development. SBDC personnel work extensively with grant writing and funding for small businesses with small business computerized databases and information networking. The Small Business Development Center is at 1445 Market St., Denver, CO 80202, 303-620-8076.

Visiones

Visiones is a 15-module multicultural leadership development course which enhances participants' skills in dealing effectively with the realities of changing demographics, communicating across cultural differences, resolving conflict in a culturally sensitive manner, and ethically balancing the rights and responsibilities of the individual with those of the group. Visiones combines transformational leadership theory and intercultural competency skills to develop leaders who are highly motivated to proactively serve their organizations and communities. College credit is available upon successful completion of the course. For more information, contact Visiones, 1391 N. Speer Blvd., Suite 200, Denver, 303-620-4436.

Work and Family Resource Center

The Work and Family Resource Center offers a broad spectrum of services to working families and employers. These include enhanced corporate child care resource and referral, workplace needs assessments and employer consultation, parent-education seminars, advocacy provider recruitment and support services. In addition, we offer a community information and referral telephone counseling service to help citizens find child care. For more information, call 303-534-3789.

Workplace Education

Workplace Education offers credit and non-credit courses in the areas of essential skills to businesses interested in expanding and upgrading the skills of their workforce. An Essential Skills certificate in several career tracks is available, consisting of three components: (1) 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; (2) vocational core courses specific to each vocational track; and (3) cooperative education involving job coaching/mentoring through placement in the student's field of interest. For more information, contact Workplace Education, 1391 N. Speer Blvd., Ste. 200, Denver, 303-620-4427, x338 or x326.

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.

Contact Hour
This is a 50-minute period of classroom or lab contact between student and instructor.

Core Curriculum
These are courses that fulfill lower division general education requirements as defined and agreed upon 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 or Contact Hours in Parenthesis
Course options from which you may choose. These options are not individually included in the total credit or contact hours listed below the parenthetical numbers.

General Education
General Education is the liberal arts component of a baccalaureate degree that may include lower division 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 will be 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

Accounting	ACC
Administrative Health Assistant	AHA
Anthropology	ANT
Art	ART
American Sign Language	ASL
Arabic	ARB
Astronomy	AST
Biology	BIO
Business Administration	BUS
Business Technology: Office Management and Secretarial Studies	BTE
Business of Travel and Tourism	BTT
Chemistry	CHE
Chinese	CHN
Commercial Credit Management	CRM
Communications	COM
Computer-Aided Drafting	CAD
Computer Information Systems	CIS
Computer Science	CSC
Dental Hygiene	DEH
Drafting for Industry	DRI
Early Childhood Professions	ECP
Economics	ECO
Education	EDU
Electronics Technology	ELT
English	ENG
English as a Second Language	ESL
French	FRE
General Education Development	GED
Geography	GEO
Geology	GEY
Gerontology	GNT
Graphic Arts	GRA
Graphic Design	GRD
Health and Wellness Management	HWM
Health Occupations	HOC
History	HIS
Human Services	HSE
Humanities	HUM
Japanese	JPN
Journalism	JOU
Literature	LIT
Machine and CNC Tool Operator	MTO
Magnetic Resonance Imaging	MRI
Massage Therapy	MST
Mathematics	MAT
Multimedia Design	MUM
Music	MUS
Nursing	NUR
Nutrition	NUT
Operating Room Nurse	ORN
Paralegal	PAR
Personal Growth and Development	PGD
Philosophy	PHI
Photography	PHO
Physics	PHY
Political Science	POS
Postal Service	PST
Psychiatric Technician	LPT
Psychology	PSY
Radiography	RTR
Reading	REA
Real Estate (Emily Griffith Opportunity School)	REE
Recreational Assistant	RAE
Refrigeration, Heating and Air Conditioning (Commercial-Industrial)	RAC
Science	SCI
Sociology	SOC
Spanish	SPA
Special Learning Support Program	SLS
Speech	SPE
Surgical Technology	STE
Technical Health Assistant	THA
Theatre	THE
Welding and Fabrication	WEF

general information about DEGREES & CERTIFICATES

Associate of Arts Degree

University Parallel, Transfer Program

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 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.

The Associate of Arts 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 baccalaureate colleges and universities in the state of 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 higher. 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, room 134.

Student Performance Objectives for Transfer Education (AA Degree)

1. 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.
2. 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.
3. 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.
4. Students will demonstrate orally and in writing the critical-thinking skills of analysis, synthesis and evaluation.
5. 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.

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 courses. At the time of application, students are encouraged to identify an area of emphasis. Program application forms are in South Classroom Building, room 134, and division offices. Students should obtain an Advising Transcript from the Office of Admissions, Registration and Records and attach it to the program application.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

AA Degree Program Requirements

Within the AA degree, the college offers 12 areas of emphasis: Art, Behavioral Sciences, Communications, Economics, English/Literature, History, Humanities/Philosophy, Music, Photography, Political Sciences, Speech or Theatre. The same course may not count both toward 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 "C" grade or better. All graduates of the AA degree must meet the following program requirements.

General Education Core	Credit Hours
I. English ENG 121, ENG 122	6
II. Speech SPE 115	3
III. Mathematics (Select any 1 of the following) MAT 121, 125, 135, 201, 202	3-5
IV. Physical & Biological Sciences (Select any 1 of the following) AST 101, 102 BIO 105, 111, 112 CHE 101, 102, 111, 112 PHY 105, 111, 112, 211, 212 GEY 111, 121	4-5
V. Social & Behavioral Sciences (Select 9 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	9
VI. Humanities (Select 9 credit hours from a minimum of 2 disciplines.) 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	9
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	20-23
Capstone Course HUM 285 Seminar in Critical Thinking or SCI 285 Critical Thinking	3
Total Hours	60

Approved Electives for the AA Degree

ANT-all courses
ART - all courses
AST - all courses
BIO - 105 and higher
CHE - 101 and higher
COM - all courses
CIS - 118
CSC - 150, 230
ECO - 201 and higher
ENG - 121 and higher
Any foreign language 111 or higher
GEO - all courses
GEY - all courses
GNT - all courses
HIS - all courses
HUM - all courses
JOU - all courses
LIT - all courses
MAT - 121 and higher
MUS - all courses
PER - all courses
PHI - all courses
PHY - all courses
POS - all courses
PSY - all courses
REA - 151, 223 (approved by MSCD only)
SOC - all courses
SPE - all courses
THE - all courses

Courses in any prefix whose numbers begin with "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 and Contact Hours
Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Contacts are the in-class contact hours required for the course. Credit or contact hours in parenthesis, e.g., (3), are options from which students may choose. They also may be course-embedded content. They are not included in the total credit or contact 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.

Associate of Science Degree

University Parallel, Transfer Program

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 four-year colleges and universities to continue work toward a baccalaureate degree and professional training in such fields as engineering, medicine, biology, chemistry and physics.

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 higher. 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, room 134.

Student Performance Objectives for Transfer Education (AS Degree)

1. 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.
2. 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.
3. 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.
4. Students will demonstrate orally and in writing the critical-thinking skills of analysis, synthesis and evaluation.
5. 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.

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 courses. At the time of application, students are encouraged to identify an area of emphasis. Program application forms are in South Classroom Building, rooms 134 and 306. Students should obtain an Advising Transcript from the Office of 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 advisor for his or her probable emphasis area.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

AS Degree Program Requirements

Within the AS degree, the college offers eight areas of emphasis: Biology, Chemistry, Computer Science, Earth Science, Mathematics, Medical Cluster, Pre-Engineering Cluster and Physics. The same course may not count both toward general education requirements and toward an area of emphasis. 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 AS degree. Up to three credits of physical education may count toward this degree. All general education core and capstone courses must be completed with a "C" grade or better. All graduates of the AS degree must meet the following program requirements.

General Education Core	Credit Hours
I. English ENG 121, 122	6
II. Speech SPE 115	3
III. Mathematics (any 1 of the following) MAT 121, 125, 201, 202	4-5
IV. Physical & Biological Sciences (any 2 of the following) AST 101, 102 BIO 111, 112 CHE 111, 112 GEY 111, 121 PHY 111, 112, 211, 212	8-10
V. Social & Behavioral Sciences (6 credit hours from 2 disciplines) ANT 101, 111 ECO 201, 202 GEO 105 HIS 101, 102, 201, 202 POS 105, 111 PSY 101, 102 SOC 101, 102	6

VI. Humanities	6
(any 2 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	
General Education Sub-Total	33-36
Area of Emphasis (Optional) and/or electives	21-24
(12 credits must be in science or math prefixes, 6 credits must be in 200-level courses)	
Capstone Course	3
HUM 285 Seminar in Critical Thinking	
or	
SCI 285 Critical Thinking	
Total	60

Approved Electives for the AS Degree

An area of emphasis consists of four 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.

Approved Electives for the AS Degree

- ANT - all courses
- ART - all courses
- AST - all courses
- BIO - 111 and higher
- CHE - 111 and higher
- COM - all courses
- CIS - 118
- CSC - 150, 230
- ECO - 201 and higher
- ENG - 121 and higher
- Any foreign language 111 or higher
- GEO - all courses
- GEY - all courses
- HIS - all courses
- HUM - all courses
- JOU - all courses
- LIT - all courses
- MAT - 121 and higher
- MUS - all courses
- PER - all courses
- PHI - all courses
- PHY - 111 and higher
- POS - all courses
- PSY - all courses
- REA - 151, 223 (approved by MSCD only)
- SOC - all courses
- SPE - all courses
- THE - all courses

Any course whose number begins with a "0" in any prefix will not meet requirements for the AS degree. English and mathematics courses must be numbered 121 or above.

Credit and Contact Hours

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Contacts are the in-class contact hours required for the course. Credit or contact hours in parenthesis, e.g., (3), are options from which students may choose. They also may be course-embedded content. They are not included in the total credit or contact 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.

Areas of Emphasis for the AS Degree

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 to a four-year degree program. **Courses shown in bold under the emphasis area meet core requirements.** Students must complete a total of 60 semester hours for the associate degree. Of these, 21-24 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 recommended that students speak frequently with the appropriate advisor in the Division of Science and Technology, South Classroom Building, room 306, while completing degree requirements.

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. **The 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 request and consult with a faculty advisor. Students are strongly encouraged to develop specific career goals and to transfer to the CCD degree program appropriate to those goals.

   Entry requirements: 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 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 should be assigned to a faculty advisor after completing 12 semester 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 advisor. Entry requirements: 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 desire to enter. Program application forms are in South Classroom Building, room 134, and appropriate division offices. Entry requirements are the same as for the matching AAS degree.

   Program Admission Requirements

   See individual articulated degree options.

Credit and Contact Hours

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Contacts are the in-class contact hours required for the course. Credit or contact hours in parenthesis, e.g., (3), are options from which students may choose. They also may be course-embedded content. They are not included in the total credit or contact 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 by Articulation Agreements	20-23
Capstone Course	3
Total	60

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 advisor in their area of interest.

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

General Education AA Core		Credit Hours
I.	English ENG 121, ENG 122	6
II.	Speech SPE 115	3
III.	Mathematics (any 1 of the following) MAT 121, 125, 135, 201, 202	3-5

IV.	Physical & Biological Sciences (any 1 of the following) AST 101, 102 BIO 105, 111, 112 CHE 101, 102, 111, 112 PHY 105, 111, 112, 211, 212 GEY 111, 121	4-5
V.	Social & Behavioral Sciences (Select 9 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	9
VI.	Humanities* (Select 9 credit hours from a minimum of 2 disciplines.) 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 *Many four-year schools prefer a concentrationof 2 classes in same prefix.	9
General Education Sub-Total		34-37
*Elective Sub-Total (Must include a minimum of 6 hours in 200-level courses.)		20-23
	Capstone Course HUM 285 Seminar in Critical Thinking or SCI 285 Critical Thinking	3
	Total	60

*Any course whose number begins with "0" in any prefix will not meet requirements for the AGS-G degree. English and mathematics courses num bered 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 advisor for specific details.

Student Performance Objectives for Vocational Education (AAS Degree Programs)

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

1. Basic and advanced academic skills appropriate to the profession.
   a. 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.

3. Specific occupational skills that include all aspects of the profession. These 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. These performance objectives are given to students during the advising process. They are collectively bound and published for general distribution and constitute the college's guarantee to the employer. Copies are available in division and counseling offices.

AAS Degree Program Entry
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, room 134, and division 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.

General Education Requirements	Credit Hours
I. English - ENG 100 or Higher	3
II. Mathematics - MAT 103 or higher	3-5
III. One course from 3 of the following 4 areas:	9-13

A. Speech
SPE 115
SPE 115 may be earned through "Speech Intensive" programs. (See specific AAS program recommendations or an advisor.)

B. Physical and Biological Sciences
AST 101, 102
BIO 105, 111, 112*
CHE 101, 102, 111, 112**
GEY 111, 121
PHY 105, 111, 112, 211, 212
*Nursing requires BIO 201, 202 and 205.
*Health Occupations require BIO 201 and 202, or BIO 119
**Dental Hygiene requires CHE 106

C. 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
ECP 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	45
Total	60-66

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

Credit and Contact Hours
Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Contacts are the in-class contact hours required for the course. Credit or contact hours in parenthesis, for example (3), are options from which students may choose and are not individually included in the total credit or contact hours listed below the numbers in parentheses. An average full-time 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 are applicable 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:

1. Basic and advanced academic skills appropriate to the profession.
   a. 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 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.
   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.

CCD Theatre's 1998 production of **Night Must Fall.**

3. Specific occupational skills that include all aspects of the profession. These 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. They are collectively bound and published for general distribution and constitute the college's guarantee to the employer. Copies are available in division 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, room 134, and in instructional division offices.

Degree and Certificate Programs

Accounting

Associate of Applied Science Degree in Accounting
Accounting Emphasis

This is a technical degree in accounting. If you plan to transfer to a senior institution, you may design, in conjunction with an accounting advisor, an associate degree program for maximum transferability. Contact an advisor early to plan your program.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Completion of ACC 121 with a C or better.
3. Overall GPA of 2.0 or higher in business and business-related courses, or
4. Completion of a TEC Accounting WorkTrain certificate program.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ECO 201	Principles of Macro Economics	3	45
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics (or MAT 121 or 124 or 125)	3-4	45-60
SPE 115	Principles of Speech	3	45
Major Requirements			
ACC 121	Accounting Principles I (Corequisite ACC 110 or Level 3 math placement)	4	60
ACC 122	Accounting Principles II	4	60
ACC 110	Business Math	3	45
ACC 111	Individual Income Tax	3	45
ACC 113	Computerized Accounting	4	68
ACC 115	Computerized Payroll	2	30
CIS 155	Spreadsheet Concepts	3	45
	or		
CIS 150	Intro to PC Spreadsheets	(3)	(45)
ACC 211	Intermediate Accounting (Capstone)	3	45
ACC 226	Cost Accounting	3	45
BTE	Keyboarding Elective	1-5	22-120
BUS 217	Business Communications	3	45
Select 11 credits with advisor approval:		11	180-270
ACC 101	Fundamentals of Accounting (Must be taken prior to ACC 121 to be counted for graduation.)	(3)	(45)
ACC 215	Accounting Systems	(3)	(45)
ACC 297	Cooperative Education (Prerequisite ACC 122)	(3)	(135)
BTE 152	Microsoft Word	(3)	(45)
BUS 115	Intro. to Business	(3)	(45)

BUS 221	Legal Environment of Business	(3)	(45)
BUS 228	Principles of Management	(3)	(45)
CIS 130	Intro. to the Internet	(3)	(45)
CIS 135	Graphics Technology	(2)	(45)
CIS 140	Intro. to PC Databases	(2)	(45)
CIS 156	Advanced Spreadsheets	(3)	(45)
PSY 115	Psychology of Adjustment	(2)	(48)
Total		60-65	938-1141

Associate of Applied Science Degree in Accounting
Commercial Credit Management Emphasis

This program is specifically designed to train and to upgrade skills of credit managers, assistants and other credit personnel who work in the area of extension of commercial credit and who desire an associate degree.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 103 with a C or better.
2. Completion of 12 semester hours of college level courses with overall GPA of 2.0.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ECO 201	Principles of Macro Economics	3	45
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics (or MAT 121, 124, or 125)	3-4	45-60
PSY 101	General Psychology I	3	45
SPE 115	Principles of Speech	3	45
Major Requirements			
ACC 110	Business Math	3	45
ACC 121	Accounting Principles I	4	60
ACC 122	Accounting Principles II	4	60
BTE 151	WordPerfect	3	45
	or		
BTE 152	Microsoft Word		
BUS 115	Intro. to Business	3	45
BUS 116	Intro. to Management/Supervision	3	45
BUS 118	Intro. to Marketing	3	45
BUS 125	Intro. to Finance	3	45
BUS 217	Business Communications	3	45
BUS 221	Legal Environment of Business	3	45
CIS 155	Spreadsheet Concepts	3	45
*CRM 217	Business Credit Principles (Capstone)	3	45
ECO 202	Principles of Micro Economics	3	45
**AIB	Financial Statement Analysis	3	45
Total		63-64	953-968

*Taken at the National Association of Credit Management Office Building
**Taken at American Institute of Banking

Certificate in Accounting

This is recommended for students who wish to study basic business fundamentals while developing entry-level accounting skills, and constitutes an acceptable first-year curriculum in accounting and business for an associate degree.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 110	Business Math	3	45
ACC 101	Fundamentals of Accounting	3-4	45-60
	or		
ACC 121	Accounting Principles I		
ACC 121	Accounting Principles I	4	60
	or		
ACC 122	Accounting Principles II		
ACC 113	Computerized Accounting	4	60
ACC 115	Computerized Payroll	2	30
CIS 118	Intro. to PC Applications	4	68
CIS 150	Intro. to PC Spreadsheets	2-3	45
	or		
CIS 155	Spreadsheet Concepts		
BUS 217	Business Communications	3	45
BTE	Keyboarding Elective	1-5	22-120
BTE 120	Filing & Records Control	4	68
Total		30-36	488-601

Certificate in Accounting
Accounting Clerk

This certificate is a QuickTrain program designed for students who need a one-semester accounting program that provides basic business and accounting fundamentals and represents an acceptable first-semester curriculum for an associate degree in Accounting. This certificate qualifies graduates for clerical positions in business as accounting clerks, accounts receivable clerks, accounts payable clerks, payroll clerks and general bookkeepers.

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;

b. reading at level 3a or completion of REA 090 with a C or better;
c. study skills at level 3 or completion of REA 109 with a C or better; and
d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 110	Business Math	3	45
ACC 101	Fundamentals of Accounting	3-4	45-60
	or		
ACC 121	Accounting Principles I		
CIS 118	Intro. to PC Applications	4	68
BUS 115	Intro. to Business	3	45
BTE 100	Intro. to Keyboarding	3	45
Total		16-17	188-203

Certificate in Accounting
Accounting with Computer Applications
This program prepares the student for entry-level positions: accounting clerk, data entry clerk, accounts payable clerk, accounts receivable clerk and accounting assistant. Students will develop specialized computer skills in word processing, accounting software, spreadsheet and computer programming most requested by today's employers.

Program Admission Requirements
1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 110	Business Math	3	45
ACC 113	Computerized Accounting	3	45
ACC 115	Computerized Payroll	2	30
ACC 121	Accounting Principles I (Corequisite ACC 110 or Level 3 math placement)	4	60
ACC 122	Accounting Principles II	4	60
CIS 118	Intro. to PC Applications	4	68
CIS 155	Spreadsheet Concepts	3	45
Select 2 courses with advisor approval:		6	90
BTE 152	Microsoft Word	(3)	(45)
BUS 115	Intro. to Business	(3)	(45)
CIS 145	Database Concepts	(3)	(45)
CIS 156	Advanced Spreadsheets	(3)	(45)
Total		29	443

Bookkeeper Certificate
TEC North, TEC East, TEC West
Bookkeeper is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students with the job-entry skills necessary to perform bookkeeping activities that include financial statements, general journals, ledgers, accounts payable and receivable and payroll. Students gain skills in computerized payroll applications; Microsoft Access and Excel applications; and use of E-mail, the Internet and the World Wide Web. Graduates are prepared for jobs as a bookkeeper, accounts payable and/or receivable clerk, payroll clerk and general office clerk.

All XpressTrain Bookkeeper certificate program credits apply toward the WorkTrain Computerized Accounting Technician certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
ACC 101	Fundamentals of Accounting	3	72
ACC 110	Business Math	3	72
ACC 115	Computerized Payroll	2	48
ACC 121	Accounting Principles I (Capstone)	4	96
BTE 102	Basic Keyboarding Applications	3	72
CIS 130	Intro. to the Internet	3	72
	or		
ACC 297	Cooperative Work Experience	(3)	(135)
CIS 140	Intro. to PC Databases	2	48
CIS 150	Intro. to PC Spreadsheets	3	72
PSY 115	Psychology of Adjustment	2	48
Total		25	600-663

Computerized Accounting Technician Certificate
TEC North, TEC East, TEC West
Computerized Accounting Technician is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students with the job-entry skills necessary to perform both manual and computerized full-charge bookkeeping activities that include: financial statements, general journals, ledgers, accounts payable and receivable, bank reconciliation, payroll, bad debts, depreciation and inventory. Students gain skills in computerized accounting and payroll applications for personal computers; Microsoft Office Access, Excel and Power Point applications; and use of E-mail, the Internet and the World Wide Web. Graduates are prepared for jobs as a full-charge bookkeeper, computerized accounting clerk, computerized payroll clerk and general office clerk.

All WorkTrain Computerized Accounting Technician certificate program credits apply toward the requirements of the AAS degree in Accounting, General Accounting Emphasis.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
ACC 101	Fundamentals of Accounting	3	72
ACC 110	Business Math	3	72
ACC 113	Computerized Accounting (Capstone)	4	96
ACC 115	Computerized Payroll	2	48
ACC 121	Accounting Principles I	4	96
ACC 122	Accounting Principles II	4	96
BTE 102	Basic Keyboarding Applications	3	72
CIS 118	Intro. to PC Applications	3	72
CIS 130	Intro. to the Internet, or	3	72
ACC 297	Cooperative Work Experience	3	135
CIS 135	Graphics Technology	1	24
CIS 140	Intro. to PC Databases	2	48
CIS 150	Intro. to PC Spreadsheets	3	72
PSY 115	Psychology of Adjustment	2	48
Total		37	888-951

Payroll Clerk Certificate
TEC North, TEC East, TEC West

Payroll Clerk is a QuickTrain program designed for completion in one, 15-week semester. It prepares students with the job-entry skills necessary to perform manual and computerized payroll activities. Students gain skills in computerized payroll applications; Microsoft Excel applications; and use of E-mail, the Internet and the World Wide Web. Graduates are prepared for jobs as a payroll clerk and general office clerk.

All QuickTrain Payroll Clerk certificate program credits apply toward the XpressTrain Bookkeeper certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on Reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
ACC 101	Fundamentals of Accounting	3	72
ACC 110	Business Math	3	72
ACC 115	Computerized Payroll (Capstone)	2	48
BTE 102	Basic Keyboarding Applications	3	72
CIS 130	Intro. to the Internet	3	72
CIS 150	Intro. to PC Spreadsheets	3	72
Total		17	408

Anthropology

(See Behavioral Sciences)

Art

Associate of Arts Degree with an Art Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
ART 122	Drawing II/Mixed Media (Prerequisite ART 121, Drawing I)	3	90
ART 131	Design I	3	90
ART 211	Painting I	3	90
ART 212	Painting II	3	90
Total		12	360

The following may be taken as Art electives:

ART 132	Design II	(3)	(90)
ART 151	Fund. of Black & White Photography	(3)	(90)
GRD 100	Lettering & Typographic Design	(3)	(90)
MUM 101	Intro. to Multimedia	(3)	(68)
ART 213	Painting III	(3)	(90)
ART 214	Painting IV	(3)	(90)
ART 231	Watercolor I	(3)	(90)
ART 232	Watercolor II		
ART 270	Figure Drawing I		
ART 290	Special Topics (with instructor consent)	(1-3)	(15-45)
HUM 285	Seminar in Critical Thinking (Capstone)	(3)	(45)

Arts Management

Associate of Arts Degree with an Arts Management Emphasis*

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 227	Human Resources Management	3	45
BUS 236	Principles of Marketing	3	45
BUS 290	Intro. to Arts Management	3	45
CIS 118	Intro. to PC Applications	4	68
ENG 290	Fund Raising & Grant Writing	3	45
BUS 297	Cooperative Education	3	135
HUM 285	Seminar in Critical Thinking (Capstone)	(3)	(45)
Total		23	443

***Please note that Arts Management students have a specific humanities core requirement.**

Humanities menu in general education for Arts Management.

Select any three courses or nine 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

Associate of Arts Degree with a Behavioral Sciences Emphasis

See page 39 for complete AA degree information.

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

General Education Requirements (See page 39)

ANTHROPOLOGY EMPHASIS		Credits	Contacts
ANT 101	Cultural Anthropology	(3)	(45)
ANT 107	Introduction to Archaeology	(3)	(45)
ANT 111	Physical Anthropology	(3)	(45)
ANT 203	Urban Socio-Anthropology	(3)	(45)
ANT 265	Violence & Culture	(3)	(45)
GERONTOLOGY EMPHASIS			
GNT 201	Intro. to Gerontology	(3)	(45)
GNT 213	Psychology of Aging	(3)	(45)
GNT 214	Social Issues & Aging	(3)	(45)
GNT 215	Aging in a Diverse Society	(3)	(45)
GNT 221	Overview of Programs & Services	(3)	(45)
GNT 237	Death & Dying	(3)	(45)
GNT 295	Leadership Development	(3)	(45)
PSYCHOLOGY EMPHASIS			
PSY 101	General Psychology I	(3)	(45)
PSY 102	General Psychology II	(3)	(45)
PSY 227	Psychology of Death & Dying	(3)	(45)
PSY 235	Psychology of Human Growth & Development	(3)	(45)
PSY 249	Abnormal Psychology	(3)	(45)
PSY 260	Psychology of Aging	(3)	(45)
PSY 265	Violence & Culture	(3)	(45)
PSY 295	Leadership Development	(3)	(45)
SOCIOLOGY EMPHASIS			
SOC 101	Intro. to Sociology	(3)	(45)
SOC 102	Intro. to Sociology II	(3)	(45)
SOC 103	Sociology of Health Care	(3)	(45)
SOC 203	Urban Socio-Anthropology	(3)	(45)
SOC 205	Sociology of Marriage & Family	(3)	(45)
SOC 215	Contemporary Social Problems	(3)	(45)
SOC 220	Race, Gender, Class, Culture	(3)	(45)
SOC 237	Death & Dying	(3)	(45)
SOC 260	Sociology of Deviance	(3)	(45)
SOC 265	Violence & Culture	(3)	(45)
Total		12	180

Biology

Associate of Science Degree with a Biology Emphasis

See page 41 for complete AS degree information.

Courses shown in bold meet core requirements.

General Education Requirements (see page 41)

		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
PHY 111	**Physics: Algebra-Based I**	**5**	**105**
PHY 112	**Physics: Algebra-Based II**	**5**	**105**
Total		37	705

Business Administration

Associate of General Studies Degree
Business Administration (AGS-BUS)

This is an educational transfer agreement in Business Administration between Colorado public community colleges and Colorado public post-secondary 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. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Completion of ACC 121 with a C or better grade.

General Education AA Core
(AS General Education Core is acceptable)

		Credit Hours
I.	English ENG 121, ENG 122	6
II.	Speech SPE 115	3
III.	Mathematics (Select any 1 of the following) MAT 121, *125, 135, 201, 202	3-5

IV.	Physical & Biological Sciences (Select any 1 of the following) AST 101, 102 BIO 105, 111, 112 CHE 101, 102, 111, 112 PHY 105, 111, 112, 211, 212 GEY 111, 121	4-5
V.	Social & Behavioral Sciences (Select 9 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 *recommended for all business majors	9
VI.	Humanities (Select 9 credit hours from a minimum of 2 disciplines.) 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	9
General Education Sub-Total		34-37

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

		Credits	Contacts
ACC 121	Accounting Principles I	4	60
ACC 122	Accounting Principles II	4	60
BUS 221	Legal Environment of Business	3	45
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
BUS 226	Business Statistics	3	45
CIS 118	Intro. to PC Applications	4	68
*BUS 228	Principles of Management	3	45
*BUS 236	Principles of Marketing	3	45

*The following courses are required before enrolling in BUS 228 and BUS 236: ACC 121, 122, ECO 202, MAT 135 (or BUS 226), BUS 115 and sophomore standing.

Business Course Sub-Total Hours	30	503
Capstone Course (Required)		
SCI 285 or HUM 285 Critical Thinking	3	45
Total	67-68	1043-1158

Associate of Applied Science Degree in Business Administration

This program provides a broad exposure to general business functions and fundamental management concepts. Upon 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.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Overall GPA of 2.0 on all college-level work after completing 12 semester hours.

Associate of Applied Science Degree in Business Administration Business Generalist Emphasis

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ECO 201	Principles of Macro Economics	3	45
ENG 121	English Composition I	3	45
Elective	Math MAT 103, 121, 124 or 125	3-4	45-60
SPE 115	Principles of Speech	3	45
Program Core Requirements			
ACC 121	Accounting Principles I	4	60
ACC 122	Accounting Principles II	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
BUS 221	Legal Environment of Business	3	45
BUS 226	Business Statistics	3	45
BUS 227	Human Resources Management	3	45
BUS 228	Principles of Management	3	45
BUS 230	Principles of Finance	3	45
BUS 236	Principles of Marketing	3	45
BUS 285	Business Policy and Ethics	3	45
General Electives (with advisor approval)			
BUS 297	Cooperative Education	3	135
BTE 151	WordPerfect or	3	45
BTE 152	Microsoft Word		
CIS 155	Spreadsheet Concepts	3	45
ECO 202	Principles of Micro Economics	3	45
Elective		3	45
Total		66-67	1088-1103

Custom programs can be designed with a business advisor or students may choose one of the following areas of 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 a business advisor. All general electives for custom programs must have a course number greater than 100.

All electives must be approved by your Business advisor. 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 Business advisor in the division of Business and Governmental Studies, Plaza Building, room 262, 303-556-2487.

Certificate in Business Administration
Entrepreneurship
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. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
BUS 221	Legal Environment of Business	3	45
BUS 227	Human Resources Management	3	45
BUS 230	Principles of Finance	3	45
BUS 231	Principles of Sales	3	45
CIS 118	Intro. to PC Applications	4	68
MAT 103	Contemporary College Mathematics	3	45
SPE 115	Principles of Speech	3	45
BUS 185	Business Certificate (Capstone)	1	15
Total		33	503

Associate of Applied Science Degree
in Business Administration
Finance Emphasis
Choose one of the following two options:

General Education Requirements (see page 44)

GENERAL FINANCE		Credits	Contacts
ACC 215	Accounting Systems	3	45
BUS 297	Cooperative Education	3	135
CIS 155	Spreadsheet Concepts	3	45
CIS 156	Advanced Spreadsheets	3	45
ECO 202	Principles of Micro Economics	3	45
Total		15	315

COMMERCIAL CREDIT		Credits	Contacts
BUS 297	Cooperative Education	3	135
CIS 155	Spreadsheet Concepts	3	45
CRM 217	Business Credit Principles	3	45
ECO 202	Principles of Micro Economics	3	45
Elective approved by business advisor		3	45
Total		15	315

Certificate in Business Administration
Finance/Commercial Credit Management
This certificate provides students with the fundamentals for success in the financial and 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. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
BUS 221	Legal Environment of Business	3	45
BUS 226	Business Statistics	3	45
BUS 227	Human Resources Management	3	45
BUS 230	Principles of Finance	3	45
CIS 155	Spreadsheet Concepts	3	45
CRM 217	Business Credit Principles	3	45
BUS 185	Business Certificate (Capstone)	1	15
Total		29	435

Associate of Applied Science Degree
in Business Administration
Insurance Emphasis

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 Business advisor in the division of Business and Governmental Studies, Plaza Building, room 262, 303-556-2487.

This emphasis consists of a total of 15 semester 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.

General Education Requirements (see page44)

Choose one of the following four options:

- General Insurance
- Chartered Property Casualty Underwriter (CPCU)
- Chartered Life Underwriter (CLU)
- Life Office Management Associate (LOMA)

Associate of Applied Science Degree
in Business Administration
International Business Emphasis

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 Business advisor in the division of Business and Governmental Studies, Plaza Building, room 262, 303-556-2487.

This emphasis consists of a total of 15 semester 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.

General Education Requirements (see page 44)

Select 6 credits from the following:		6	90
BUS 210	International Business	(3)	(45)
BUS 211	International Marketing	(3)	(45)
BUS 215	International Business Environments	(3)	(45)
POS 205	International Relations	(3)	(45)

Certificate in Business Administration
International Business

This program is designed for individuals and businesses who would like to explore the possibilities of doing or improving their business in international markets. Basic essentials of foreign trade and cultural understanding will be necessary for an effective business relationship.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 210	International Business	3	45
BUS 211	International Marketing	3	45
BUS 217	Business Communications	3	45
BUS 221	Legal Environment of Business	3	45
BUS 227	Human Resources Management	3	45
CIS 118	Intro. to PC Applications	4	68
ECO 201	Principles of Macro Economics	3	45
POS 205	International Relations	3	45
BUS 185	Business Certificate (Capstone)	1	15
Total		33	503

Associate of Applied Science Degree
in Business Administration
Management Emphasis

Choose one of the following two options:

General Management

The AAS degree program in Business Administration, Management is offered jointly by CCD and Emily Griffith Opportunity School. An official school transcript showing completion of Emily Griffith Opportunity School's Management courses is required for program advising. Contact your Business advisor in the division of Business and Governmental Studies, Plaza Building, room 262, 303-556-2487.

The option consists of a total of 15 semester credit hours of Management-specific credits. Students may earn 3 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 12 credits listed below, must be completed at CCD.

General Education Requirements (see page 44)

		Credits	Contacts
BUS 205	Small Business Management	3	45
BUS 229	Motivation and Management	3	45
BUS 235	Retail Marketing & Management	3	45
BUS 297	Cooperative Education	3	135

Associate of Applied Science Degree in Business Administration
Marketing Emphasis

Choose one of the following two options:

General Education Requirements (see page 44)

CUSTOMER SERVICE		Credits	Contacts
BUS 237	Customer Service	3	45
BUS 238	Customer Service II	3	72
BUS 297	Cooperative Education	3	135
Select an additional 6 credit hours of BUS electives with Business advisor approval.		6	90
Total		15	342

SALES AND PROMOTION		Credits	Contacts
BUS 211	International Marketing	3	45
BUS 231	Principles of Sales	3	45-72
BUS 235	Retail Marketing and Management	3	45
BUS 239	Advertising and Promotion	3	45
BUS 297	Cooperative Education	3	135
Total		15	315-342

Certificate in Business Administration
Marketing

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

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
BUS 115	Intro. to Business	3	45
BUS 211	International Marketing	3	45
BUS 217	Business Communications	3	45
BUS 231	Principles of Sales	3	45
BUS 235	Retail Marketing & Management	3	45
BUS 236	Principles of Marketing	3	45
BUS 239	Advertising & Promotion	3	45
BTE 139	Professional Development	3	45
CIS 118	Intro. to PC Applications	4	68
SPE 115	Principles of Speech	3	45
BUS 185	Business Certificate (Capstone)	1	15
Total		32	488

Associate of Applied Science Degree in Business Administration
Postal Service Management

The Postal Service Management (PSM) option in the Associate in Applied Science Business Administration degree is designed to prepare the student with the necessary knowledge and skills to gain employment and/or to advance to positions of increased responsibility within the United States Postal Service (USPS). For more information, contact Connie Burke in the Division of Continuing Education, 303-620-4433, ext. 320.

This option consists of a total of 15 semester credit hours of Postal Service Management-specific credits and a minimum of 51 credit hours of general education and program core courses.

General Education Requirements (see page 44)

Select 15 credits from the following:		15	675
PST 105	Postal Service History & Organization	(3)	(45)
PST 106	Postal Service Finance	(3)	(45)
PST 112	Postal Mail Processing I	(3)	(45)
PST 114	Delivery & Collections	(3)	(45)
PST 200	Postal Service Automation	(3)	(45)
PST 205	Personnel Services	(3)	(45)
PST 226	Labor Relations I	(3)	(45)
PST 227	Labor Relations II (Capstone)	(3)	(45)

Associate of Applied Science Degree in Business Administration
Real Estate Emphasis

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 Business advisor in the division of Business and Governmental Studies, Plaza Building, room 262, 303-556-2487.

This emphasis consists of a total of 15 semester 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.

Choose one of the following two options:

General Education Requirements (see page 44)

REAL ESTATE APPRAISER		Credits	Contacts
BUS Elective		3	45
BUS 297	Cooperative Education	3	135

REAL ESTATE BROKER

BUS 297	Cooperative Education	3	135

Certificate in Business Administration
Supermarket Management

This program is designed to give 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

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 170	Supermarket Loss Prevention	3	45
BUS 228	Principles of Management	3	45
BUS 221	Legal Environment of Business Law	3	45
BUS 227	Human Resources Management	3	45
BUS 229	Motivation & Management	3	45
BUS 239	Advertising & Promotion	3	45
CIS 118	Intro. to PC Applications	4	68
BUS 285	Business Policy and Ethics	3	45
BUS 235	Retail Marketing and Management (Capstone)	3	45
Total		35	533

Associate of Applied Science Degree
in Business Administration
Business of Travel and Tourism

This program provides a broad exposure to general business functions and fundamentals of the travel and tourism industry. Upon completion, students are qualified for an entry-level position in a wide variety of general travel and tourism occupations. 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.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Completion of MAT 103 and BUS 115 with a grade of C or better.
3. GPA of 2.5 on all college-level work after completing 12 semester hours.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ECO 201	Principles of Macro Economics	3	45
ENG 121	English Composition I	3	45
MAT 103, 121, 124 or 125		3-4	45-60
SPE 115	Principles of Speech	3	45
Major Requirements			
BTT 110	Intro. to Travel	3	45
BTT 111	Travel Geography I	3	45
BTT 112	Travel Geography II	3	45
BTT 113	Selecting & Selling Cruises	3	45
BTT 210	Domestic Ticketing	3	45
BTT 211	International Travel	3	45
BTT 212	Computer Reservations I	3	45
BTT 213	Computer Reservations II	3	45
Business Requirements:			
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 215	International Business Environments	3	45
BUS 231	Principles of Sales	3	45
BUS 236	Principles of Marketing	3	45
Cognate Requirements:			
Elective	Foreign Language 111 or 112	5	73-90
Elective	Foreign Language 112 or 211	3-5	45-75
Total		64-67	966-1028

Certificate in Business Administration
Travel and Tourism

This two-semester certificate program provides entry-level skills for employment in the travel, tourism and hospitality industries. Courses prepare students for jobs such as an entry-level reservations assistant, clerk and travel agent trainee.

Courses must be taken in the sequence as shown.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.

		Credits	Contacts
BTT 110	Principles of Travel Administration	3	45
BTT 111	Travel Geography I	3	45
BTT 112	Travel Geography II	3	45
BTT 113	Selecting & Selling Cruises	3	45

BTT 210	Domestic Ticketing	3	45
BTT 211	International Travel	3	45
BTT 212	Computer Reservations I	3	45
BTT 213	Computer Reservations II (Capstone)	3	45
Total		24	360

Business Technology: Office Management & Secretarial Skills

Associate of Applied Science Degree in Business Technology: Office Management and Secretarial Studies

These Business Technology program options are designed to 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 about 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 increasingly will be in great demand.

Associate of Applied Science Degree in Business Technology: Office Management and Secretarial Studies Administrative Assistant/Office Manager

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics	3	45
Elective	Economics or Political Science	3	45
Program Core Requirements			
BTE 101	Keyboarding I	5	83
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 120	Filing & Records Control	4	68
BTE 133	Word Processing Communications & Applications	3	45
BTE 139	Professional Development (Speech Intensive)	3	45
BTE 151	WordPerfect	3	45
BTE 152	Microsoft Word	3	45
BTE 155	Spreadsheets for Office Management	3	45
BTE 288	Model Office	3	45
BUS 217	Business Communications (Speech Intensive)	3	45
BTE 297	Cooperative Education (Capstone)	3	135
Major Requirements			
ACC 101	Fundamentals of Accounting	3	45
BTE 108	Business Machines: Ten Key by Touch	2	23
BUS 115	Intro. to Business	3	45
BUS 228	Principles of Management	3	45
CIS 139	Integration Software	3	45
Total		64	1067

Associate Of Applied Science Degree in Business Technology: Office Management and Secretarial Studies Administrative Assistant

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 39 credits listed in the WorkTrain Administrative Assistant certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Administrative Assistant Certificate
TEC North, TEC East TEC West

Administrative Assistant is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students to write business letters; input data; use and understand personal computers; use E-mail, the Internet and the World Wide Web; and use Microsoft Office Word, Access, Excel and Power Point applications. Graduates are prepared to enter positions as a receptionist, data entry clerk, secretary, word processor, office assistant and office specialist.

The WorkTrain Administrative Assistant certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Administrative Assistant.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on Reading and mathematics, or co-enrollment in REA 060, MAT 033 and/or ENG 060.

		Credits	Contacts
BTE 101	Keyboarding I	4	96
BTE 103	Typing Development I	3	72
BTE 152	Microsoft Word	3	72
BTE 160	Data Entry I	3	72
BTE 200	Office Procedures	3	72
	or		
BTE 297	Cooperative Work Experience	(3)	(135)
BTE 251	Advanced Word Processing	3	72
BUS 217	Business Communications	3	72
CIS 118	Intro. to PC Applications	3	72
CIS 130	Intro. to the Internet	3	72
CIS 135	Graphics Technology	2	48
CIS 139	Integration Software (Capstone)	3	72
CIS 140	Intro. to PC Databases	2	48
CIS 150	Intro. to PC Spreadsheets	2	48
PSY 115	Psychology of Adjustment	2	48
Total		39	936-999

Associate Of Applied Science Degree in Business Technology: Office Management And Secretarial Studies Clinical Medical Assistant
TEC East

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 39 credits listed in the WorkTrain Clinical Medical Assistant certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Clinical Medical Assistant Certificate
TEC East

Clinical Medical Assistant is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students to conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments. Graduates are prepared to enter positions as clinical medical assistants and medical assistants.

The WorkTrain Clinical Medical Assistant certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Clinical Medical Assistant.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboarding Applications	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
*THA 151	Technical Procedures	3	72
THA 153	Medical Terminology II	2	48
*THA 200	Patient Care	3	72
THA 205	Pharmacology Practices	4	96
THA 212	Internship Seminar	1	24
THA 230	Clinical Procedures	7	168
THA 297	Internship Work Experience (Capstone)	4	180
Total		39	1020

*NUR 100 substitutes for THA 151 and THA 200.

Nurse Assistant Certificate
TEC East

Nurse Assistant is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students to use medical terminology, adhere to health care standards, use CPR and first aid procedures and provide

patient services in a professional manner. This program is approved by the State Board of Nursing. Graduates are eligible to take the state examination for certified nurse aide. Graduates are prepared to enter positions as nurse assistants, patient care providers, nurse aides and home health aides.

All XpressTrain Nurse Assistant certificate program credits apply toward the WorkTrain Comprehensive Medical Assistant and Clinical Medical Assistant certificate programs requirements.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboarding Applications	3	72
NUR 100	Nurse Aide Procedures and Patient Care	6	144
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
THA 212	Internship Seminar	1	24
THA 297	Internship Work Experience (Capstone)	3	135
Total		26	708

Nurse Aide Certificate
TEC East

Nurse Aide is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to use medical terminology, adhere to health care standards, use CPR and first aid procedures and provide patient services in a professional manner. This program is approved by the State Board of Nursing. Graduates are eligible to take the state examination for certified nurse aide. Graduates are prepared to enter positions as nurse aides and home health aides.

All QuickTrain Nurse Aide certificate program credits apply toward the XpressTrain Nurse Assistant certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
NUR 100	Nurse Aide Procedures and Patient Care	6	144
PSY 115	Psychology of Adjustment	1	24
THA 110	Medical Terminology I	2	48
THA 114	Medical Emergencies	1	24
THA 212	Internship Seminar	1	24
THA 297	Internship Work Experience (Capstone)	5	225
Total		16	489

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Comprehensive Medical Assistant
TEC East

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 50 credits listed in the WorkTrain Comprehensive Medical Assistant certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Comprehensive Medical Assistant Certificate
TEC East

Comprehensive Medical Assistant is a nationally certified WorkTrain program designed for completion in three, 15-week semesters. It prepares students to perform front office tasks, complete insurance forms, make office appointments, and perform ICD-9 and CPT coding. Students also are prepared to perform back office tasks, conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments.

This program is nationally certified by the American Association of Medical Assisting through which graduates can obtain certification by examination. Graduates are prepared to enter positions as certified medical assistants and medical assistants.

The WorkTrain Comprehensive Medical Assistant certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Comprehensive Medical Assistant.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
AHA 152	Medical Office Communications	3	72
AHA 155	Medical Manager	2	48
AHA 156	Basic Coding	2	48
AHA 211	Medical Secretary Skills	4	96
BTE 102	Basic Keyboarding Applications	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
*THA 151	Technical Procedures	3	72
THA 153	Medical Terminology II	2	48
*THA 200	Patient Care	3	72
THA 205	Pharmacology Practices	4	96
THA 212	Internship Seminar	1	24
THA 230	Clinical Procedures	7	168
THA 297	Internship Work Experience (Capstone)	4	180
Total		50	1284

*NUR 100 substitutes for THA 151 and THA 200.

Associate Of Applied Science Degree in Business Technology: Office Management And Secretarial Studies Health Information Specialist TEC East

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 39 credits listed in the WorkTrain Health Information Specialist certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Health Information Specialist Certificate TEC East

Health Information Specialist is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students to use Microsoft Word, manage medical files, use medical coding, prepare admissions and discharge records, and assemble and analyze medical data. Graduates are prepared to enter positions as medical records clerks and health information specialists.

The WorkTrain Health Information Specialist certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Health Information Specialist.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
AHA 120	Medical Filing	2	48
AHA 160	Coding I	2	48
AHA 200	Medical Transcription I	3	72
AHA 204	Medical Records I	4	96
AHA 250	Medical Records II (Capstone)	4	96
AHA 297	Internship Work	2	90
	or		
BTE 104	Keyboarding SpeedBuilding	(2)	(48)
BTE 101	Keyboarding I	4	96
BTE 152	Microsoft Word	3	72
BTE 160	Data Entry I	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
Total		39	936-978

Associate of Applied Science Degree in Business Technology: Office Management and Secretarial Studies Legal Secretarial/Legal Assistant

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics	3	45
Elective	Economics or Political Science Course	3	45

Program Core Requirements			
BTE 101	Keyboarding I	5	83
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 120	Filing & Records Control	4	68
BTE 133	Word Processing Communications & Applications	3	45
BTE 139	Professional Development (Speech Intensive)	3	45
BTE 151	WordPerfect	3	45
BTE 152	Microsoft Word	3	45
BTE 155	Spreadsheets for Office Management	3	45
BTE 288	Model Office	3	45
BUS 217	Business Communications (Speech Intensive)	3	45
BTE 297	Cooperative Education (Capstone)	3	135
Major Requirements			
BTE 121	Alpha Speedwriting I	4	60
BTE 209	Legal Terminology	2	30
BTE 230	Machine Transcription	5	83
BUS 221	Legal Environment of Business	3	45
PAR 124	Legal Research	3	45
Total		67	1127

Associate of Applied Science Degree
in Business Technology:
Office Management and Secretarial Studies
Medical Secretarial

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics	3	45
Elective	Economics or Political Science Course	3	45
Program Core Requirements			
BTE 101	Keyboarding I	5	83
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 120	Filing & Records Control	4	68
BTE 133	Word Processing Communications & Applications	3	45
BTE 139	Professional Development (Speech Intensive)	3	45
BTE 151	WordPerfect or	3	45
BTE 152	Microsoft Word		
BTE 155	Spreadsheets for Office Management	3	45
BTE 288	Model Office	3	45
BUS 217	Business Communications (Speech Intensive)	3	45
BTE 297	Cooperative Education (Capstone)	3	135
Major Requirements			
ACC 101	Fundamentals of Accounting	3	45
AHA 155	The Medical Manager	3	72
AHA 156	Basic Coding	2	48
BTE 108	Business Machines: Ten Key by Touch	2	23
BTE 121	Alpha Speedwriting I	4	60
BTE 230	Machine Transcription	5	83
HOC 100	Medical Terminology	2	30
Total		68	1180

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Medical Secretary
TEC East

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 37 credits listed in the WorkTrain Medical Secretary certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Medical Secretary Certificate
TEC East

Medical Secretary is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students to use Microsoft Word; prepare various medical office correspondence, papers, forms and data base information; and prepare insurance forms. Graduates are prepared to enter positions as a medical secretary.

The WorkTrain Medical Secretary certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Medical Secretary.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
AHA 120	Medical Filing	2	48
AHA 152	Medical Office Communications	3	72
AHA 155	The Medical Manager	3	72
AHA 200	Medical Transcription I	4	96
AHA 211	Medical Secretary Skills (Capstone)	4	96
AHA 297	Internship Work Experience	2	90
	or		
BTE 104	Keyboarding SpeedBuilding	(2)	(48)
BTE 101	Keyboarding I	4	96
BTE 152	Microsoft Word	3	72
PSY 115	Psychology Of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
Total		37	888-930

Certificate in Business Technology: Office Management and Secretarial Studies Medical Secretarial

Designed to prepare students for jobs such as medical records clerk, medical secretary, etc.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 2 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 103 with a C or better.

Major Requirements		Credits	Contacts
ACC 101	Fundamentals of Accounting	3-4	45-60
	or		
ACC 121	Accounting Principles I		
BTE 101	Keyboarding I	5	83
	or		
BTE 202	Keyboarding II		
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 108	Business Machines: Ten Key by Touch	2	23
BTE 120	Filing & Records Control	4	68
BTE 133	Word Processing Communications & Applications	3	45
BTE 139	Professional Development	3	45
BTE 151	WordPerfect	3	45
	or		
BTE 152	Microsoft Word		
BTE 230	Machine Transcription	5	83
BTE 288	Model Office	3	45
AHA 155	The Medical Manager	3	72
HOC 100	Medical Terminology	2	30
BTE 297	Cooperative Education (Capstone)	3	135
Total		43-44	779-794

Medical Clerk Certificate
TEC East

Medical Clerk is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students to use Microsoft, prepare basic medical office papers and forms, and process office files and records. Graduates are prepared to enter positions as medical clerks.

All XpressTrain Medical Clerk certificate program credits apply toward the Medical Secretary certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
AHA 120	Medical Filing	2	48
AHA 155	The Medical Manager (Capstone)	3	72
AHA 297	Internship Work Experience	2	90
	or		
BTE 104	Keyboarding SpeedBuilding	(2)	(48)
BTE 101	Keyboarding I	4	96
BTE 152	Microsoft Word	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
Total		26	624-666

Associate Of Applied Science Degree in Business Technology: Office Management And Secretarial Studies Medical Transcriptionist
TEC East

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 39 credits listed in the WorkTrain Medical Transcriptionist certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60

Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Medical Transcriptionist Certificate
TEC East

Medical Transcriptionist is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students to use Microsoft Word, use medical coding, prepare insurance billings, and transcibe general, medical, surgical and radiological data. Graduates are prepared to enter positions as medical transcriptionists.

The WorkTrain Medical Transcriptionist certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Medical Transcriptionist.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
AHA 152	Medical Office Communications	3	72
AHA 155	The Medical Manager	3	72
AHA 156	Basic Coding	2	48
AHA 200	Medical Transcription I	4	96
AHA 207	Medical Transcription II (Capstone)	6	144
AHA 297	Internship Work Experience	2	90
	or		
BTE 104	Keyboarding SpeedBuilding	(2)	(48)
BTE 101	Keyboarding I	4	96
BTE 152	Microsoft Word	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
Total		39	936-978

Associate Of Applied Science Degree in Business Technology: Office Management And Secretarial Studies Medical Unit Coordinator
TEC East

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 38 credits listed in the WorkTrain Medical Unit Coordinator certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Medical Unit Coordinator Certificate
TEC East

Medical Unit Coordinator is a WorkTrain program designed for completion in two, 17-week semesters. It 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. Graduates are prepared to enter positions as medical unit coordinators.

The WorkTrain Medical Unit Coordinator certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Medical Unit Coordinator.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
AHA 158	Medical Unit Coordinating I	7	168
AHA 209	Medical Unit Coordinating II (Capstone)	7	168

AHA 297	Internship Work Experience	2	90
	or		
BTE 104	Keyboarding SpeedBuilding	(2)	(48)
BTE 101	Keyboarding I	4	96
BTE 152	Microsoft Word	3	72
BTE 160	Data Entry I	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
Total		38	912-954

Customer Service Specialist Certificate
TEC North, TEC East, TEC West

Customer Service Specialist is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students to keyboard, input data, use and understand personal computers, use Microsoft Office Word and Access, and use principles of sales and customer service. Graduates are prepared to enter positions as conservation/collections representatives, audit processors, and customer relations, member service and quality assurance representatives.

Most XpressTrain Customer Service Specialist certificate program credits apply toward the WorkTrain Administrative Assistant certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboarding Applications	3	72
BTE 103	Typing development I	2	48
BTE 152	Microsoft Word	3	72
BTE 160	Data Entry I	3	72
	or		
BTE 297	Cooperative Work Experience	(3)	(135)
BUS 118	Intro. to Marketing	3	72
BUS 237	Customer Service (Capstone)	3	72
CIS 118	Intro. to PC Applications	3	72
CIS 140	Intro. to PC Databases	2	48
PSY 115	Psychology of Adjustment	2	48
Total		24	576-639

Customer Service Representative Certificate
TEC North, TEC East, TEC West

Customer Service Representative is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to keyboard, use and understand personal computers, use Microsoft Word, and use principles of sales and customer service. Graduates are prepared to enter positions as customer service, member service and quality assurance representatives.

All QuickTrain Customer Service Representative certificate program credits apply toward the XpressTrain Customer Service Specialist certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboarding Applications	3	72
BTE 103	Typing Development I	2	48
BTE 152	Microsoft Word	3	72
BUS 118	Intro. to Marketing	3	72
BUS 237	Customer Service (Capstone)	3	72
CIS 118	Intro. to PC Applications	3	72
Total		17	408

Data Entry Clerk Certificate
TEC North, TEC East, TEC West

Data Entry Clerk is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to perform general office functions, input data and use Microsoft Word. Graduates are prepared to enter positions as data entry and office clerks.

All QuickTrain Data Entry Clerk certificate program credits apply toward the XpressTrain Word Processor certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 101	Keyboarding I	4	96
BTE 103	Typing Development I	3	72
BTE 152	Microsoft Word	3	72
BTE 160	Data Entry I (Capstone)	3	72
BTE 200	Office Procedures	3	72
Total		16	384

Certificate in Business Technology:
Office Management and Secretarial Studies
Executive Assistant

This program is designed to enhance and upgrade the skill level of those individuals currently working as office managers or other administrative support personnel.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 2 or completion of REA 109 with a C or better; and math at level 2a or completion of MAT 103 with a C or better.

Major Requirements		Credits	Contacts
BTE 139	Professional Development	3	45
BTE 155	Spreadsheets for Office Management	3	45
BUS 217	Business Communications	3	45
BUS 228	Principles of Management	3	45
CIS 138	Business Applications on the World Wide Web	3	45
CIS 139	Integration Software	3	45
Total		18	270

Certificate in Business Technology:
Office Management and Secretarial Studies
General Clerical

Designed to prepare students for jobs in offices where general clerical opportunities exist (filing, word processor, clerk, etc.).

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 2 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 103 with a C or better.

OPTION I - 1 SEMESTER (with permission of BTE faculty advisor)		Credits	Contacts
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 108	Business Machines: Ten Key by Touch	2	23
BTE 120	Filing & Records Control	4	68
BTE 151	WordPerfect	3	45
	or		
BTE 152	Microsoft Word		
BTE 297	Cooperative Education (Capstone)	3	135
Total		16	331

OPTION II - 2 SEMESTERS (with permission of BTE faculty advisor)			
ACC 101	Fundamentals of Accounting	3-4	45-60
	or		
ACC 121	Accounting Principles I		
BTE 101	Keyboarding I	5	83
	or		
BTE 202	Keyboarding II		
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 108	Business Machines: Ten Key by Touch	2	23
BTE 120	Filing & Records Control	4	68
BTE 133	Word Processing Communications & Applications	3	45
BTE 151	WordPerfect	3	45
BTE 152	Microsoft Word	3	45
BTE 139	Professional Development	3	45
BTE 297	Cooperative Education (Capstone)	3	135
Total		33-34	594-609

General Office Clerk Certificate
TEC North, TEC East, TEC West

General Office Clerk is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to perform general office functions; use and understand personal computers; use Microsoft Word; and use E-mail, the Internet and the World Wide Web. Graduates are prepared to enter positions as a receptionist and office clerk.

All QuickTrain General Office Clerk certificate program credits apply toward the XpressTrain Word Processor certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on Reading and mathematics, or co-enrollment in REA 060, MAT 033 and/or ENG 060.

		Credits	Contacts
BTE 101	Keyboarding I	4	96
BTE 103	Typing Development I	3	72
BTE 152	Microsoft Word	3	72
BTE 200	Office Procedures (Capstone)	3	72
CIS 130	Intro. to the Internet	3	72
Total		16	384

Microsoft Office Specialist Certificate
TEC North, TEC East, TEC West

Microsoft Office Specialist is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to perform general office functions; use and understand personal computers; use Microsoft Office Word, Access and Excel; and use E-mail, the Internet and the World Wide Web. Graduates are prepared to enter positions as Microsoft applications specialists and office clerks.

All QuickTrain Microsoft Office Specialist certificate program credits apply toward the WorkTrain Administrative Assistant program.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on Reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 101	Keyboarding I	4	96
BTE 152	Microsoft Word	3	72
CIS 130	Intro. to the Internet	3	72
CIS 139	Integration Software (Capstone)	3	72
CIS 140	Intro. to PC Databases	2	48
CIS 150	Intro. to PC Spreadsheets	2	48
Total		17	408

Certificate in Business Technology:
Office Management and Secretarial Studies
Stenographic

This program prepares students for jobs such as a secretary, stenographer, word processor and office assistant/specialist.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 2 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 103 with a C or better.

Major Requirements		Credits	Contacts
BTE 101	Keyboarding I	5	83
	or		
BTE 202	Keyboarding II		
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 108	Business Machines: Ten Key by Touch	2	23
BTE 120	Filing & Records Control	4	68
BTE 121	Alpha Speedwriting I	4	60
BTE 133	Word Processing Communications & Applications	3	45
BTE 151	WordPerfect	3	45
	or		
BTE 152	Microsoft Word		
BUS 217	Business Communications	3	45
BTT 288	Model Office	3	45
BTE 297	Cooperative Education (Capstone)	3	135
Total		34	609

Word Processor Certificate
TEC North, TEC East, TEC West

Word Processor is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students to input data; use and understand personal computers; use Microsoft Word; and use E-mail, the Internet and the World Wide Web. Graduates are prepared to enter positions as a receptionist, data entry clerk, secretary and word processor.

All XpressTrain Word Processor certificate program credits apply toward the WorkTrain Administrative Assistant certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on Reading and mathematics, or co-enrollment in REA 060, MAT 033 and/or ENG 060.

		Credits	Contacts
BTE 101	Keyboarding I	4	96
BTE 103	Typing Development I	3	72
	or		
BTE 152	Microsoft Word	3	72
BTE 160	Data Entry I	3	72
BTE 200	Office Procedures	3	72
	or		
BTE 297	Cooperative Work Experience	(3)	(135)
BTE 251	Advanced Word Processing (Capstone)	3	72
CIS 118	Intro. to PC Applications	3	72
CIS 130	Intro. to the Internet	3	72
PSY 115	Psychology of Adjustment	2	48
Total		27	648-711

Associate of Applied Science Degree
in Business Technology:
Office Management and Secretarial Studies
Radiology/Orthopedic Assistant

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 39 credits listed in the WorkTrain Radiology/Orthopedic Assistant certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Radiology/Orthopedic Assistant Certificate
TEC East

Radiology/Orthopedic Assistant is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students to conduct patient evaluations, take and record clinical measurements, assist in radiological procedures, process radiological film and assist in orthopedic procedures. Graduates are prepared to enter positions as radiology and orthopedic assistants.

The WorkTrain Radiology/Orthopedic Assistant certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Business Technology, Office Management and Secretarial Studies, Radiology/Orthopedic Assistant.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboarding Applications	3	72
PSY 115	Psychology of Adjustment	2	48
THA 110	Medical Terminology I	2	48
THA 111	The Human Body	4	96
THA 112	Social Issues in Health	3	72
THA 114	Medical Emergencies	1	24
THA 151	Technical Procedures	3	72
THA 153	Medical Terminology II	2	48
THA 210	Radiology Assisting	6	144
THA 212	Internship Seminar	1	24
THA 220	Orthopedic Assisting	8	192
THA 297	Internship Work Experience (Capstone)	4	180
Total		39	1020

Associate of Applied Science Degree in Business Technology: Office Management and Secretarial Studies Secretarial/Computer Applications

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics	3	45
Elective	Economics or Political Science	3	45
Program Core Requirements			
BTE 101	Keyboarding I	5	83
BTE 104	Keyboarding SpeedBuilding	4	60
BTE 120	Filing & Records Control	4	68
BTE 133	Word Processing Communications & Applications	3	45
BTE 139	Professional Development (Speech Intensive)	3	45
BTE 151	WordPerfect	3	45
BTE 152	Microsoft Word	3	45
BTE 155	Spreadsheets for Office Management	3	45
BTE 288	Model Office	3	45
BUS 217	Business Communications (Speech Intensive)	3	45
BTE 297	Cooperative Education (Capstone)	3	135
Major Requirements			
ACC 101	Fundamentals of Accounting	3	45
BTE 108	Business Machines: Ten Key by Touch	2	23
BTE 121	Alpha Speedwriting I	4	60
BTE 202	Keyboarding II	5	83
CIS 145	Database Concepts	3	45
Total		67	1120

Chemistry

Associate of Science Degree with a Chemistry Emphasis

General Education Requirements (see page 41)

		Credits	Contacts
CHE 111	General College Chemistry I	5	105
CHE 112	General College Chemistry II	5	105
MAT 121	College Algebra	4	60
MAT 122	Trigonometry	3	45
MAT 201	Calculus I	5	75
MAT 202	Calculus II	5	75
PHY 111	Physics: Algebra-Based I	5	105
PHY 112	Physics: Algebra-Based II	5	105
Total		37	675

Communications

Associate of Arts Degree with a Communications Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
COM 126	Intro. to Mass Media	3	45
	or		
JOU 106	Fundamentals of Reporting		
COM 251	Intro. to Television Production	3	45
COM 252	Videography/Editing	3	45
COM 255	Survey of Film	3	45
Total		12	180

Computer Information Systems

Associate of Applied Science Degree in Computer Information Systems Business Applications Programmer

This program serves the general student population, but is designed, developed, and operated for and by the nationally recognized and award-winning Computer Training for People with Disabilities (CTPD) Program. The program prepares students for careers as applications programmers emphasizing the COBOL language. This is a fast-track program that can be completed in 13 months or more depending on the semester the student begins the curriculum and the amount of remediation, general studies and adaptation skill development required. The program has a fall and spring semester curriculum. Students must have completed the "prereq-

uisites to fall semester" and are encouraged to complete the general education requirements prior to beginning the fall and spring curriculum. Applications should be submitted by May 1.

Students with disabilities are encouraged to make application to the Computer Training for People with Disabilities program that offers special services, support and placement for program participants. Application information may be obtained from the Center for Persons with Disabilities, South Classroom Building, room 134, or by phone at 303-556-3300.

All students must satisfy the following program admission requirements prior to beginning the program:

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Students with a disability requiring adaptive equipment must be functioning at a professional level. Skills are assessed and evaluated by the CTPD Coordinator.

General Education Requirements (see page 44)

Business Core		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
CIS Courses			
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming (with permission of CIS advisor)	3	45
CIS 145	Database Concepts	3	45
CIS 167	Programming in C++	3	45
CIS 212	UNIX	3	45
CIS 218	Advanced PC Applications	2	45
CIS 220	PC Data Recovery & Software Repair	3	45
CIS 241	Oracle	3	45
CIS 254	Windows NT Workstation	4	60
CIS 260	COBOL Programming	3	45
CIS 261	Advanced COBOL Programming	3	45
CIS 263	CICS/COBOL Programming	3	45
CIS 269	On-line Program Development	3	45
CIS 276	Systems Analysis & Design	3	45
CIS 277	Operating Systems and JCL	3	45
CIS 297	Cooperative Education/Internship (Capstone)	6	135
Total		62	998

Certificate in Computer Information Systems (CIS)
Business Applications Programmer

This program serves the general student population, but is designed, developed, and operated for and by the nationally recognized and award-winning Computer Training for People with Disabilities (CTPD) program. The certificate program prepares students for careers as applications programmers emphasizing the COBOL language. This is a fast-track program that can be completed in 13 months or more depending on the semester the student begins the curriculum and the amount of remediation, general studies and adaptation skill development required. The program has a fall and spring semester curriculum. Students must have completed the "prerequisites to fall semester" and are encouraged to complete the general education requirements prior to beginning the fall and spring curriculum. Applications should be submitted by May 1.

Students with disabilities are encouraged to make application to CTPD program, which offers special services, support and placement for program participants. Application information may be obtained from the Center for Persons with Disabilities, South Classroom Building, room 134, or by phone at 303-556-3300.

All students must satisfy the following program admission requirements prior to beginning the program.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better. Successful completion of a computer aptitude test battery. Personal interview with members of the business advisory council.
4. Students with a disability requiring adaptive equipment must be functioning at a professional level. Skills are assessed and evaluated by the CTPD director.

Business Core		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
CIS Courses			
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming	3	45
CIS 145	Database Concepts	3	45
CIS 167	Programming in C++	3	45
CIS 212	UNIX	3	45
CIS 218	Advanced PC Applications	2	45
CIS 220	PC Data Recovery & Software Repair	3	45
CIS 241	Oracle	3	45
CIS 254	Windows NT Workstation	4	60
CIS 260	COBOL Programming	3	45

CIS 261	Advanced COBOL Programming	3	45
CIS 263	CICS/COBOL Programming	3	45
CIS 269	Online Program Development	3	45
CIS 276	Systems Analysis & Design	3	45
CIS 277	Operating Systems and JCL	3	45
CIS 297	Cooperative Education/Internship (Capstone)	6	135
Total		62	998

Associate of Applied Science Degree
in Computer Information Systems
Computer Specialist
Auraria Campus

This program prepares the student as an entry-level specialist in working with and utilizing personal computers. Upon completion of the program, students will be competent to set up and configure personal computers and their peripherals, to configure application systems, manage communications and/or networks and use many major software packages.

Students pursuing the AAS degree in Computer Information Systems, Computer Specialist, must complete 60 or more credit hours by selecting one of the emphases listed after the major requirements.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Completion of CIS 118 with a grade of C or better.
3. GPA of 2.0 or higher in CIS courses.
4. Completion of 12 semester hours of college-level work or in place of above requirements or, 5.0 completion of a TEC WorkTrain CIS certificate program.

General Education Requirements		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
ENG 121	English Composition I	3	45
	or		
ENG 131	Technical Writing I		
MAT 103	Contemporary College Mathematics	3-4	45-60
	or		
MAT 121	College Algebra		
	or		
MAT 135	Intro. to Statistics		
SPE 115	Principles of Speech	3	45
Select 1 course from the following:		2-3	45-48
ECO 201	Principles of Macro Economics	(3)	(45)
	or		
POS 105	Intro. to Political Science	(3)	(45)
	or		
PSY 115	Psychology of Adjustment	(2)	(48)
Major Requirements			
CIS 110	Intro. to PC Operation Systems	2	45
CIS 119	Intro. to Programming	3	45
CIS 130	Intro. to the Internet	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 175	Intro. to Telecommunications	3	45
CIS 200	Local Area Networking Concepts	2	45
CIS 285	Computer Capstone	1	23
Pre-Emphasis Total		32-34	541-559

Complete 60 or more total credit hours by selecting one of the following emphases.

Associate of Applied Science Degree
in Computer Information Systems
Computer Specialist
Computer Specialist Emphasis

General Education Requirements (see page 44)

Select 28 or more credits from the following:		28	564
CIS 112	Intro. to Windows	(2)	(45)
CIS 117	Computer Access Methods for the Disabled	(2)	(45)
CIS 131	Intro. to Web Authoring	(3)	(45)
CIS 132	Intermediate Web Authoring	(2)	(45)
CIS 133	Advanced Web Authoring	(3)	(45)
CIS 134	Web Page Layout & Design	(3)	(45)
CIS 135	Graphics Technology	(2)	(45)
CIS 138	Business Applications on the WWW	(3)	(45)
CIS 140	Intro. to PC Databases	(2)	(45)
CIS 142	Advanced PC Databases	(2)	(45)
CIS 145	Database Concepts	(3)	(45)
CIS 150	Intro. to PC Spreadsheets	(2)	(45)
CIS 152	Advanced PC Spreadsheets	(2)	(45)
CIS 155	Spreadsheet Concepts	(3)	(45)
CIS 156	Advanced Spreadsheets	(3)	(45)
CIS 166	Visual BASIC Programming	(3)	(45)
CIS 167	Programming in C++	(3)	(45)
CIS 168	JAVA Programming	(3)	(45)
CIS 179	Software/Systems Survey	(3)	(45)
CIS 180	Intro. to Multimedia Technology	(3)	(45)
CIS 181	Digital Image Editing	(2)	(48)
CIS 182	Digital Video Imaging	(2)	(48)
CIS 183	Digital Sound Editing	(1)	(24)
CIS 190	Speech Dictation Applications	(1-2)	(15-30)
CIS 212	UNIX	(3)	(45)
CIS 220	PC Data Recovery & Software Repair	(3)	(45)
CIS 226	Computer Diagnosis & Repair	(3)	(45)
CIS 227	A+ Certification Preparation	(1)	(22)
CIS 228	PC Help Desk Skills	(3)	(72)
CIS 254	Windows NT Workstation	(4)	(60)
CIS 255	Novell 4x Administration	(4)	(60)
CIS 256	Novell 3x Administration	(3)	(67)

CIS 257	Advanced Novell Administration	(4)	(60)
CIS 258	Windows NT Server	(4)	(60)
CIS 260	COBOL Programming	(3)	(45)
CIS 261	Advanced COBOL Programming	(3)	(45)
CIS 263	CICS/COBOL Programming	(3)	(45)
CIS 266	Advanced Visual BASIC Programming	(3)	(45)
CIS 269	On-line Program Development	(2-3)	(90-135)
CIS 276	Systems Analysis & Design	(3)	(45)
CIS 277	Operating Systems & JCL	(3)	(45)
CIS 297	Cooperative Education	(2-3)	(90-135)
BTE 100	Intro. to Keyboarding	(3)	(68)
	or		
BTE 102	Basic Keyboarding Applications	(2)	(45)
BTE 151	WordPerfect	(3)	(45)
	or		
BTE 152	Microsoft Word	(3)	(45)
BTE 251	Advanced Word Processing	(3)	(67)

Associate of Applied Science Degree in Computer Information Systems
Computer Specialist
Network Administration Emphasis

General Education Requirements (see page 44)

Select 4 courses from the following:		15-16	240-247
CIS 254	Windows NT Workstation	(4)	(60)
CIS 255	Novell 4x Administration	(4)	(60)
CIS 256	Novell 3x Administration	(3)	(67)
CIS 257	Adv. Novell Administration	(4)	(60)
CIS 258	Windows NT Server	(4)	(60)
Select an additional 12 or more credit hours of CIS courses with CIS advisor approval.		12	180

Certificate in Windows NT Network Administration (Auraria Campus)

This program prepares the student for employment as a computer network administrator. Upon completion of the program, the student will be able to install, configure, administer and optimize a Windows NT network. Additionally, the program prepares the student for evaluation as a Microsoft Certified Product Specialist (MCPS).

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Students must have completed or co-registered for a total of 12 credit hours in Computer Information Systems.
3. Students are encouraged to participate in the CIS Assessment System to ensure appropriate course preparation.

		Credits	Contacts
CIS 110	Intro. to PC Operation Systems	2	45
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 200	Local Area Networking Concepts	2	45
CIS 254	Windows NT Workstation	4	60
CIS 258	Windows NT Server	4	60
CIS 276	Systems Analysis & Design	3	45
CIS 285	Computer Capstone	1	23
An additional CIS course with CIS advisor approval		3-4	44-59
Total		29-30	480-495

Certificate Computer Information Systems (Auraria Campus)
Novell 4x Network Administration

This program prepares the student for employment as a computer network administrator. Upon completion of the program, the student will be able to install, configure, administer and optimize a Novell 4x network. Additionally, the program prepares the student for evaluation as a Certified Novell Administrator (CNA).

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Students must have completed or co-registered for a total of 12 credit hours in Computer Information Systems.
3. Students are encouraged to participate in the CIS Assessment System to ensure appropriate course preparation.

		Credits	Contacts
CIS 110	Intro. to PC Operation Systems	2	45
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 200	Local Area Networking Concepts	2	45
CIS 255	Novell 4x Administration	4	60
CIS 257	Advanced Novell Administration	4	60
CIS 276	Systems Analysis & Design	3	45
CIS 285	Computer Capstone	1	23
An additional CIS course with CIS advisor approval		3-4	44-59
Total		29-30	480-495

Certificate in Computer Information Systems
Novell 3x Network Administration (Auraria Campus)
This program prepares the student for employment as a computer network administrator. Upon completion of the program, the student will be able to install, configure, administer and optimize a Novell 3x network. Additionally, the program prepares the student for evaluation as a Certified Novell Administrator (CNA).

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Students must have completed or co-registered for a total of 12 credit hours in Computer Information Systems.
3. Students are encouraged to participate in the CIS Assessment System to ensure appropriate course preparation.

		Credits	Contacts
CIS 110	Intro. to PC Operation Systems	2	45
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 200	Local Area Networking Concepts	2	45
CIS 256	Novell 3x Administration	3	67
CIS 257	Advanced Novell Administration	4	60
CIS 276	Systems Analysis & Design	3	45
CIS 285	Computer Capstone	1	23
An additional CIS course with CIS advisor approval		3-4	44-59
Total		28-29	487-502

NT Network Specialist Certificate
TEC North
NT Network Specialist is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students with the job-entry skills necessary to install PC applications; use E-mail, the Internet and the World Wide Web; use Basic and Visual Basic programming; perform PC repairs, install PC upgrades and obtain A+ Certification; and set-up and manage NT networks and connecting equipment. Graduates are prepared to enter positions as NT network specialists and PC support specialists.

The 40 credits listed below in the WorkTrain NT Network Specialist certificate program credits apply toward the requirements of the AAS degree in Computer Information Systems, Computer Specialist.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboard Applications	2	48
CIS 110	Intro. to PC Operation Systems	2	48
CIS 112	Intro. to Windows	2	48
CIS 118	Intro. to PC Applications	3	72
CIS 119	Intro. to Programming	3	72
CIS 130	Intro. to the Internet	3	72
CIS 166	Visual Basic Programming	3	72
CIS 170	Microcomputer Hardware	3	72
CIS 175	Intro. to Telecommunications	3	72
CIS 200	LAN Concepts	2	48
CIS 226	Computer Diagnosis and Repair	3	72
CIS 227	A+ Certification Preparation	1	24
CIS 254	Windows NT Workstation	4	96
CIS 258	Windows NT Server (Capstone)	4	96
	or		
CIS 297	Cooperative Work Experience	(4)	(190)
PSY 115	Psychology of Adjustment	2	48
Total		40	960-1054

Associate of Applied Science Degree
in Computer Information Systems
Computer Specialist
Internet Specialist Emphasis

General Education Requirements (see page 44)

CIS 131	Intro. to Web Authoring	3	45
CIS 135	Graphics Technology	2	45
CIS 138	Business Applications on the WWW	3	45
CIS 168	JAVA Programming	3	45
Select an additional 16 or more credit hours of CIS courses with CIS advisor approval. Note: The 16 additional credit hours may include such courses as CIS 132, CIS 133 and CIS 134.		16	240

Web Page Specialist Certificate
TEC East
Web Page Specialist is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students with job-entry skills necessary to use E-mail, the Internet and the World Wide Web; use Basic programming; and create home pages using HTML, Java Script, Front Page, PERL and CGI Script. Students also perform pixel-based image editing using Adobe PhotoShop; edit digital movies using Adobe Premier; edit and apply digital sound processing using Sound Forge; and create interactive multimedia Web page titles or computer-based training materials that contain sound, animation and digital video with Macro-Media Director. Graduates are prepared to enter positions as Web page specialists, Web page designers, Web page editors and multimedia specialists.

The 38 credits listed below in the WorkTrain Web Page Specialist certificate program apply toward the requirements of the AAS degree in Computer Information Systems, Computer Specialist.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboard Applications	2	48
CIS 110	Intro. to PC Operation Systems	2	48
CIS 112	Intro. to Windows	2	48
CIS 118	Intro. to PC Applications	3	72
CIS 119	Intro. to Programming	3	72
CIS 130	Intro. to the Internet	3	72
CIS 131	Intro. to Web Authoring	3	72
CIS 132	Intermediate Web Authoring	2	48
CIS 133	Advanced Web Authoring	3	72
CIS 134	Web Page Layout & Design (Capstone)	3	72
	or		
CIS 297	Cooperative Work Experience	(3)	(135)
CIS 175	Intro. to Telecommunications	3	72
CIS 181	Digital Image Editing	2	48
CIS 182	Digital Video Editing	2	48
CIS 183	Digital Sound Editing	1	24
CIS 200	LAN Concepts	2	48
PSY 115	Psychology of Adjustment	2	48
Total		38	912-975

Associate of Applied Science Degree in Computer Information Systems Computer Specialist Business Emphasis

General Education Requirements (see page 44)

Select 28 credits from the following:		28	420
CIS 138	Business Applications on the WWW	(3)	(45)
CIS 145	Database Concepts	(3)	(45)
CIS 155	Spreadsheet Concepts	(3)	(45)
CIS 156	Advanced Spreadsheets	(3)	(45)
CIS 276	Systems Analysis & Design	(3)	(45)
ACC 113	Computerized Accounting	(4)	(60)
ACC 121	Accounting Principles I	(4)	(60)
BTE 151	WordPerfect	(3)	(45)
	or		
BTE 152	Microsoft Word	(3)	(45)
BTE 251	Advanced Word Processing	(3)	(67)
BUS 115	Intro. to Business	(3)	(45)

Associate of Applied Science Degree in Computer Information Systems Computer Specialist Programming Emphasis

General Education Requirements (see page 44)

CIS 166	Visual BASIC Programming	3	45
CIS 167	Programming in C++	3	45
CIS 260	COBOL Programming	3	45
Select 2 or more courses from the following:		5-6	75-90
CIS 131	Intro. to Web Authoring	(3)	(45)
CIS 168	JAVA Programming	(3)	(45)
CIS 212	UNIX	(3)	(45)
CIS 261	Advanced COBOL Programming	(3)	(45)
CIS 263	CICS/COBOL Programming	(3)	(45)
CIS 266	Advanced Visual BASIC Programming	(3)	(45)
CIS 269	On-line Program Development	(2-3)	(30-45)
CIS 277	Operating Systems & JCL	(3)	(45)
Select an additional 15 or more credit hours of CIS courses with CIS advisor approval.		15	225

Certificate in Computer Information Systems Computer Specialist

This program is designed to train students in microcomputer use and operations, with a focus on the currently popular software packages used by business and industry.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.

Major Requirements		Credits	Contacts
CIS 110	Intro. to PC Operation Systems	2	45
CIS 119	Intro. to Programming	3	45
CIS 130	Intro. to the Internet	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 175	Intro. to Telecommunications	3	45
CIS 200	Local Area Networking Concepts	2	45
CIS 285	Computer Capstone	1	23
Select any 9-13 credits from the following:		9-13	135-195
CIS 112	Intro. to Windows	(2)	(45)
CIS 117	Computer Access Methods for the Disabled	(2)	(45)
CIS 131	Intro. to Web Authoring	(3)	(45)
CIS 132	Intermediate Web Authoring	(2)	(45)
CIS 133	Advanced Web Authoring	(3)	(45)
CIS 134	Web Page Layout & Design	(3)	(45)
CIS 135	Graphics Technology	(2)	(45)
CIS 138	Business Applications on the WWW	(3)	(45)
CIS 140	Intro. to PC Databases	(2)	(45)
CIS 142	Advanced PC Databases	(2)	(45)
CIS 145	Database Concepts	(3)	(45)
CIS 150	Intro. to PC Spreadsheets	(2)	(45)
CIS 152	Advanced PC Spreadsheets	(2)	(45)
CIS 155	Spreadsheet Concepts	(3)	(45)
CIS 156	Advanced Spreadsheets	(3)	(45)
CIS 166	Visual BASIC Programming	(3)	(45)
CIS 167	Programming in C++	(3)	(45)
CIS 168	JAVA Programming	(3)	(45)

CIS 179	Software/Systems Survey	(3)	(45)
CIS 180	Intro. to Multimedia Technology	(3)	(45)
CIS 181	Digital Image Editing	(2)	(48)
CIS 182	Digital Video Imaging	(2)	(48)
CIS 183	Digital Sound Editing	(1)	(24)
CIS 190	Speech Dictation Applications	(1-2)	(15-30)
CIS 212	UNIX	(3)	(45)
CIS 220	PC Data Recovery & Software Repair	(3)	(45)
CIS 226	Computer Diagnosis & Repair	(3)	(45)
CIS 227	A+ Certification Preparation	(1)	(22)
CIS 254	Windows NT Workstation	(4)	(60)
CIS 255	Novell 4x Administration	(4)	(60)
CIS 256	Novell 3x Administration	(3)	(67)
CIS 257	Advanced Novell Administration	(4)	(60)
CIS 258	Windows NT Server	(4)	(60)
CIS 260	COBOL Programming	(3)	(45)
CIS 261	Advanced COBOL Programming	(3)	(45)
CIS 263	CICS/COBOL Programming	(3)	(45)
CIS 266	Advanced Visual BASIC Programming	(3)	(45)
CIS 269	On-line Program Development	(2-3)	(30-45)
CIS 276	Systems Analysis & Design	(3)	(45)
CIS 277	Operating Systems & JCL	(3)	(45)
CIS 297	Cooperative Education	(2-3)	(45)
BTE 100	Intro. to Keyboarding	(3)	(68)
	or		
BTE 102	Basic Keyboarding Applications	(2)	(45)
BTE 151	WordPerfect	(3)	(45)
	or		
BTE 152	Microsoft Word	(3)	(45)
BTE 251	Advanced Word Processing	(3)	(67)
Total		26	428-488

Associate of Applied Science Degree
in Computer Information Systems
PC Specialist/LAN Administrator (Auraria Campus)
Computer Training for People with Disabilities

This AAS degree program begins each summer and is specifically designed to train selected disabled persons for entry-level positions as PC Specialists/LAN Administrators. It is designed for students seeking the associate degree and who are willing to comply with industry and educational standards for entry-level employment.

Applications should be submitted by March 1. Admissions information may be obtained from the Center for Persons with Disabilities, 303-556-3300.

Students are selected into this program based on screening, selection and admission test scores.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Successful completion of a computer aptitude test battery.
3. Personal interview with members of the business advisory council.
4. Students with a disability requiring adaptive equipment must be functioning at a professional level. Skills are assessed and evaluated by the CTPD director.

General Education Requirements (see page 44)

Business Core		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
General Education Requirements			
CIS 118	Intro. to PC Applications	4	68
ECO 201	Principles of Macro Economics	3	45
ENG 121	English Composition I	3	45
	or		
ENG 131	Technical Writing I		
MAT 103	Contemporary College Mathematics	3	45
SPE 115	Principles of Speech	3	45
CIS Courses			
CIS 119	Intro. to Programming (with permission of CIS advisor)	3	45
CIS 145	Database Concepts	3	45
CIS 155	Spreadsheet Concepts	3	45
CIS 167	Programming in C++	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 175	Intro. to Telecommunications	3	45
CIS 179	Software/Systems Survey	3	45
CIS 218	Advanced PC Applications	2	45
CIS 226	Computer Diagnosis & Repair	3	45
CIS 241	Oracle	3	45
CIS 257	Advanced Novell Administration	4	60
CIS 258	Windows NT Server	4	60
CIS 260	COBOL Programming	3	45
CIS 276	Systems Analysis & Design	3	45
CIS 297	Cooperative Education/Internship (Capstone)	6	135
Total		75	1193

Certificate in Computer Information Systems
PC Specialist/LAN Administrator (Auraria Campus)

This program serves the general student population, but is designed, developed, and operated for and by the nationally recognized and award-winning Computer Training for People with Disabilities (CTPD) program. The certificate program prepares students for careers as PC specialists, emphasizing the LAN Administration. This is a fast-track program that can be completed in 13 months or more depending on the semester the student begins the curriculum and the amount of remediation and adaptation skill development required. The program has a fall and spring semester curriculum Students must have completed the "prerequisites to the fall semester" and are encouraged to complete the gen-

eral education requirements prior to beginning the fall and spring curriculum. Applications should be submitted by May 1.

Students with disabilities are encouraged to make application to the CTPD program, which offers special services, support and placement for program participants. Application information may be obtained from the Center for Persons with Disabilities, South Classroom Building, room 134, or by phone at 303-556-3300.

All students must satisfy the following program admission requirements prior to beginning the program.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and math at level 2b or completion of MAT 103 with a C or better.
2. Successful completion of a computer aptitude test battery.
3. Personal interview with members of the business advisory council.
4. Students with a disability requiring adaptive equipment must be functioning at a professional level. Skills are assessed and evaluated by the CTPD director.

Business Core		Credits	Contacts
ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 217	Business Communications	3	45
CIS Courses			
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming	3	45
CIS 145	Database Concepts	3	45
CIS 155	Spreadsheet Concepts	3	45
CIS 167	Programming in C++	3	45
CIS 170	Microcomputer Hardware	3	45
CIS 175	Intro. to Telecommunications	3	45
CIS 179	Software/Systems Survey	3	45
CIS 218	Advanced PC Applications	2	45
CIS 226	Computer Diagnosis & Repair	3	45
CIS 241	Oracle	3	45
CIS 257	Advanced Novell Administration	4	60
CIS 258	Windows NT Server	4	60
CIS 260	COBOL Programming	3	45
CIS 276	Systems Analysis & Design	3	45
CIS 297	Cooperative Education/Internship (Capstone)	6	270
Total		63	1148

PC Repair Specialist Certificate
TEC North, TEC East, TEC West

PC Repair Specialist is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students with job-entry skills necessary to install PC applications; use E-mail, the Internet and the World Wide Web; use Basic programming; and perform PC repairs, install PC upgrades and obtain A+ Certification. Graduates are prepared to enter positions as PC repair specialists.

All XpressTrain PC Repair Specialist certificate program credits apply toward the requirements of the WorkTrain NT Network Specialist certificate program.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
CIS 110	Intro. to PC Operation Systems	2	48
CIS 112	Intro. to Windows	2	48
CIS 118	Intro. to PC Applications	3	72
CIS 119	Intro. to Programming	3	72
CIS 130	Intro. to the Internet	3	72
CIS 170	Microcomputer Hardware	3	72
CIS 175	Intro. to Telecommunications	3	72
CIS 200	LAN Concepts	2	48
CIS 226	Computer Diagnosis and Repair (Capstone)	3	72
CIS 227	A+ Certification Preparation	1	24
PSY 115	Psychology of Adjustment	2	48
Total		27	648

PC Help Desk Specialist Certificate
TEC North, TEC East, TEC West

PC Help Desk Specialist is a WorkTrain program designed for completion in two, 17-week semesters. It prepares students with job-entry skills necessary to install PC applications; use and instruct others to use Microsoft Office Word, Access, Excel and Power Point applications; and use E-mail, the Internet and the World Wide Web. Students also use Basic programming; perform PC repairs, install PC upgrades and obtain A+ Certification; and function in a PC help desk environment providing problem-solving assistance and guidance to internal or external customers. Graduates are prepared to enter positions as PC help desk specialists and PC applications/support specialists.

The 38 credits listed below in the WorkTrain PC Help Desk Specialist certificate program apply toward the requirements of the AAS degree in Computer Information Systems, Computer Specialist.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
BTE 102	Basic Keyboard Applications	2	48
BTE 152	Microsoft Word	3	72
CIS 110	Intro. to PC Operation Systems	2	48
CIS 112	Intro. to Windows	2	48
CIS 118	Intro. to PC Applications	3	72
CIS 119	Intro. to Programming	3	72
CIS 130	Intro. to the Internet	3	72
CIS 135	Graphics Technology	2	48
CIS 140	Intro. to PC Databases	2	48
CIS 150	Intro. to PC Spreadsheets	2	48
CIS 170	Microcomputer Hardware	3	72
CIS 200	LAN Concepts	2	48
CIS 226	Computer Diagnosis and Repair	3	72
CIS 227	A+ Certification	1	24
CIS 228	PC Help Desk Skills (Capstone)	3	72
	or		
CIS 297	Cooperative Work Experience	(3)	(135)
PSY 115	Psychology of Adjustment	2	48
Total		38	912-975

Computer Science

Associate of Science Degree
with a Computer Science Emphasis

See page 41 for complete AS degree information.

Courses shown in Bold meet core requirements.

General Education Requirements (see page 41)

		Credits	Contacts
CIS 118	Intro. to PC Applications	4	68
CSC 160	C++ Programming I	3	45
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 135	Intro. to Statistics	3	45
MAT 201	**Calculus I**	**5**	**75**
MAT 202	**Calculus II**	**5**	**75**
PHY 211	**Physics: Calculus-Based I**	**5**	**105**
PHY 212	**Physics: Calculus-Based II**	**5**	**105**
Total		37	623
Recommended:			
CHE 111	General College Chemistry I	5	105

Drafting

Associate of Applied Science Degree
in Drafting for Industry

The AAS Drafting for Industry includes five emphases: Civil/Topographic, Mechanical, Structural, Process Piping and Electrical. All drafting exit competencies in all drafting programs will be measured by portfolio review at the end of the program. This program also allows students to transfer readily into a Bachelor of Science degree program to major in Technical and Industrial Administration.

Associate of Applied Science Degree
in Drafting for Industry
Civil/Topographic Emphasis

Drafting for Industry, Civil/Topographic emphasis, prepares students for job-entry positions on drafting teams for local, state and federal government agencies and petroleum, geological, civil engineering, mineral development and planning companies.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Completion of DRI 105 and 106 with a C or better.

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
AAS requirements in Arts, Humanities and Social Studies		5	75
Major Requirements			
DRI 105	Intro. to Drafting	5	113
CAD 110	Computer-Aided Drafting I	3	68
DRI 106	Dimensioning & Tolerancing	2	45
DRI 107	Geometric Tolerancing	2	45
DRI 109	Pictorial Drawing	2	45
DRI 111	Descriptive Geometry & Auxiliary Views	2	45
DRI 113	Intersections & Developments	3	68
DRI 116	Mechanical Detail Drafting	5	113
DRI 200	Intro. to Civil/Topographic Drafting	3	68
DRI 203	Intro. to Architectural Drafting	3	68
DRI 205	Intro. to Process Pipe Drafting	2	45
DRI 207	Intro. to Structural Drafting	2	45
DRI 209	Intro. to Electrical Drafting	2	45
DRI 230	Civil/Topographic Drafting I	8	180
DRI 235	Civil/Topographic Drafting II (Capstone)	4	90
Total		63	1323

With permission of the program faculty, DRI 297 Cooperative Education (variable credit) and DRI 299 Independent Study (variable credit) may be used in place of other drafting courses.

Associate of Applied Science Degree
in Drafting for Industry
Electrical Emphasis

Drafting for Industry, Electrical emphasis, prepares students for job-entry positions on drafting and design teams in electrical, architectural and mechanical engineering firms.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Completion of DRI 105 and 106 with a C or better.

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
AAS requirements in Arts, Humanities and Social Studies		5	75
Major Requirements			
DRI 105	Intro. to Drafting	5	113
CAD 110	Computer-Aided Drafting I	3	68
DRI 106	Dimensioning & Tolerancing	2	45
DRI 107	Geometric Tolerancing	2	45
DRI 109	Pictorial Drawing	2	45
DRI 111	Descriptive Geometry & Auxiliary Views	2	45
DRI 113	Intersections & Developments	3	68
DRI 116	Mechanical Detail Drafting	5	113
DRI 200	Intro. to Civil/Topographic Drafting	3	68
DRI 203	Intro. to Architectural Drafting	3	68
DRI 205	Intro. to Process Pipe Drafting	2	45
DRI 207	Intro. to Structural Drafting	2	45
ELT 100	DC Fundamentals	3	68
ELT 102	AC Fundamentals	2	45
DRI 209	Intro. to Electrical Drafting	2	45
DRI 260	Electrical Drafting (Capstone)	6	136
Total		62	1302

With permission of the program faculty, DRI 297 Cooperative Education (variable credit) and DRI 299 Independent Study (variable credit) may be taken in place of other drafting courses.

Associate of Applied Science Degree in Drafting for Industry
Mechanical Emphasis

Drafting for Industry, Mechanical emphasis, prepares students for job-entry positions on drafting teams in industrial plants, engineering and manufacturing firms and governmental agencies.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Completion of DRI 105 and 106 with a C or better.

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
AAS requirements in Arts, Humanities and Social Sciences		5	75
Major Requirements			
DRI 105	Intro. to Drafting	5	113
CAD 110	Computer-Aided Drafting I	3	68
DRI 106	Dimensioning & Tolerancing	2	45
DRI 107	Geometric Tolerancing	2	45
DRI 109	Pictorial Drawing	2	45
DRI 111	Descriptive Geometry & Auxiliary Views	2	45
DRI 113	Intersections & Developments	3	68
DRI 116	Mechanical Detail Drafting	5	113
DRI 200	Intro. to Civil/Topographic Drafting	3	68
DRI 203	Intro. to Architectural Drafting	3	68
DRI 205	Intro. to Process Pipe Drafting	2	45
DRI 207	Intro. to Structural Drafting	2	45
DRI 209	Intro. to Electrical Drafting	2	45
DRI 220	Advanced Mechanical Drafting I	8	180
DRI 225	Advanced Mechanical Drafting II (Capstone)	4	90
Total		63	1323

With permission of the program faculty, DRI 297 Cooperative Education (variable credit), and DRI 299 Independent Study (variable credit) may be taken in place of other drafting courses.

Associate of Applied Science Degree in Drafting for Industry
Process Piping Emphasis

Drafting for Industry, Process Piping emphasis, prepares students for job-entry positions on drafting and design teams in the petro/chemical industry, and design, engineering and manufacturing firms that supply that industry.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Completion of DRI 105 and 106 with a C or better.

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
AAS requirements in Arts, Humanities and Social Sciences		5	75
Major Requirements			
DRI 105	Intro. to Drafting	5	113
CAD 110	Computer-Aided Drafting I	3	68
DRI 106	Dimensioning & Tolerancing	2	45
DRI 107	Geometric Tolerancing	2	45
DRI 109	Pictorial Drawing	2	45
DRI 111	Descriptive Geometry & Auxiliary Views	2	45
DRI 113	Intersections & Developments	3	68
DRI 116	Mechanical Detail Drafting	5	113
DRI 200	Intro. to Civil/Topographic Drafting	3	68
DRI 203	Intro. to Architectural Drafting	3	68
DRI 205	Intro. to Process Piping Drafting	2	45
DRI 207	Intro. to Structural Drafting	2	45
DRI 209	Intro. to Electrical Drafting	2	45
DRI 250	Process Pipe Drafting I	8	180
DRI 255	Process Piping Drafting II (Capstone)	4	90
Total		63	1323

With permission of the program faculty, DRI 297 Cooperative Education (variable credit) and DRI 299 Independent Study (variable credit) may be taken in place of other drafting courses.

Associate of Applied Science Degree in Drafting for Industry
Structural Emphasis

Drafting for Industry, Structural emphasis, prepares students for job-entry positions on drafting and design teams for local, state and federal government agencies; civil, architectural and mechanical engineering firms; and petroleum, mineral and planning firms.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Completion of DRI 105 and 106 with a C or better.

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
AAS requirements in Arts, Humanities and Social Studies		5	75
Major Requirements			
DRI 105	Intro. to Drafting	5	113
CAD 110	Computer-Aided Drafting I	3	68
DRI 106	Dimensioning & Tolerancing	2	45
DRI 107	Geometric Tolerancing	2	45
DRI 109	Pictorial Drawing	2	45
DRI 111	Descriptive Geometry & Auxiliary Views	2	45
DRI 113	Intersections & Developments	3	68
DRI 116	Mechanical Detail Drafting	5	113
DRI 200	Intro. to Civil/Topographic Drafting	3	68
DRI 203	Intro. to Architectural Drafting	3	68
DRI 205	Intro. to Process Pipe Drafting	2	45
DRI 207	Intro. to Structural Drafting	2	45
DRI 209	Intro. to Electrical Drafting	2	45
DRI 240	Structural Drafting I	8	180
DRI 245	Structural Drafting II (Capstone)	4	90
Total		64	1323

With permission of the program faculty, DRI 297 Cooperative Education (variable credit) and DRI 299 Independent Study (variable credit) may be taken in place of other drafting courses.

Certificate in Computer-Aided Drafting (CAD)

The Computer-Aided Drafting (CAD) certificate program prepares students for entry positions as CAD operators in industrial plants, engineering firms, manufacturing firms and government agencies.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2 or completion of MAT 035 with a C or better.
2. Completion of DRI 105, 106, and CAD 110 with a C or better.

		Credits	Contacts
DRI 105	Intro. to Drafting	5	113
DRI 106	Dimensioning & Tolerancing	2	40
CAD 110	Computer-Aided Drafting I	3	68
CAD 111	Computer-Aided Drafting II	3	60
CIS 118	Intro. to PC Applications	4	68
ENG 131	Intro. to Technical Writing I	3	45
CAD 210	Computer-Aided Drafting III	3	60
JSW 295	Job Search Workshop	1	15
CAD 211	Computer-Aided Drafting IV (Capstone)	3	60
Total		27	529

The DRI 105 Intro. to Drafting and DRI 106 Dimensioning and Tolerancing can be waived with proof of prior experience in the drafting field.

Certificate in Drafting for Industry

The Drafting for Industry certificate program prepares students for entry positions on drafting teams in industrial plants, engineering and manufacturing firms and government agencies.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2 or completion of MAT 035 with a C or better.
2. Completion of DRI 105 and 106 with a C or better.

		Credits	Contacts
DRI 105	Intro. to Drafting	5	113
CAD 110	Computer-Aided Drafting I	3	68
DRI 106	Dimensioning & Tolerancing	2	40
DRI 107	Geometric Tolerancing	2	40
DRI 109	Pictorial Drawing	2	40
DRI 111	Descriptive Geometry & Auxiliary Views	2	40
DRI 113	Intersections & Developments	3	60
JSW 295	Job Search Workshop	1	15
DRI 116	Mechanical Detail Drafting (Capstone)	5	113
Total			529

Early Childhood Education

(see Teacher Education)

Earth Science

Associate of Science Degree with a Earth Science Emphasis

See page 41 for complete AS degree information.

Courses shown in Bold meet core requirements.

General Education Requirements (see page 41)

		Credits	Contacts
BIO 112	**General College Biology II**	**(5)**	**(90)**
GEY 111	**Physical Geology**	**(4)**	**(60)**
GEO 105	**Geography**	**(3)**	**(45)**
BIO 118	Human Ecology & the Environment		
	or		
GEO 200	Human Ecology	(3)	(45)
	or		
GEY 225	Planet Earth	(3)	(45)
Total		13-14	195-225

Economics

Associate of Arts Degree with a Economics Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
ECO 105	Intro. to Economics	3	45
ECO 201	Principles of Macro Economics	3	45
ECO 202	Principles of Micro Economics	3	45
Total		9	135

Electronics Technology

Associate of Applied Science Degree in Electronics Technology

This program prepares students with job-entry skills in assembly, testing, repair and maintenance of electronic equipment. Basic knowledge is provided to advance students into more detailed and specific areas with further training and experience. This program also allows students to readily transfer into a Bachelor of Science degree program to major in Technical and Industrial Administration.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Complete ELT 100 and 101 with a C or better.

General Education Requirements		Credits	Contacts
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
SPE 115	Principles of Speech	3	45
ENG 131	Technical Writing I (must be completed in first 2 semesters)	3	45
CIS 118	Intro. to PC Applications	4	68
Major Requirements			
ELT 100	DC Fundamentals	3	68
ELT 101	DC Circuits & Magnetism	2	45
ELT 102	AC Fundamentals	2	45
ELT 103	AC Circuits	3	68
ELT 104	Complex Circuit Analysis	3	68
ELT 110	Diode Circuits	3	68
ELT 111	Transistor Amplifiers	3	68
ELT 112	JFET's & Oscillators	2	45
ELT 114	IC Operational Amplifiers	3	68
ELT 200	Pulse & Digital Fundamentals	3	68
ELT 201	Digital Circuits	3	68
ELT 202	Microprocessor Fundamentals	2	45
ELT 203	Microprocessor & Microcomputer Systems	3	68
ELT 210	Communications I	3	68
ELT 211	Instruments & Measurements I	3	68

ELT 285	Troubleshooting Techniques for Analog & Digital Systems (Capstone)	5	113
Total		63	1319

Certificate in Electronics Technology
Principles of Electronics
The electronics certificate options offer the opportunity for specialization and skills upgrading. All courses have a prerequisite of the preceding course or proof of competency.

Program Admission Requirements
1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2 or completion of MAT 035 with a C or better.
2. Completion of ELT 100 and 101 with a C or better.

		Credits	Contacts
ELT 100	DC Fundamentals	3	68
ELT 101	DC Circuits & Magnetism	2	45
ELT 102	AC Fundamentals	2	45
ELT 103	AC Circuits	3	68
ELT 104	Complex Circuit Analysis	3	68
ELT 110	Diode Circuits	3	68
ENG 100	Composition Style & Technique	3	45
	or		
ENG 131	Intro. to Technical Writing I (recommended)		
MAT 103	Contemporary College Mathematics	3	45
ELT 111	Transistor Amplifiers (Capstone)	3	68
Total		25	520

Certificate in Electronics Technology
Advanced Solid State, Digital & IC Principles
The electronics certificate options offer the opportunity for specialization and skills upgrading. All courses have a prerequisite of the preceding course or proof of competency.

Program Admission Requirements
1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2 or completion of MAT 035 with a C or better.
2. Completion of ELT 100 and 101 with a C or better.

		Credits	Contacts
ELT 112	JFETs & Oscillators	2	45
ELT 114	Operational Amplifiers	3	68
MAT 103	Contemporary College Mathematics	3-4	45-60
	or		
MAT 121	College Algebra (recommended)		
PHY 105	Conceptual Physics	4	75
ELT 200	Pulse & Digital Fundamentals	3	68
ELT 201	Digital Circuits	3	68
ELT 202	Microprocessor Fundamentals	2	45
ELT 203	Microprocessor & Microcomputer Systems (Capstone)	3	68
ENG 131	Intro. to Technical Writing I	3	45
Total		26-27	527-542

Certificate in Electronics Technology
Broadcast Technologist
This program prepares the student for entry level positions in the broadcast industry. Job titles include master control operator, production technician, video production assistant and maintenance technician.

		Credits	Contacts
ELT 100	DC Fundamentals	3	68
ELT 101	DC Circuits & Magnetism	2	45
ELT 102	AC Fundamentals	2	45
COM 251	Intro. to Television Production	3	45
CIS 118	Intro. to PC Applications	4	68
ELT 217	Basic Television & Video Systems (Capstone)	3	68
Select 9 credits from the following:		9	225-315
SPE 115	Principles of Speech	(3)	(45)
ENG 131	Intro. to Technical Writing I	(3)	(45)
ELT 297	Cooperative Education	(3-6)	(135-270)
Total		26	564-654

Engineering

Associate of Science Degree
Engineering Cluster
See page 41 for complete AS degree information.
Courses shown in Bold meet core requirements.

General Education Requirements (see page 41)

PRE-ENGINEERING GENERAL EMPHASIS		Credits	Contacts
MAT 201	**Calculus I**	**5**	**75**
MAT 202	**Calculus II**	**5**	**75**
MAT 203	Calculus III	4	60
MAT 3191	Applied Linear Algebra (CU-Denver)	3	45
MAT 3200	Elementary Differential Equations (CU-Denver)	3	45
CHE 111	**General College Chemistry I**	**5**	**105**
PHY 211	**Physics: Calculus-Based I**	**5**	**105**
PHY 212	**Physics: Calculus-Based II**	**5**	**105**
Total		35	615

ALSO REQUIRED FOR APPLIED MATHEMATICS MAJORS:

CSC 150	PASCAL Programming	3	45
ENGR 1025	Engineering Graphics/CAD (CU-Denver)	3	45

ALSO REQUIRED FOR COMPUTER SCIENCE MAJORS:

CSC 150	PASCAL Programming	3	45
CSC 2421	Data Structures & Program Design (CU-Denver)	3	45
CSC 1510	Logic Design (CU-Denver)	3	45

ALSO REQUIRED FOR ELECTRICAL ENGINEERING MAJORS:

CSC 150	PASCAL Programming	3	45
CSC 1510	Logic Design (CU-Denver)	3	45
ME 2023	Statics (CU-Denver)	3	45
ME 2033	Dynamics (CU-Denver)	3	45

ALSO REQUIRED FOR CIVIL ENGINEERING MAJORS:

GEY 111	Physical Geology	4	60
CSC 1100	Computing with FORTRAN (CU-Denver)	3	45
ENGR 1025	Engineering Graphics/CAD (CU-Denver)	3	45
CE 2121	Analytical Mechanics I (CU-Denver)	3	45

ALSO REQUIRED FOR MECHANICAL ENGINEERING MAJORS:

CSC 1100	Computing with FORTRAN (CU-Denver)	3	45
ENGR 1025	Engineering Graphics/CAD (CU-Denver)	3	45
ME 2023	Statics (CU-Denver)	3	45
ME 2033	Dynamics (CU-Denver)	3	45

English/Literature

Associate of Arts Degree
with a English/Literature Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
Select 4 courses, at least 2 of which are ENG:		12	180
ENG 131	Technical Writing I	(3)	(45)
ENG 221	Creative Writing I	(3)	(45)
ENG 222	Creative Writing II	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
LIT 201	Masterpieces of Literature I	(3)	(45)
LIT 202	Masterpieces of Literature II	(3)	(45)
Total		12	180

Environmental and Regrigeration Technology

Associate of Applied Science Degree
in Environmental and Refrigeration Technology
Commercial/Industrial Refrigeration,
Heating and Air Conditioning
Auraria

This program on the Auraria Campus prepares students with job-entry skills in the fields of commercial-industrial refrigeration, heating and air conditioning. Demonstrated mastery of skills is required. Programs are open-entry/open-exit. Students may complete some of the courses, enter the workforce, then return at any time to either complete the program for a certificate or degree or to upgrade specific skills. To satisfy the requirements for an associate degree, the RAC courses must be taken in the listed sequence. Exit competencies will be measured by a comprehensive examination and final "hands-on" project assigned by the instructor. This program also allows students to readily transfer into a Bachelor of Science degree program, majoring in Technical and Industrial Administration.

There are two degree options: Commercial Refrigeration Technician and Environmental Controls Technician.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Complete RAC 111 and 112 with a C or better.

COMMERCIAL REFRIGERATION TECHNICIAN OPTION

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45
PHY 105	Conceptual Physics	4	75
SPE 115	Principles of Speech	3	45
SOC 101	Intro. to Sociology	3	45
Major Requirements			
CAD 100	Commercial Blueprints & Computer-Aided Drafting	3	68
CIS 118	Intro. to PC Applications	4	68
ELT 113	Waveforms, Harmonics & Direct Digital Sensors	2	45
RAC 111	Electricity & Electronics I	4	68
RAC 112	Electricity & Electronics II	2	45
RAC 114	Fundamentals of Refrigeration I	2	45
RAC 116	Fundamentals of Refrigeration II	3	68
RAC 200	Refrigeration Systems, Components & Applications	3	68
RAC 205	Heat Loads & System Development	2	45
RAC 208	Special Refrigeration Systems	2	68
RAC 211	Installation & Service Refrigeration Systems	3	68
RAC 212	Fundamentals of Air Conditioning	3	68
RAC 214	Unitary & Central Station Systems	3	68
RAC 215	Air Flow Principles & Distribution	2	45
RAC 216	HVAC Control Systems	3	68
RAC 285	Air Conditioning Troubleshooting & Servicing (Capstone)	4	90
RAC 297	Cooperative Education	4	120
Total		65	1370

ENVIRONMENTAL CONTROLS TECHNICIAN OPTION

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I	3	45
MAT 103	Contemporary College Mathematics	3	45

PHY 105	Conceptual Physics	4	75
SPE 115	Principles of Speech	3	45
SOC 101	Intro. to Sociology	3	45
Major Requirements			
CAD 100	Commercial Blueprints & Computer-Aided Drafting	3	68
CIS 118	Intro. to PC Applications	4	68
CIS 119	Intro. to Programming	3	45
CIS 130	Intro. to the Internet	3	45
RAC 111	Electricity & Electronics I	4	68
RAC 112	Electricity & Electronics II	2	45
RAC 114	Fundamentals of Refrigeration I	2	45
RAC 116	Fundamentals of Refrigeration II	3	68
RAC 200	Refrigeration Systems, Components & Applications	3	68
RAC 205	Heat Loads & System Development	2	45
RAC 212	Fundamentals of Air Conditioning	3	68
RAC 215	Air Flow Principles & Distribution	2	45
RAC 216	HVAC Control Systems	3	68
*RAC 275	Direct Digital Control Systems	1	23
*RAC 276	Metasys: HVAC Application Specific Controller Engineering	2	45
*RAC 277	Metasys DX-9100 Engineering	2	45
*RAC 278	Metasys Companion Facility Operators	1	23
*RAC 279	Metasys Facility Operators	2	45
RAC 297	Cooperative Education	4	120
*Johnson Controls Courses			
Total		64	1302

Certificate in Environmental and Refrigeration Technology
Refrigeration and Air Conditioning
Auraria

Programs are open-entry/open-exit. Students may complete some of the courses, enter the workforce, then return at any time to either complete the program for a certificate or degree or upgrade specific skills. Students may waive 100-level courses with prior knowledge and experience. The advanced placement credit is by portfolio and must be approved by the instructor. To satisfy the requirements for a certificate, the following courses must be taken in the listed sequence.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 1; and
   d. math at level 2 or completion of MAT 035 with a C or better.
2. Completion of RAC 111 and 112 or equivalent with a C or better.

This program prepares the student with job-entry skills in the fields of commercial-industrial refrigeration, heating and air conditioning. Job skills cover installation, maintenance and servicing. Job titles include HVAC maintenance technician, environmental control technician and refrigeration maintenance technician.

		Credits	Contacts
RAC 111	Electricity & Electronics I	3	68
RAC 112	Electricity & Electronics II	2	45
RAC 114	Fundamentals of Refrigeration I	2	45
RAC 116	Fundamentals of Refrigeration II	3	68
RAC 200	Refrigeration Systems, Components & Applications	3	68
RAC 205	Heat Loads & System Development	2	45
RAC 208	Special Refrigeration Systems	3	68
RAC 211	Installation & Service Refrigeration Systems	3	68
RAC 212	Fundamentals of Air Conditioning	3	68
RAC 214	Unitary & Central Station System	3	68
RAC 215	Air Flow Principles & Distribution	2	45
RAC 216	HVAC Control Systems	3	68
JSW 295	Job Search Workshop	1	20
RAC 285	Air Conditioning Troubleshooting & Servicing (Capstone)	4	90
Total		37	834

Gerontology

Associate of Arts degree in Gerontology
(See Behavioral Sciences)

Certificate in Gerontology

CCD offers the only gerontology certificate program at the community college level in Colorado. Gerontology is the study of aging from an interdisciplinary perspective. Gerontologists include practitioners from such diverse fields as nursing, dentistry, physical and occupational therapy, real estate, human services and social work. Nursing and human services students would do well to add the gerontology certificate to their course work; behavioral sciences majors can emphasize gerontology in their degree plan.

All interested persons should call 303-556-3891 for an appointment with the gerontology program coordinator.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.

Major Requirements		Credits	Contacts
GNT 201	Intro. to Gerontology	3	45
GNT 213	Psychology of Aging	3	45

GNT 221	Overview of Programs & Services	3	45
GNT 237	Death & Dying	3	45
GNT 285	Gerontology Practicum (Capstone)	3	45-90
Electives			
BIO 204	Physiological Aspects of Aging	(3)	(45)
GNT 101	Nutrition	(3)	(45)
GNT 214	Social Issues & Aging	(3)	(45)
GNT 215	Aging in a Diverse Society	(3)	(45)
GNT 295	Leadership Development	(3)	(45)
GNT 299	Independent Study		
Total		15	225-270

Graphics

Associate of Applied Science Degree in Graphic Arts (Printing)

This program prepares students with job-entry skills to accomplish most operations necessary on the process camera and the offset press. Students also will be able to work in basic bindery, stripping, general layout and composition, electronic page make up and prepress. On completion of the program, students will be equipped to enter positions with commercial print shops, trade shops, in-plant shops and any other operation requiring printers.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 2 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education Requirements		Credits	Contacts
ENG 131	Intro. to Technical Writing	3	45
MAT 103	Contemporary College Mathematics	3	45
PSY 101	General Psychology I	3	45
Select 1 course from the following AAS general education requirements: RT 151; LIT 115, 201, 202; MUS 120; CHN 101, JPN 101, SPA 101		3	45
Major Requirements			
GRA 101	Intro. to Graphic Arts & Traditional Layout	3	68
GRA 102	Electronic Composition Art & Copy Prep	3	68
GRA 103	Line & Halftone Photography	3	68
GRA 104	Digital Halftone Photography	3	68
SPE 115	Principles of Speech or	3	45-68
GRA 105	Resume & Portfolio		
GRA 111	Beginning Offset Presses	3	60
GRA 112	Stripping, Image Assembly, Platemaking & Inks	3	60
GRA 113	Paper & Ink Management & Print Production I	3	60
GRA 114	Intermediate Offset Press & Print Production II	3	60
GRA 201	Electronic Graphics	3	68
GRA 202	Electronic Page Layout	3	68
GRA 203	Electronic Scan & Color Theory	3	68
GRA 204	Electronic Prepress	3	68
GRA 205	Photo Manipulation & Portfolio	3	68
GRA 185	Bindery & Portfolio (Speech Intensive) or	3	60
GRA 285	Printers Portfolio & Advanced Printing Techniques (Capstone) (Speech Intensive)		
GRA 299	Independent Studies/GRA Internship	3-6	68-136
Total		60-63	1205-1296

Certificate in Graphics Arts Prepress

This program prepares students with job-entry skills to accomplish most operations necessary for the process camera, general layout and composition work. It also provides skills to use state-of-the-art electronic equipment for graphics, page make up, photo manipulation and scanning. On completing the program, students will be equipped to enter positions with desk-top publishing businesses, commercial print shops, trade shops and in-plant shops.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1 or completion of ENG 030 with a C or better;
   b. reading at level 1 or completion of REA 060 with a C or better;
   c. study skills at level 1 or completion of REA 060 with a C or better; and
   d. math at level 1 or completion of MAT 030 with a C or better.

		Credits	Contacts
GRA 101	Intro. to Graphic Arts & Traditional Layout	3	68
GRA 102	Electronic Composition, Art & Copy Preparation	3	68
GRA 103	Line & Halftone Photography	3	68
GRA 104	Digital Halftone Photography	3	68
GRA 105	Resume & Portfolio (Capstone)	3	68
GRA 201	Electronic Graphics	3	68
GRA 202	Electronic Page Layout	3	68
GRA 203	Electronic Scan & Color Theory	3	68
GRA 204	Electronic Prepress	3	68
GRA 205	Photo Manipulation & Portfolio	3	68
Total		30	680

Certificate in Graphic Arts
Printing

This program will prepare students with job-entry skills to accomplish most operations necessary on the process camera and the offset press, and to function in the areas of basic bindery, stripping, and general layout and composition work. Upon completing the program, students will be equipped to enter positions with commercial print shops, trade shops, in-plant shops and any other operation requiring printers.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 2 or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 2 or completion of MAT 030 with a C or better.

		Credits	Contacts
GRA 101	Intro. to Graphic Arts & Traditional Layout	3	68
GRA 102	Electronic Composition, Art & Copy Prep	3	68
GRA 103	Line & Halftone Photography	3	68
GRA 104	Digital Halftone Photography	3	68
GRA 105	Resume & Portfolio (Capstone)	3	68
GRA 111	Beginning Press Operations	3	60
GRA 112	Stripping, Image Assembly, Platemaking & Inks	3	60
GRA 113	Paper & Ink Management & Print Production I	3	60
GRA 114	Intermediate Offset Press & Print Production II	3	60
GRA 185	Bindery & Portfolio	3	60
Total		30	640

Associate of General Studies Degree:
MSCD/CU-Denver
Graphic Design (AGS-GRD)

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. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education AA Core		Credit Hours
I.	English ENG 121 English Composition I ENG 122 English Composition II	6
II.	Speech SPE 115 Principles of Speech	3
III.	Mathematics (any 1 of the following) MAT 121, 125, 135, 201, 202	3-5
IV.	Physical & Biological Sciences (any 1 of the following) AST 101, 102; BIO 105, 111, 112; CHE 101, 102, 111, 112; GEY 111, 112; PHY 105, 111, 112, 211, 212.	4
V.	Social & Behavioral Sciences (Select 9 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	9
VI.	Humanities (Select 9 credit hours from a minimum of 2 disciplines.) ART 110, 111, 112; HUM 121, 122, 123; LIT 115, 201, 202; FRE, SPA, JPN, MUS 120, 121, 122; PHI 111, 112, 113; THE 105, 211, 212	9
General Education Sub-Total		34-36
Major Requirements (MSCD ONLY)		
	*ART 111 Art History I	3
	*ART 112 Art History II	3
	ART 121 Drawing I	3
	ART 131 Design I	3
	ART 132 Design II	3
	GRD 100 Lettering & Typographic Design	3
	GRD 103 MAC Computer Art	3
	GRD 105 Advertising Typo. & Layout	3
	GRD 207 Gra. Design Prod. & Prepress II	3
Capstone Course		3
	GRD 285 Creative Graphic Design & Portfolio Preparation	

*Students who take ART 111 and ART 112 as General Education should add ART 122 and GRD 200.

Arts Subtotal		30
Total		64-66
Major Requirements (CU-Denver ONLY)		
ART 121	Drawing I	3
ART 131	Design I	3
ART 211	Painting I	3
GRD 100	Lettering & Typographic Design	3

GRD 103	MAC Computer Art	3
GRD 105	Advertising Typography & Layout	3
GRD 200	Advertising Design & Portfolio Preparation (Speech Intensive)	3
GRD 206	Graphic Design Production & Prepress I	3
GRD 207	Graphic Design Production & Prepress II	3
Capstone Course		
GRD 285	Creative Graphic Design & Portfolio Preparation	3
Arts Subtotal		30
Total		64-66

Associate of Applied Science Degree in Graphic Design

This program is designed to provide the skills necessary for entry into the field of graphic design. The graphic design profession involves graphic and advertising design, illustration, electronic output and prepress. The Graphic Design program allows students to develop basic skills common to all three specialties while developing an emphasis in one.

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

1. Assessment scores or course equivalents as follows:
   a. English at level 2 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education Requirements		Credits	Contacts
SPE 115	Principles of Speech	3	45
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics	3	45
Select AAS general education courses from 2 of the following 3 areas: Arts and Humanities; Physical and Biological Sciences; Social and Behavioral Sciences		6	90
Major Requirements			
ART 121	Drawing I	3	90
ART 131	Design I	3	90
GRD 100	Lettering & Typographic Design	3	90
GRD 103	MAC Computer Art	3	90
GRD 105	Advertising Typography & Layout	3	90
GRD 107	Rendering/Mixed Media	3	90
GRD 200	Advertising Design & Portfolio Preparation	3	90
GRD 203	Adobe Illustrator	3	90
GRD 206	Graphic Design Production & Prepress I	3	90
GRD 207	Graphic Design Production & Prepress II	3	90
GRD 209	Quark Express	3	90
GRD 220	PhotoShop	3	90
GRD 297	Graphic Design Internship	3	135
GRD 285	Creative Graphic Design & Portfolio Preparation (Capstone)	3	90
Select 2 courses from the following:		6	158-180
ART 122	Drawing II/Mixed Media	(3)	(90)
ART 132	Design II	(3)	(90)
ART 151	Fund. of Black & White Photography	(3)	(90)
ART 211	Painting I	(3)	(90)
MUM 101	Intro. to Multimedia	(3)	(68)
Total		63	1688-1710

Certificate in Graphic Design Computer Graphics

Courses in the certificate sequence are applicable to the AAS degree and normally can be completed in two semesters. Upon completion of major requirements, students may choose one of three emphases, each of which will prepare students for a career in graphic design. Instructor permission is required to omit GRD 102, which could be substituted with an elective. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 1b or completion of MAT 030 with a C or better.

Major requirements:		Credits	Contacts
ENG 100	Composition Style & Technique	3	45
ART 121	Drawing I	3	90
ART 131	Design I	3	90
GRD 100	Lettering & Typographic Design	3	90
GRD 102	Intro. to Macintosh	3	90
GRD 103	MAC Computer Art	3	90
GRD 105	Advertising Typography & Layout	3	90
Total		21	585
Select 2 courses with advisor approval:		6	158-180
ART 132	Design II	(3)	(90)
MUM 206	Fractal Painter I	(3)	(68)
GRD 203	Adobe Illustrator	(3)	(90)
GRD 220	PhotoShop	(3)	(90)
MUM 210	3-D Modeling & Animation	(3)	(90)
GRD 297	Graphic Design Internship	(3)	(135)

GRD 209	Quark Xpress on Macintosh (Capstone)	3	90
Total		30	855-900

Certificate in Graphic Design
Graphic Design

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. Instructor permission is required to omit GRD 102, which could be substituted with an elective. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 1b or completion of MAT 030 with a C or better.

Major requirements:		Credits	Contacts
ENG 100	Composition Style & Technique	3	45
ART 121	Drawing I	3	90
ART 131	Design I	3	90
GRD 100	Lettering & Typographic Design	3	90
GRD 102	Intro. to Macintosh	3	90
GRD 103	MAC Computer Art	3	90
GRD 105	Advertising Typography & Layout	3	90
Total		21	585
Select 2 courses with advisor approval:		6	180
ART 122	Drawing II/Mixed Media	(3)	(90)
GRD 209	Quark Xpress		
GRD 200	Advertising Design & Portfolio Prep.	(3)	(90)
GRD 206	Graphic Design Production & Prepress I	(3)	(90)
GRD 297	Graphic Design Internship	(3)	(135)
GRD 285	Creative Graphic Design & Portfolio Preparation (Capstone)	3	90
Total		30	855-900

Certificate in Graphic Design
Service Bureau

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. Instructor permission is required to omit GRD 102, which could be substituted with an elective. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 1b or completion of MAT 030 with a C or better.

Major requirements:		Credits	Contacts
ENG 100	Composition Style & Technique	3	45
ART 121	Drawing I	3	90
ART 131	Design I	3	90
GRD 100	Lettering & Typographic Design	3	90
GRD 102	Intro. to Macintosh	3	90
GRD 103	MAC Computer Art	3	90
GRD 105	Advertising Typography & Layout	3	90
Total		21	585
GRA 204	Electronic Prepress	3	68
Select 1 class with advisor approval:		3	90
GRD 200	Advertising Design & Portfolio Prep.	(3)	(90)
GRD 206	Graphic Design Production & Prepress I	(3)	(90)
GRD 209	Quark Xpress	(3)	(90)
GRD 297	Graphic Design Internship	(3)	(135)
GRA 203	Electronic Scan & Color Theory (Capstone)	3	68
Total		30	811-856

Health Related

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Clinical Medical Assistant
TEC East
(see Business Technology)

Clinical Medical Assistant Certificate
TEC East
(see Business Technology)

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Comprehensive Medical Assistant
TEC East
(see Business Technology)

Comprehensive Medical Assistant Certificate
TEC East
(see Business Technology)

Associate of Applied Science Degree in Dental Hygiene

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 March 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

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Submit the CCD application to the Office of Admissions, Registration and Records, South Classroom Building, room 133, on the Auraria Campus.
3. Submit a completed Dental Hygiene application form and packet. Dental Hygiene application packets can be requested by calling 365-7771.
4. Complete the following general education prerequisites with a grade of C or better. Science courses must show cumulative GPA of 2.8 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 the Office of 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.
6. 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.
7. Following acceptance into the program, the student must present documentation of health insurance, CPR Certification, and Dental and Medical Examination that includes up-to-date immunization records. More information on this subject will be sent to the applicant following acceptance into the program.

General Education Requirements

Must be completed with a grade of "C" or better. Science courses must show cumulative GPA of 2.8 or better prior to enrollment date:

		Credits	Contacts
ENG 121	English Composition I	3	45
BIO 201	Human Anatomy & Physiology I	4	75
BIO 202	Human Anatomy & Physiology II	4	75
BIO 205	Microbiology	4	60
CHE 106	General, Organic & Biochemistry	4	60
MAT 121	College Algebra	4	60
SOC 101	Intro. to Sociology	3	45
	or		
PSY 101	General Psychology I		
	or		
PSY 235	Psychology of Human Growth & Development		
SPE 115	Principles of Speech	3	45
NUT 100	Foundations of Nutrition	3	45
Total		32	510

First Semester		Credits	Contacts
DEH 101	Pre-Clinic Dental Hygiene Science	2	30
DEH 102	Pre-Clinic Care	2	60
DEH 103	Embryology & Histology	2	30
DEH 105	Dental Radiology	3	45
DEH 107	Head & Neck Anatomy	2	30
DEH 109	Dental Anatomy	3	45
DEH 111	Medical & Dental Emergencies	3	45
Second Semester			
DEH 150	Dental Hygiene Clinic Science I	2	30
DEH 152	Dental Hygiene Clinic Care I	3	135

DEH 154	Periodontology I	3	45
DEH 156	Applied Pharmacology	3	45
DEH 158	General & Oral Pathology	3	45
DEH 160	Preventive Dentistry	3	45
Total First Year		34	630

Third Semester		Credits	Contacts
DEH 201	Dental Hygiene Clinic Science II	2	30
DEH 203	Dental Hygiene Clinic Care II	4	180
DEH 205	Dental Materials	3	45
DEH 209	Local & Regional Dental Anesthesiology	3	45
DEH 211	Community Dental Health	3	45
Fourth Semester			
DEH 250	Clinic Science III	2	30
DEH 252	Clinic Care III (Capstone)	4	180
DEH 254	Periodontology II	3	45
DEH 256	Community Field Experience	3	90
DEH 258	Ethics & Issues in Dental Hygiene	2	30
DEH 260	Practice Management	2	30
Total Second Year		31	750
Total for Program (Includes General Education Courses)		96	1875

Associate Of Applied Science Degree in Business Technology: Office Management And Secretarial Studies Health Information Specialist TEC East
(see Business Technology)

Health Information Specialist Certificate TEC East
(see Business Technology)

Associate of Applied Science Degree in Health and Wellness Management

This program is designed to prepare students for entry-level employment in the broad field of health and wellness. Some the occupations for which students will be prepared include personal care providers, home health aides, fitness center staff, health promotion and wellness coordinators within business and industry, wellness educators with health insurance companies or national health organizations (i.e. American Cancer Society), diet center staff, fitness resort staff, and fitness event coordinators or staff (i.e. "Run for the Cure").

It is possible many of the occupations for which students will be prepared have not yet been created. Health and wellness promotion is "on the cutting edge" of health care, fitness, social services and education. As health care reform takes hold, we expect the health and wellness job market to explode.

In addition to the Health and Wellness Management degree, the program offers a variety of physical activity and fitness courses. These courses are offered on the Lowry campus and may be taken by anyone who registers. The courses are listed below, following the degree courses.

This degree articulates to Colorado State University's Bachelor of Science degree in Wellness Management.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Signature authorization on completed program application from the Health and Wellness Management program coordinator. To apply to the program, arrange an appointment with the program coordinator in South Classroom Building, room 301, 303-556-2472.

General Education Requirements
Must be completed with a grade of "C" or better

		Credits	Contacts
BIO 111	General College Biology I	5	90
ENG 121	English Composition I	3	45
	or		
ENG 131	Technical Writing I		
MAT 121	College Algebra	3-4	45-60
	or		
MAT 135	Intro. to Statistics		
SOC 101	Intro. to Sociology	3	45
SPE 115	Principles of Speech	3	45
PSY 101	General Psychology I	3	45
	or		
ECO 202	Principles of Micro Economics		
AAS Humanities requirement		3	45

Major Requirements

ACC 121	Accounting Principles I	4	60
BUS 115	Intro. to Business	3	45
BUS 236	Principles of Marketing	3	45
CIS 118	Intro. to PC Applications	4	68
GNT 201	Intro. to Gerontology	3	45
HWM 101	Essentials of Total Fitness & Wellness	3	45
HWM 103	First Aid & CPR	2	30
HWM 201	Health Psychology	3	45
HWM 205	Educational Prin. of Health & Wellness	3	45
NUT 100	Foundations of Nutrition	3	45
PER 100	Aerobics	2	45
HSE 213	Substance Abuse: A Multi-Model Approach	3	45
	or		
PSY 235	Psy. of Human Growth & Development	3	45
HWM 285	Health & Wellness Practicum (Capstone)	2	90

Elective Physical Activity/Fitness Courses			
HWM 050	Swimming I	(2)	(30)
HWM 060	Water Exercise	(2)	(30)
HWM 070	Tai-Chi	(2)	(30)
RAE 010	Golf I	(2)	(30)
RAE 030	Tennis I	(2)	(30)
Total		63-64	1035-1050

Medical Clerk Certificate
TEC East
(see Business Technology)

Associate of Applied Science Degree
in Business Technology:
Office Management and Secretarial Studies
Medical Secretarial
(see Business Technology)

Certificate in Business Technology:
Office Management and Secretarial Studies
Medical Secretarial
(see Business Technology)

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Medical Secretary
TEC East
(see Business Technology)

Medical Secretary Certificate
TEC East
(see Business Technology)

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Medical Transcriptionist
TEC East
(see Business Technology)

Medical Transcriptionist Certificate
TEC East
(see Business Technology)

Associate Of Applied Science Degree
in Business Technology:
Office Management And Secretarial Studies
Medical Unit Coordinator
TEC East
(see Business Technology)

Medical Unit Coordinator Certificate
TEC East
(see Business Technology)

Nurse Aide Certificate
TEC East
(see Business Technology)

Nurse Assistant Certificate
TEC East
(see Business Technology)

Associate of Applied Science Degree in Nursing
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. Beginning in fall 1998, classes are 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 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 April 15 for admission into fall semester, or by August 1 for admission into spring semester. Eligible applicants not admitted remain on the waiting list for admission in the next class. More specific program information may be obtained from the Division of Health and Human Services.

Program Admission Requirements

1. Take the CCD Basic Skills Assessment in the Testing Center in South Classroom Building, room 230, 303-556-3810. All prospective nursing students must take the Basic Skills Assessment without exception.
2. Attend the mandatory Nursing program orientation held every Tuesday at 3:30 p.m. in South Classroom Building, room 246, with a copy of Basic Skills Assessment scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the following scores on the Basic Skills Assessment:
   a. English assessment level 3 or completion of ENG 100 with a C or better;
   b. math assessment level 2a or completion of MAT 035 with a C or better;

c. reading assessment level 3b or completion of REA 151 with a C or better; and
d. study skills assessment level 3 or completion of REA 109 with a C or better.

3. Submit the completed application packet as soon as possible. The complete application packet includes the program application form, two sealed letters of reference dated within the past 12 months, a copy of the Basic Skills Assessment scores, a health immunization record completed and signed by the applicant's primary care provider and a copy of a CPR certification card. 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 program office before registering in NUR courses.

Prerequisites and/or General Education Requirements		Credits	Contacts
*BIO 201	Human Anatomy & Physiology I	4	75
*BIO 202	Human Anatomy & Physiology II	4	75
*BIO 205	Microbiology	4	75
*PSY 235	Psychology of Human Growth & Development	3	45
ENG 121	English Composition I	3	45
MAT 100 or higher		3-5	45-75
NUT 101	Nutrition for Health Care Providers	2-3	45-67
Humanities Core Elective (See AAS curriculum for a list of approved courses) or		3	45
REA 105	Workshop in Reading, Writing and Speaking		

*Must have been completed within the past 10 years.

Major Requirements			
NUR 101	Core Concepts in Pharmacology	1	23
NUR 103	Pharmacology for Nursing	2	45
NUR 109	Basic Nursing Skills	4	120
NUR 111	Nursing Concepts & Issues	6	135
NUR 112	Nursing Care of the Hospitalized Client I	7	158
NUR 113	Nursing Care of the Elderly Client	3	68
NUR 114	Family-Centered Nursing I	5	112
NUR 208	Nursing Assessment & Diagnosis	3	90
NUR 210	Family-Centered Nursing II	4	90
NUR 211	Principles of Psychiatric Nursing	5	112
NUR 212	Nursing Care of Hospitalized Client II	8	180
NUR 214	Leadership & Management in Nursing	2	45
NUR 285	Comprehensive Nursing Internship (Capstone)	3-4	135-180
Total		79-83	1763-1860

Associate of Applied Science Degree in Nursing Advanced Placement

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. Beginning fall of 1998, 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 30 practical nursing credits when the student completes articulation requirements. Educational validation through testing is required if the applicant graduated from an out-of-state vocational practical nursing program, or more than 10 years prior to entry into the program. Applicants must complete all general education courses and the bridge course, NUR 126, before registering for NUR courses.

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

Program Admission Requirements

1. Take the CCD Basic Skills Assessment in the Testing Center in South Classroom Building, room 230, 303-556-3810. All prospective nursing students must take the Basic Skills Assessment without exception.
2. Attend the mandatory Nursing program orientation held every Tuesday at 3:30 p.m. in South Classroom Building, room 246, with a copy of Basic Skills Assessment scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the following scores on the Basic Skills Assessment:
   a. English assessment level 3 or completion of ENG 100 with a C or better;
   b. math assessment level 2a or completion of MAT 035 with a C or better;
   c. reading assessment level 3b or completion of REA 151 with a C or better; and
   d. study skills assessment level 3 or completion of REA 109 with a C or better.

   Submit the completed application packet as soon as possible. The complete application packet includes the program application form, two sealed letters of reference dated within the past 12 months, a copy of the Basic Skills Assessment scores, a health immunization record completed and signed by the applicant's primary care provider and a copy of a CPR certification card. Incomplete packets will not be considered for admission.
4. 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 program office before registering in NUR courses.

Prerequisites and/or General Education Requirements		Credits	Contacts
*BIO 201	Human Anatomy & Physiology I	4	75
*BIO 202	Human Anatomy & Physiology II	4	75
*BIO 205	Microbiology	4	75
*PSY 235	Psychology of Human Growth & Development	3	45
ENG 121	English Composition I	3	45
MAT 100 or higher		3-5	45-75

Humanities Core Elective (See AAS curriculum for a list of approved courses)		3	45
NUR 126	Nursing Process Concepts & Skills	2	45
Credit awarded for Practical Nurse Education under Colorado Nursing Articulation Agreement.		30	521

*Must be completed within past ten years of entry into NUR courses.

Major Requirements			
NUR 208	Nursing Assessment & Diagnosis	3	90
NUR 211	Principles of Psychiatric Nursing	5	112
NUR 212	Nursing Care of Hospitalized Client II	8	180
NUR 210	Family-Centered Nursing II	4	90
NUR 214	Leadership & Management in Nursing	2	45
NUR 285	Comprehensive Nursing Internship (Capstone)	3-4	135-180
Total		81-84	1623-1698

Certificate in Practical Nursing

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. Beginning in fall 1998, 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

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 a 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 April 15 for admission into fall semester, or by August 1 for admission into spring semester. Eligible applicants not admitted remain on the waiting list for admission in the next class. More specific program information may be obtained from the Division of Health and Human Services.

Program Admission Requirements

1. Take the CCD Basic Skills Assessment in the Testing Center in South Classroom Building, room 230, 303-556-3810. All prospective nursing students must take the Basic Skills Assessment without exception.
2. Attend the mandatory Nursing program orientation held every Tuesday at 3:30 p.m. in South Classroom Building, room 246, with a copy of Basic Skills Assessment scores. All applicants will be advised about their eligibility for admission and given a Nursing program application form if they have achieved the following scores on the Basic Skills Assessment:
   a. English assessment level 3 or completion of ENG 100 with a C or better;
   b. math assessment level 2a or completion of MAT 035 with a C or better;
   c. reading assessment level 3b or completion of REA 151 with a C or better; and
   d. study skills assessment level 3 or completion of REA 109 with a C or better.
3. Submit the completed application packet as soon as possible. The complete application packet includes the program application form, two sealed letters of reference dated within the past 12 months, a copy of the Basic Skills Assessment scores, a health immunization record completed and signed by the applicant's primary care provider and a copy of a CPR certification card. Incomplete packets will not be considered for admission.
4. 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 program office before registering in NUR courses.

Prerequisites and/or General Education Requirements		Credits	Contacts
*BIO 201	Human Anatomy & Physiology I	4	75
*BIO 202	Human Anatomy & Physiology II	4	75
*PSY 235	Psychology of Human Growth & Development	3	45
ENG 121	English Composition I	3	45
MAT 100	or higher	3-5	45-75
NUT 101	Nutrition for Health Care Providers	2-3	45-67

*Must have been completed within the past 10 years.

Requirements		Credits	Contacts
NUR 101	Core Concepts of Pharmacology	1	23
NUR 103	Pharmacology for Nursing	2	45
NUR 109	Basic Nursing Skills	4	120
NUR 111	Nursing Concepts & Issues	6	135
NUR 112	Nursing Care of Hospitalized Client I	7	157-158
NUR 113	Nursing Care of the Older Adult	3	67-68
NUR 114	Family-Centered Nursing Care I	4	90
Total		46-49	967-1021

Associate of Science Degree: Medical Cluster

See page 41 for complete AS degree information.

Courses shown in bold meet core requirements.

General Education Requirements (see page 41)

PRE-DENTAL EMPHASIS		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**

MAT 122	Trigonometry	3	45
PHY 111	**Physics: Algebra-Based I**	**5**	**105**
PHY 112	**Physics: Algebra-Based II**	**5**	**105**
Total		37	705

PRE-MEDICAL EMPHASIS		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
PHY 111	**Physics: Algebra-Based I**	**5**	**105**
PHY 112	**Physics: Algebra-Based II**	**5**	**105**
Select 2 courses from the following:		6	90
LIT 115	**Intro. to Literature**	**(3)**	**(45)**
LIT 201	**Masterpieces of Literature I**	**(3)**	**(45)**
LIT 202	**Masterpieces of Literature II**	**(3)**	**(45)**
Total		43	795

PRE-MEDICAL TECHNOLOGY EMPHASIS		Credits	Contacts
BIO 201	Anatomy & Physiology I	4	75
BIO 205	Microbiology	4	75
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 135	Intro. to Statistics	3	45
PHY 111	Physics: Algebra-Based I	5	105
PHY 112	Physics: Algebra-Based II	5	105
Total		38	720

PRE-PHARMACY EMPHASIS		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
BIO 205	Microbiology	4	75
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 201	**Calculus I**	**5**	**75**
Select 2 courses from the following:		6	90
ANT 101	**Cultural Anthropology**	**(3)**	**(45)**
HIS 101	**Western Civilization I**	**(3)**	**(45)**
HIS 102	**Western Civilization II**	**(3)**	**(45)**
HIS 201	**United States History I**	**(3)**	**(45)**
HIS 202	**United States History II**	**(3)**	**(45)**
PSY 101	**General Psychology I**	**(3)**	**(45)**
PSY 102	**General Psychology II**	**(3)**	**(45)**
SOC 101	**Intro. to Sociology I**	**(3)**	**(45)**
SOC 102	**Intro. to Sociology II**	**(3)**	**(45)**
Total		42	735

PRE-PHYSICAL THERAPY EMPHASIS		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
BIO 201	Anatomy & Physiology I	4	75
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 135	Intro. to Statistics	3	45
PHY 111	**Physics: Algebra-Based I**	**5**	**105**
PHY 112	**Physics: Algebra-Based II**	**5**	**105**
Select 2 courses from the following:		6	90
PSY 101	**General Psychology I**	**(3)**	**(45)**
PSY 102	**General Psychology II**	**(3)**	**(45)**
PSY 235	Psychology of Human Growth & Development	(3)	(45)
PSY 249	Abnormal Psychology	(3)	(45)
Total		50	915

PRE-PHYSICIAN ASSISTANT EMPHASIS		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	College Algebra	4	60
MAT 135	Intro. to Statistics	3	45
PSY 101	**General Psychology I**	**3**	**45**
PSY 102	**General Psychology II**	**3**	**45**
Total		33	585

PRE-VETERINARY SCIENCE EMPHASIS		Credits	Contacts
BIO 111	**General College Biology I**	**5**	**90**
BIO 112	**General College Biology II**	**5**	**90**
CHE 111	**General College Chemistry I**	**5**	**105**
CHE 112	**General College Chemistry II**	**5**	**105**
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 135	Intro. to Statistics	3	45
PHY 111	**Physics: Algebra-Based I**	**5**	**105**
Total		35	645

Associate of Applied Science Degree in Radiography

The Radiography program prepares the student for an entry-level position as a radiographer in a variety of medical settings. 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 Radiologic Technologists.

The program begins fall semester of each year. Information and requirements can be obtained from the Educational Planning and Advising Center. Students who are interested in articulating their career with a Bachelor of Science degree should contact the degree-awarding institution for information regarding transferable prerequisite course work.

Program Admission Requirements

There are two steps for admission into the radiography program.

1. Qualify for an application by meeting the following criteria:

a. English assessment level 3 or completion of ENG 100 with a C or better;
b. math assessment level 2a or completion of MAT 035 with a C or better;
c. reading assessment level 3 or completion of REA 151 with a C or better; and
d. study skills assessment level 3 or completion of REA 109 with a C or better.

All prospective Radiography students must take the Basic Skills Assessment. There are no exceptions.

To get an application, students must meet with a radiography program advisor. Call 303-556-2472 to make an appointment. Bring a copy of the Basic Skills Assessment 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 Basic Skills Assessment results, previous college transcripts and an educational plan.

2. Complete the following general education requirements with a "C" grade or better prior to starting the program.

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
Select either BIO 119, or both BIO 201 and 202:		4-8	60-150
*BIO 119	Radiographic & Surgical Anatomy or both	(4)	(60)
*BIO 201	Anatomy & Physiology I and	(4)	(75)
*BIO 202	Anatomy & Physiology II	(4)	(75)
Select 1 course from the following:		3-4	45-60
MAT 100	Elementary Algebra	(3)	(60)
MAT 103	Contemporary College Mathematics	(3)	(45)
MAT 105	Intermediate Algebra	(4)	(60)
MAT 121	College Algebra	(4)	(60)
MAT 135	Intro. to Statistics	(3)	(45)
Select 1 course from the following:		3	45
SOC 101	Intro. to Sociology I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
PSY 235	Psychology of Human Growth & Development	(3)	(45)

*Must have been completed within the past five years

Radiography Program

Fall			
RTR 102	Radiographic Imaging I	3	45
RTR 103	Radiographic Equipment	3	45
RTR 104	Radiographic Internship I	5	225
RTR 105	Radiographic Patient Care I	3	45
Spring			
RTR 112	Radiographic Imaging II	3	45
RTR 113	Radiographic Equipment II	3	45
RTR 114	Radiographic Internship II	5	225
RTR 115	Radiographic Patient Care II	2	45
Summer			
RTR 124	Radiographic Internship III	7	315
Fall			
RTR 202	Imaging III (Speech Intensive)	3	45
RTR 203	Radiation Biology/Protection	2	30
RTR 204	Radiographic Internship IV	8	360
Spring			
RTR 214	Radiographic Internship V	11	495
RTR 216	Radiography Capstone	2	30
Total		73-78	2190-2295

Certificate in Radiologic Health Sciences
Offered to registered radiologic technologists, these certificate programs provide opportunity for cross training and enhancing professional competence and employability. These programs are offered on an "as-needed" basis. Please call the coordinator at 303-556-2472 for more information about any of the Radiologic certificate programs. Check with the Office of Financial Aid for program eligibility for the following programs.

Radiologic Health Sciences
Magnetic Resonance Imaging (MRI) Technology
Offered on an "as-needed" basis, this certificate program limits application to those who have registry and/or certification in another diagnostic imaging modality (nuclear medicine technology or registered diagnostic medical sonography, radiologic technology). Call the MRI coordinator for more information at 303-556-2472.

Associate of Applied Science Degree
in Business Technology:
Office Management and Secretarial Studies
Radiology/Orthopedic Assistant
(see Business Technology)

Radiology/Orthopedic Assistant Certificate
TEC East
(see Business Technology)

Associate of Applied Science Degree
in Recreational Assistant
The Recreational Assistant program awards either the AAS degree or the certificate of program completion. Upon successful completion of 400 hours of externship experiences, the graduate qualifies under the National Recreation and Park Association as a Certified Leisure Assistant. This program is currently in the process of

articulating with bachelor's degree programs for transfer of credits for the BS degree in Recreation Therapy. Two of the program's courses are offered as "open enrollment" and can be taken by anyone interested in the Recreation Assistant program, or in the activities taught. To earn the AAS degree in the Recreational Assistant program, the student must complete all required courses with a "C" grade or better.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Signature authorization on completed program application from the Recreational Assistant program coordinator. To apply to the program, arrange an appointment with the program coordinator in South Classroom Building, room 301, 303-556-2472.

General Education Requirements		Credits	Contacts
BIO 201	Human Anatomy & Physiology I	4	75
ENG 121	English Composition I	3	45
	or		
ENG 131	Technical Writing I		
MAT 135	Intro. to Statistics	3	45
PSY 101	General Psychology I	3	45
PSY 235	Psy. of Human Growth & Development	3	45
SOC 101	Intro. to Sociology	3	45
SPE 115	Principles of Speech	3	45
AAS Humanities requirement		3	45
Other Required Courses			
BUS 115	Intro. to Business	3	45
CIS 118	Intro. to PC Applications	4	68
Recreational Assistant Program			
Fall			
RAE 201	Intro. to Recreational Leisure	3	45
RAE 202	Intro. to Recreational Therapy	3	45
RAE 205	Recreational Assistant Externship I	4	180
RAE 207	Specialized Areas in Recreation Electives (Open enrollment. Offered spring semester, also.)	4	60
SOC 103	Sociology of Health Care	3	45
Spring			
RAE 203	Rec. & Leisure in Special Populations	3	45
RAE 204	Health & Safety in Recreation & Leisure	3	45
RAE 207	Specialized Areas in Recreation Electives (Open enrollment. Offered fall semester, also.)	(4)	(60)
RAE 285	Recreational Assistant Externship II	5	225
Total		60	1193

Certificate in Recreational Assistant

Program applicants who previously have earned credits for general education courses, or have documented equivalencies for these courses, may apply directly to the Recreational Assistant program and complete the Recreational Assistant program courses only. Upon successful completion of course work and 400 hours of externship experience, the graduate qualifies under the National Recreation and Park Association as a certified leisure assistant. The program is currently in the process of articulating with bachelor's degreed programs for transfer of credits for the BS degree in Recreational Therapy. Two of the program's courses are offered as "open enrollment" and can be taken by anyone interested in the activities taught. For more information, contact the program coordinator at 303-556-2472.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Proof of general education equivalencies:
   BIO 201 Human Anatomy & Physiology I
   ENG 121 English Composition I
   or
   ENG 131 Intro. to Technical Writing I
   MAT 135 Intro. to Statistics
   PSY 101 General Psychology I
   PSY 235 Psychology of Human Growth & Development
   SOC 101 Intro. to Sociology
   SPE 115 Principles of Speech
   AAS Humanities requirement
   BUS 115 Intro. to Business (optional)
   CIS 118 Intro. to PC Applications (optional)
3. Application to the Recreational Assistant program.

Fall			
RAE 201	Intro. to Recreational Leisure	3	45
RAE 202	Intro. to Recreational Therapy	3	45
RAE 205	Recreational Assistant Externship I	4	180
RAE 207	Specialized Areas in Recreation Electives (Open enrollment; also offered spring semester.)	4	60
SOC 103	Sociology of Health Care	3	45
Spring			
RAE 203	Rec. & Leisure in Special Populations	3	45
RAE 204	Health & Safety in Recreation & Leisure	3	45
RAE 207	Specialized Areas in Recreation Electives (Open enrollment; also offered fall semester.)	(4)	(60)
RAE 285	Recreational Assistant Externship II	5	225
Total		28	690

Certificate in Massage Therapy

The Massage Therapy certificate consists of 38 credit hours of course work. The certificate prepares the student to sit for the state certification exam for massage therapists. Students receive education and skill practice in anatomy and physiology, business, English composition, nutrition, mathematics and psychology, in addition to massage therapy.

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.

Admission to the program requires evidence of high school graduation, or the equivalent, submission of 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.

Applications will be taken at any time during the year and students are advised into the most appropriate courses. For more information, contact the program coordinator at 303-556-2472, South Classroom Building, room 301.

Program Admission Requirements

1. Submit the CCD application to the Office of Admissions, Registration and Records, South Classroom Building, room 133 on the Auraria Campus.
2. Obtain a permit to take the Basic Skills Assessment test from the Office of Admissions, Registration and Records.
3. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 100 with a C or better.
4. Submit a completed Massage Therapy program application.
5. Meet with the program advisor to plan course work.

		Credits	Contacts
BIO 201	Human Anatomy & Physiology I	4	75
BIO 202	Human Anatomy & Physiology II	4	75
BUS 115	Intro. to Business	3	45
ENG 121	English Composition I	3	45
HSE 107	Interviewing Principles & Practices	3	45
MAT 103	Contemporary College Mathematics	3	45
MST 201	Basic Massage Therapy	3	75
MST 202	Deep Tissue Massage	3	75
MST 203	Adv. Massage Modalities & Therapies	3	90
NUT 100	Foundations of Nutrition	3	45
PSY 235	Psy. of Human Growth & Development	3	45
MST 204	Massage Therapy in Action (Capstone)	3	90
Total		38	750

Certificate in Perioperative Nursing

This program prepares the student 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.

Application materials must be submitted by May 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 in the Surgical Technology/Perioperative Nursing Office, South Classroom Building, room 301. Applicants not accepted are considered for the following year. Graduate exit competency is measured by successful completion of the capstone course, ORN 221, Perioperative Nursing II.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. All applicants must be eligible for licensure as registered nurses.
3. Applicants must submit a Perioperative Nursing program application available from the office of Health and Human Services, South Classroom Building, room 301, or by calling 303-556-2472 to have an application mailed.

   A completed application packet includes the program application; a copy of current licensure as a registered nurse, or documentation of pending licensure as a registered nurse; two sealed letters of reference dated within the past two years (one letter must be from a supervisor or teacher); a copy of the high school diploma or GED; and official transcripts from other colleges attended. Official transcripts also must be submitted to the CCD Office of Admissions, Registration and Records.
4. Applicants must submit a separate application to the college. Applications are available in South Classroom Building, room 136, or by calling 303-556-2600 to have an application mailed.
5. Applicants must schedule an interview with the Perioperative Nursing program coordinator. Please call 303-556-2464 for an appointment.

Major Requirements		Credits	Contacts
Fall			
ORN 220	Perioperative Nursing I	6	90

Spring			
ORN 221	Perioperative Nursing II	8	300
Total		14	390

Certificate in Psychiatric Technician

This program prepares the student to practice as a psychiatric technician in specialized health care settings with client populations experiencing psychiatric disorders and/or developmental disabilities. The program begins fall semester and continues spring semester for one academic year. After the first semester, students are eligible for state licensing as a psychiatric technician with an emphasis in developmental disabilities. After completing the second semester, students are eligible for state licensing as a psychiatric technician with an emphasis in mental illness.

Application materials must be submitted by March 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, South Classroom Building, room 312. Applicants not accepted are considered for the following year.
Graduate exit competency is measured by successful completion of the capstone course LPT 111, Nursing Principles of Psychiatric Care and Clinical Application for the Psychiatric Technician.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 035 with a C or better.

   All prospective students must take the Basic Skills Assessment. There are no exceptions.
2. Attend a mandatory orientation, held every Tuesday at 3:30 p.m. in South Classroom Building, room 243. Bring a copy of the Basic Skills Assessment results and copies of official transcripts from other colleges attended. At orientation, the student will receive the Psychiatric Technician program application.
3. Submit a Psychiatric Technician program application with two sealed letters of reference dated within the past two years (one letter must be from a supervisor or teacher) to the program coordinator in South Classroom Building, room 312.

Major Requirements		Credits	Contacts
BIO 114	Biology of Humans for Psychiatric Technicians	3	45
HSE 113	Human Services for Persons with Developmental Disabilities	3	45
NUR 101	Core Concepts of Pharmacology	1	23
NUR 109	Basic Nursing Skills	4	120
LPT 100	Fundamental Concepts & Clinical Application	2	45
LPT 111	Nursing Principles of Psychiatric Care	6	135
Total		19	413

Certificate in Psychiatric Technician Advanced Placement

Graduates of Colorado Board of Nursing-approved psychiatric technician programs with an emphasis in developmental disabilities may enter CCD's Psychiatric Technician program in the LPT 111, Nursing Principles of Psychiatric Care and Clinical Application for the Psychiatric Technician course.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Submit two letters of recommendation, a Certificate of Completion of Colorado Board of Nursing Accredited Psychiatric Technician Developmental Disabilities program, and a copy of Colorado License as Psychiatric Technician with Developmental Disability emphasis. Students are awarded 15 credit hours from the approved Psychiatric Technician Developmental Disabilities program.

Major Requirements		Credits	Contacts
Completion of Psychiatric Technician DD program		14	293
LPT 110	Nursing Concepts for Adv. Placement Psychiatric Technicians	1	23
LPT 111	Nursing Principles of Psychiatric Care	6	135
Total		21	451

Certificate in Surgical Technology

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 Surgical Technology coordinator by the last day in February of each calendar year for the program starting the following summer. Admission information may be obtained from the Educational Planning and Advising Center or the Health and Human Services Division. Enrollment is limited to 25 students.

The Surgical Technology program at CCD depends upon voluntary affiliation by clinical affiliates for clinical practicum spaces. Students must recognize that due to the need to utilize all available clinical resources, they

may have to travel some distance to sites outside the Denver metropolitan area.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3b or completion of REA 151 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 035 with a C or better.

   All prospective Surgical Technology students must take the Basic Skills Assessment. There are no exceptions.
2. All applicants must schedule an interview with the program coordinator. Please call 303-556-2464 to schedule an interview.
3. 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 the high school diploma or GED and an official transcript from any other college attended (students also must send the CCD Office of Admissions, Registration and Records an official transcript), and schedule an interview with the program coordinator.
4. Application material 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, South Classroom Building, room 301-H. Applicants not accepted are considered for the following year.

Prerequisites and/or General Education Requirements		Credits	Contacts
BIO 201	Human Anatomy & Physiology I	4	75
BIO 202	Human Anatomy & Physiology II	4	75
ENG 121	English Composition I	3	45
Summer			
HOC 100	Medical Terminology	2	30
STE 100	Intro. to Surgical Technology	5	90
Fall			
STE 105	Pharmacology for Surgical Technology	2	30
STE 106	Surgical Skills	7	150
STE 107	Surgical Instrumentation	3	60
Spring			
STE 109	Surgical Technology Laboratory Experience	3	128
STE 110	Surgical Technology Practicum (Capstone)	7	352
STE 115	Surgical Pathology & Intervention	4	60
Total		44	1095

Surgical technology students wishing to complete the requirements for the AGS-G degree must complete the requirements for a Certificate in Surgical Technology and meet the other core general education requirements for the AGS degree. Students should contact their advisor for specific courses.

History

Associate of Arts Degree with a History Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
Select 4 courses from the following:		12	180
HIS 101	Western Civilization I	(3)	(45)
HIS 102	Western Civilization II	(3)	(45)
HIS 201	United States History I	(3)	(45)
HIS 202	United States History II	(3)	(45)
HIS 225	Colorado History	(3)	(45)
Total		12	180

Humanities/Philosophy

Associate of Arts Degree with a Humanities/Philosophy Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
PHI 111	Intro. to Philosophy	3	45
*Select 1 course from the following:		3	45
HUM 121	Survey of Humanities I	(3)	(45)
HUM 122	Survey of Humanities II	(3)	(45)
HUM 123	Survey of Humanities III	(3)	(45)
Select 2 courses from the following:		6	90
PHI 112	Ethics	(3)	(45)
PHI 113	Logic	(3)	(45)
PHI 115	Myth & Religion	(3)	(45)
PHI 290	Topics in Philosophy	(3)	(45)
HUM 116	Intro. to African-American Studies	(3)	(45)
HUM 121	Survey of Humanities I	(3)	(45)
HUM 122	Survey of Humanities II	(3)	(45)
HUM 123	Survey of Humanities III	(3)	(45)
HUM 185	Cultural Diversity in the Humanities	(3)	(45)
HUM 225	Contemporary Chicano Culture	(3)	(45)
HUM 290	Topics in Humanities	(3)	(45)
Total		12	180

*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.

Human Services

Associate of General Studies Degree: MSCD Human Services (AGS-HSE)

The following courses represent CCD/MSCD Human Services transfer agreement. Students completing these degree requirements will be admitted to MSCD as juniors in Human Services.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.
2. Signature authorization on program application from HSE faculty advisor.

General Education AA Core		Credits	Contacts
I.	English ENG 121 English Composition I ENG 122 English Composition II	6	90
II.	Speech SPE 115 Principles of Speech	3	45
III.	Mathematics MAT 121, 125, 135, 201, 202	3-5	45-75
IV.	Physical & Biological Sciences AST 101, 102; BIO 105, 111, 112; CHE 101, 102, 111, 112; GEY 111; PHY 105, 111, 112, 211, 212.	4-5	60-75
V.	Social & Behavioral Sciences (Select 9 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	9	135
VI.	Humanities (Select 9 credit hours from a minimum of 2 disciplines.) ART 110, 111, 112; HUM 121, 122, 123; LIT 115, 201, 202; FRE, SPA, JPN, MUS 120, 121, 122; PHI 111, 112, 113; THE 105, 211, 212	9	135
General Education Sub-Total		34-37	510-555
Major Requirements			
HSE 106	Survey of Human Services	3	45
Offered Fall Semester Only:			
HSE 107	Interviewing Principles & Practices	3	45
HSE 205	Human Services for Groups	3	45
HSE 206	Human Services for Families	3	45
HSE 211	Human Services Practicum II	4	150
Offered Spring Semester Only:			
HSE 108	Intro. to Therapeutic Systems	3	45
HSE 115	Human Services Practicum I	4	150
HSE 212	Human Services Practicum III (Capstone)	7	285
Total		64-67	1320-1365

Associate of Applied Science Degree in Human Services

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, community corrections, crisis centers and domestic violence.

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

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.
2. Signature authorization on program application from Human Services faculty advisor.

General Education Requirements		Credits	Contacts
ENG 131	Technical Writing I or	3	45
ENG 121	English Composition I		
MAT 103	Contemporary College Mathematics or higher	3-5	45-75
SPE 115	Principles of Speech	3	45
PSY 101	Intro. to Psychology or		
SOC 101	Intro. to Sociology or		
PSY 235	Psychology of Human Growth & Development	3	45
AAS Humanities requirement		3	45
Major Requirements			
HSE 105	Intro. to Social Welfare	3	45
HSE 106	Survey of Human Services	3	45
Offered Fall Semester Only:			
HSE 107	Interviewing Principles & Practices	3	45
HSE 109	Social Issues in Human Services	3	45
HSE 205	Human Services for Groups	3	45

HSE 206	Human Services for Families	3	45
HSE 207	Community Organization	3	45
HSE 211	Human Services Practicum II	4	150
Offered Spring Semester Only:			
HSE 108	Intro. to Therapeutic Systems	3	45
HSE 115	Human Services Practicum I	4	150
HSE 208	Social Welfare Policy	3	45
HSE 209	Crisis Theory & Intervention	3	45
HSE 212	Human Services Practicum III (Capstone)	7	285
Total		60-62	1260-1290

Certificate in Human Services
Case Management/Residential Service Aide

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

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

		Credits	Contacts
Electives	Basic Skills	6	90
HSE 106	Survey of Human Services	3	45
HSE 107	Interviewing Principles & Practices	3	45
Elective	HSE or Core	5	75
Offered Spring Semester Only:			
HSE 209	Crisis Theory & Intervention	3	45
HSE 115	Human Services Practicum I (Capstone)	4	60
Total		24	360

Special Education Paraprofessional Certificate
TEC North

Special Education Paraprofessional is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students to provide services to special populations and their parents in a public school or agency environment. Working under the direct supervision of a certified teacher or other professional, the special education paraprofessional communicates with, provides supervision to, delivers direct instruction and other services, provides emergency first aid and is sensitive to the needs of special education populations. Graduates are prepared to enter positions as special education paraprofessionals, special education aides and teacher's aides. Employment often requires a Colorado Bureau of Investigation background check.

The next program level in this career ladder is available on the CCD Auraria Campus. HSE 110, HSE 114 and HSE 297 are accepted into the Associate of Applied Science degree in Human Services on the Auraria Campus. See a faculty advisor at Auraria to develop an approved program plan for completion of this degree.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
HSE 110	Overview of Special Populations	3	72
HSE 111	Comm. Skills/Special Populations	3	72
HSE 112	First Aid/CPR	1	24
HSE 114	Student Supervision/Behavior Mgmt.	3	72
HSE 141	Basic Instructional Techniques	3	72
HSE 142	Transitional Support Skills	3	72
HSE 217	Cultural Diversity in Human Services	3	72
HSE 297	Internship Work Experience (Capstone)	6	270
PSY 115	Psychology of Adjustment	2	48
Total		27	774

Special Education Aide Certificate
TEC North

Special Education Aide is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to provide services to special populations and their parents in a public school or agency environment. Working under the direct supervision of a certified teacher or other professional, the special education aide communicates with and provides supervision, delivers direct instruction and provides emergency first aid to special education populations. Graduates are prepared to enter positions as special education aides and teacher's aides. Employment often requires a Colorado Bureau of Investigation background check.

All QuickTrain Special Education Aide certificate program credits apply toward the XpressTrain Special Education Paraprofessional certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
HSE 110	Overview of Special Populations	3	72
HSE 111	Comm. Skills/Special Populations	3	72
HSE 112	First Aid/CPR	1	24
HSE 114	Student Supervision/Behavior Mgmt.	3	72
HSE 141	Basic Instructional Techniques	3	72
HSE 297	Internship Work Experience (Capstone)	3	135
Total		16	447

Law

Associate of General Studies Degree: CU-Denver Paralegal (AGS-PAR)

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

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education AA Core		Credit Hours
I.	English ENG 121 English Composition I ENG 122 English Composition II	6
II.	Speech SPE 115 Principles of Speech	3
III.	Mathematics (any 1 of the following) MAT 121, 125, 135, 201, 202	3-5
IV.	Physical & Biological Sciences (any 1 of the following) AST 101, 102; BIO 105, 111, 112; CHE 101, 102, 111, 112; GEY 111, 112; PHY 105, 111, 112, 211, 212	4-5
V.	Social & Behavioral Sciences (Select 9 credit hours from a minimum of 2 disciplines.) ECO 201, 202; GEO 105; HIS 101, 102, 201, 202; POS 105, 111; PSY 101, 102; SOC 101, 102	9
VI.	Humanities (Select 9 credit hours from a minimum of 2 disciplines.) ART 110, 111, 112; HUM 121, 122, 123; LIT 115, 201, 202; FRE, SPA, JPN, MUS 120, 121; PHI 111, 112, 113; THE 105, 211, 212	9
General Education Sub-Total		34-37

Major Requirements		
BTE 151	WordPerfect	3
PAR 121	Intro. to Paralegal	3
PAR 124	Legal Research	3
PAR 221	Civil Procedures	3
PAR 222	Evidence	3
PAR 223	Computers & the Law	3
PAR 280	Paralegal Workshop	6
PAR 285	Paralegal II Synthesis (Capstone)	3
Total		27

Select 9 hours from any of the following:		9
PAR 105	Torts	(3)
PAR 109	Property	(3)
PAR 115	Domestic Relations	(3)
PAR 125	Tax Law	(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 252	Constitutional Law	(3)
PAR 258	Contracts	(3)
PAR 297	Cooperative Education	(3-6)
PAR 299	Independent Study	(1-3)
Total		65-66

Certificate in Paralegal
General

This program is designed to prepare individuals with job-entry skills for the general paralegal field. Emphasis is placed on practical skills such as interviewing, researching and document drafting.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 1b or completion of MAT 030 with a C or better.

		Credits	Contacts
PAR 121	Intro. to Paralegal	3	45
PAR 124	Legal Research	3	45
PAR 221	Civil Procedures	3	45
PAR 222	Evidence	3	45
PAR 223	Computers & the Law	3	45
PAR 280	Paralegal Workshop	6	225
Elective	PAR	3	45
BTE 151	WordPerfect	3	45
	or		
BTE 152	Microsoft Word		
CIS 140	Microcomputers Databases	3	45
PAR 185	Paralegal Synthesis I (Capstone)	3	45
Total		33	630

Associate of Applied Science Degree in Paralegal
This program is designed to prepare students with job-entry skills for the general paralegal field. Emphasis is placed on practical skills such as interviewing, research and document drafting.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 121	College Algebra	4	60
	or		
MAT 103	Contemporary College Mathematics	3	45
SPE 115	Principles of Speech	3	45
Select 1 course from the following			
	AAS Humanities requirements: 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	3-5	45-68
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		3	45
Major Requirements			
PAR 121	Intro. to Paralegal	3	45
PAR 124	Legal Research	3	45
PAR 221	Civil Procedures	3	45
PAR 222	Evidence	3	45
PAR 223	Computers & the Law	3	45
PAR 280	Paralegal Workshop	6	225
BTE 151	WordPerfect	3	45
Select 9 courses from the following:		25-30	375-450
PAR 105	Torts	(3)	(45)
PAR 109	Property	(3)	(45)
PAR 115	Domestic Relations	(3)	(45)
PAR 125	Tax Law	(3)	(45)
PAR 126	Creditor/Debtor/Bankruptcy	(3)	(45)
PAR 185	Paralegal Synthesis I	(3)	(45)
PAR 201	Business Organizations	(3)	(45)
PAR 205	Probate	(3)	(45)
PAR 207	Legal Research Seminar I	(3)	(45)
PAR 208	Legal Research Seminar II	(3)	(45)
PAR 214	Administrative Law	(3)	(45)
PAR 231	Investigations I	(3)	(45)
PAR 239	Criminal Law	(3)	(45)
PAR 241	Environmental Law I	(3)	(45)
PAR 252	Constitutional Law	(3)	(45)
PAR 258	Contracts	(3)	(45)
PAR 297	Cooperative Education	(3-6)	(30-180)
PAR 299	Independent Study	(1-3)	(30-90)
PAR 285	Paralegal Synthesis II (Capstone)	3	45
Total		67-72	1005-1080

Mathematics

Associate of Science Degree with a Mathematics Emphasis
See page 41 for complete AS degree information.
Courses shown in bold meet core requirements.

General Education Requirements (see page 41)		Credits	Contacts
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 135	Intro. to Statistics	3	45
MAT 201	**Calculus I**	**5**	**75**
MAT 202	**Calculus II**	**5**	**75**
MAT 203	Calculus III	4	60
MAT 265	Ordinary Differential Equations	3	45
Total		27	405

Multimedia

Associate of Applied Science Degree in Multimedia Design
This program is designed to provide 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

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3 or completion of REA 115 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.
2. Signature authorization on program application from MUM faculty advisor.
3. All students are required to be computer literate before entering the program. Students may complete deficiencies (GRD 102, Intro. to Macintosh) concurrently with the beginning courses in the program.

General Education Requirements		Credits	Contacts
SPE 115	Principles of Speech	3	45
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Mathematics	3	45
Total		9	135
Select AAS general education courses from 2 of the following 3 areas: Arts and Humanities; Physical and Biological Sciences; Social and Behavioral Sciences		6-8	90-120
Major Requirements			
MUM 100	Intro. to Macintosh	1	23
MUM 101	Intro. to Multimedia	3	68
MUM 104	Design for the Computer	3	68
GRD 103	MAC Computer Art	3	90
MUM 105	Image Processing & Manipulation	3	68
MUM 107	Integrated Video Production	3	68
MUS 202	Music Theory IV	3	45
MUM 206	Fractal Painter I	3	68
MUM 207	Multimedia Animation	3	68
MUM 285	Multimedia Portfolio Preparation (Speech Intensive Capstone)	3	68
MUM 297	Multimedia Internship	3-6	136-270
Total		32-34	770-904

COMPUTER GRAPHICS EMPHASIS

ART 131	Design I	3	90
GRD 203	Adobe Illustrator	3	90
GRD 209	Quark Xpress (Capstone)	3	90
GRD 220	PhotoShop	3	90
MUM 210	3-D Modeling and Animation	3	90
Total		15	450

GRAPHIC ARTS EMPHASIS

GRA 102	Electronic Composition, Art & Copy Preparation	3	68
GRA 103	Line & Halftone Photography	3	68
GRA 104	Digital Halftone Photography	3	68
GRA 107	Intro. to Web & Homepage	3	68
GRA 202	Electronic Page Layout	3	68
Total		15	340

GRAPHIC DESIGN EMPHASIS

GRD 100	Lettering & Typographic Design	3	90
GRD 105	Advertising Typography & Layout	3	90
GRD 200	Ad Design & Portfolio Preparation	3	90
GRD 206	Graphic Design Production & Prepress I	3	90
GRD 285	Creative Graphic Design & Portfolio Preparation (Capstone)	3	90
Total		15	450

MUSIC EMPHASIS

MUS 101	Fundamentals of Music Theory	3	45
MUS 102	Music Theory II	3	45
MUS 220	Computer Music Composing	3	45
MUS 221	Computer Music Arranging	3	45
Total		12	180

PHOTOGRAPHY EMPHASIS

PHO 101	Fundamentals of Photography	3	90
PHO 102	Fundamentals of Color Photography	3	90
PHO 107	History of Photography	3	90
PHO 204	Intro. to Digital Imaging	3	90
PHO 205	Non-Chemical Printing	3	90
Total		15	450

VIDEO PRODUCTION/COMMUNICATIONS

COM 251	Intro. to Television Production	3	45
COM 252	Videography/Editing	3	45
COM 253	Script & Storyboard Writing	3	45
COM 254	Media Writing/Media Overview	3	45
COM 255	Survey of Film	3	45
Total		15	225
Program Total		59-67	1198-1632

Music

Associate of Arts Degree with a Music Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)		Credits	Contacts
MUS 101	Fundamentals of Music Theory	3	45
MUS 102	Music Theory II	3	45
MUS 142	Private Instruction (Voice)	1	30
Select 1 course from the following:		3	45
MUS 120	Music Appreciation	(3)	(45)
MUS 121	Survey of Music History I	(3)	(45)
MUS 122	Survey of Music History II	(3)	(45)
Total		12	195

Photography

Associate of Arts Degree with a Photography Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)		Credits	Contacts
ART 151	Fundamentals of Photography	3	90
ART 153	Fundamentals of Color Photography	3	90
Select a total of 6 credits from the following:		6	135-180
ART 157	History of Photography	(3)	(45)
ART 154	Intermediate Color Photography	(3)	(90)
ART 152	Intermediate Black & White Photography	(3)	(90)

ART 253	View Camera Technique	(3)	(90)
ART 255	Points of View (Special Topics) (Workshop at selected locations)	(3)	(90)
Total		12	315-360

Associate of General Studies Degree: MSCD/CU-Denver
Photography (AGS-PHO)

The following courses represent the 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.

Recommended Humanities General Education Requirement: ART 111, 112, Art History I & II

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 3 or completion of MAT 105 with a C or better.

General Education AA Core		Credit Hours
I.	English ENG 121 English Composition I ENG 122 English Composition II	6
II.	Speech SPE 115 Principles of Speech	3
III.	Mathematics (any 1 of the following) MAT 121, 125, 135, 201, 202	3-5
IV.	Physical & Biological Sciences (any 1 of the following) AST 101, 102; BIO 105, 111, 112 CHE 101, 102, 111, 112; GEY 111, 112; PHY 105, 111, 112, 211, 212.	3-5
V.	Social & Behavioral Sciences (Select 9 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	9
VI.	Humanities (Select 9 credit hours from a minimum of 2 disciplines.) *ART 110, 111, 112; HUM 121, 122, 123; LIT 115, 201, 202; FRE, SPA, JPN, MUS 120, 121, 122; PHI 111, 112, 113; THE 105, 211, 212	9

*Must be taken as general education or extra electives.

General Education Sub-Total	33-37

Major Requirements		
ART 121	Drawing I	3
ART 131	Design I	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 1 course from the following:		3
PHO 201	View Camera Techniques	(3)
PHO 202	Studio Lighting	(3)
PHO 203	The Fine Print	(3)
Select 1 course from the following:		3
PHO 211	Portrait Photography	(3)
PHO 212	Landscape Photography	(3)
PHO 213	Creative Process	(3)
Electives		
Select a minimum of 3 credit hours from the following:		3
PHO 205	Photography Workshop	(3)
PHO 215	Seminar in Photography	(3)
GRD 103	MAC Computer Art	(3)
GRD 105	Advertising Typography & Layout	(3)
*BUS 115	Intro. to Business	(3)
PHO 107	History of Photography	(3)
*PHO 297	Cooperative Education	(3)
*CU-Denver will not accept		
Capstone Course		
PHO 285	Seminar in Photography	3
Total		63-67

Associate of Applied Science Degree in Photography

This program provides technical and aesthetic training to prepare graduates with the skills necessary to enter the field of professional photography, including free-lance, portrait and creative photography.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 2 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education Courses		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 121	College Algebra	3-4	45-60
		or	
MAT 103	Contemporary College Mathematics		
SPE 115	Principles of Speech	3	45
Select 2 courses from the following three areas:		6	90
	AAS Arts & Humanities requirements		
	AAS Physical & Biological Sciences requirements		
	AAS Social & Behavioral Sciences requirements		
Major Requirements			
ART 121	Drawing I	3	90
ART 131	Design I	3	90
PHO 101	Fundamentals of Photography	3	90
PHO 102	Fundamentals of Color Photography	3	90
PHO 107	History of Photography	3	90
PHO 111	Intermediate Black & White Photography	3	90
PHO 112	Intermediate Color Photography	3	90
Select 2 courses from the following:		6	180
PHO 201	View Camera Techniques	(3)	(90)
PHO 202	Studio Lighting	(3)	(90)
PHO 203	The Fine Print	(3)	(90)
Select 2 courses from the following:		6	180
PHO 211	Portrait Photography	(3)	(90)
PHO 212	Landscape Photography	(3)	(90)
PHO 213	Creative Process	(3)	(90)
Select a minimum of 9 credit hours from the following:		9	270
ART 211	Painting I	(3)	(90)
ART 132	Design II	(3)	(90)
BUS 115	Intro. to Business	(3)	(45)
GRD 103	MAC Computer Art	(3)	(90)
GRD 105	Advertising Typography & Layout	(3)	(90)
GRD 220	PhotoShop	(3)	(90)
PHO 290	Special Topics	(1-3)	(30-90)
PHO 295	Job Search Workshop	(1)	(15)
PHO 297	Cooperative Education (variable credit)	(3-6)	(30-180)
PHO 285	Seminar in Photography (Capstone)	3	90
Total		60-61	1755-1770

Certificate in Photography

This program provides technical and aesthetic training to prepare students with the skills necessary to enter the field of professional photography, including free-lance, portrait and creative photography.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 1b or completion of ENG 030 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 2 or completion of REA 060 with a C or better; and
   d. math at level 1b or completion of MAT 030 with a C or better.

		Credits	Contacts
ART 121	Drawing I	3	90
ART 131	Design I	3	90
ENG 121	English Composition	3	45
PHO 101	Fundamentals of Photography	3	90
PHO 102	Fundamentals of Color	3	90
PHO 111	Intermediate Black & White	3	90
PHO 112	Intermediate Color Photography	3	90
Select a minimum of 6 credits from the following:		6	120-270
GRD 105	Advertising Typography & Layout	(3)	(90)
BUS 115	Intro. to Business	(3)	(90)
PHO 201	View Camera Techniques	(3)	(90)
PHO 202	Studio Lighting	(3)	(90)
PHO 203	The Fine Print	(3)	(90)
PHO 205	Photography Workshop	(3)	(90)
PHO 211	Portrait Photography	(3)	(90)
PHO 213	Creative Process	(3)	(90)
PHO 215	Photography Seminar	(3)	(90)
PHO 297	Cooperative Education	(3-6)	(30-180)
PHO 185	Advanced Photography (Capstone)	3	90
Total		30	795-945

Physics

Associate of Science Degree with a Physics Emphasis

See page 41 for complete AS degree information.

Courses shown in bold meet core requirements.

General Education Requirements (see page 41)

		Credits	Contacts
MAT 121	**College Algebra**	**4**	**60**
MAT 122	Trigonometry	3	45
MAT 201	**Calculus I**	**5**	**75**
MAT 202	**Calculus II**	**5**	**75**
PHY 211	**Physics: Calculus-Based I**	**5**	**105**
PHY 212	**Physics: Calculus-Based II**	**5**	**105**
Total		20	405

Political Science

Associate of Arts Degree with a Political Science Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
POS 105	Intro. to Political Science	3	45
POS 111	American Government	3	45
POS 125	American State & Local Government	3	45
POS 205	International Relations	3	45
Total		12	180

Printing
(See Graphics)

Psychology
Associate of Arts Degree in Psychology
(See Behavioral Sciences)

Sociology
Associate of Arts Degree in Sociology
(See Behavioral Sciences)

Speech
Associate of Arts Degree with a Speech Emphasis
See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
SPE 125	Interpersonal Communication	3	45
SPE 205	Voice & Diction	3	45
SPE 216	Principles of Speech Communication II	3	45
SPE 219	Group Dynamics	3	45
Total		12	180

Teacher Education
Associate of General Studies Degree: MSCD Early Childhood Education
Teacher Education: Early Childhood Education (AGS-ECE)
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 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 also 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 completion (80 percent) of the Early Childhood Professions (ECP) capstone course test. Any student not completing CCD's capstone course must successfully complete the exit competency test with a score of 80 percent or better prior to approval of graduation.

Students may take ECP 101 and 102 without enrolling in the Teacher Education program. Students must apply to the Teacher Education program with an Early Childhood major for subsequent course work.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education		Credit Hours
I.	English **ENG 121 English Composition I **ENG 122 English Composition II	6
II.	Speech **SPE 115 Principles of Speech	3
III.	Mathematics (any 1 of the following) MAT **121, 125, **135, 201, 202	3-4
IV.	Physical & Biological Sciences (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.	4-5
V.	Social & Behavioral Sciences (Select 9 credit hours from a minimum of 2 disciplines.) ANT 101, 111; ECO 201, 202; GEO 105; HIS 101, 102, 201, 202; *PSY 101, 102; *SOC 101 or 102	9
VI.	Humanities 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	9
General Education Sub-Total		34-36

*Required for Colorado Department of Human Resources Director License
**Required courses to complete MSCD ECE Teacher Education requirements.

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.

ECP 101	Intro. to Early Childhood Professions (MSCD 234-4)	3
ECP 102	Intro. to Early Childhood Lab Techniques (MSCD 235-2)	3
ECP 110	Child Growth & Development (MSCD PSY 180-4)	4
ECP 215	Creativity & the Young Child (MSCD EDU 236-3)	3

Electives or Contract Minor
These courses may be used as electives or contract minor courses but DO NOT substitute for MSCD-ECP licensure courses:

ECP 148	Guidance Strategies for Children	3
ECP 205	Nutrition & the Young Child	3
ECP 227	Curriculum Development: Methods/Techniques	3
ECP	Elective	3

Capstone Course		
ECP 226	Administration of Early Childhood Care & Education Programs	3
ECP Subtotal		28
Total		62-64

Associate of General Studies Degree: MSCD Early Childhood Education
Teacher Education: Early Childhood Education/Violence Counseling (AGS-ECE/VC)

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 also 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 completion (80 percent) of the Early Childhood Professions (ECP) capstone course test. Any student not completing CCD's capstone course must successfully complete the exit competency test with a score of 80 percent or better prior to approval of graduation.

Students may take ECP 101 and 102 without enrolling in the Teacher Education program. Students must apply to the Teacher Education program with an Early Childhood major for subsequent course work.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Core		Credit Hours
I.	English **ENG 121 English Composition I **ENG 122 English Composition II	6
II.	Speech **SPE 115 Principles of Speech	3
III.	Mathematics (any 1 of the following) MAT **121, 125, **135, 201, 202	3-4
IV.	Physical & Biological Sciences (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.	4-5
V.	Social & Behavioral Sciences (Select 9 credit hours from a minimum of 2 disciplines.) ANT 101, 111; ECO 201, 202; GEO 105; HIS 101, 102, 201, 202; *PSY 101, 102; *SOC 101 or 102	9
VI.	Humanities 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	9
General Education Sub-Total		34-36

*Required for Colorado Department of Human Resources Director License
**Required courses to complete MSCD ECE Teacher Education requirements.

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.

ECP 101	Intro. to Early Childhood Professions (MSCD 234-4)	3
ECP 102	Intro. to Early Childhood Lab Techniques (MSCD 235-2)	3
ECP 110	Child Growth & Development (MSCD PSY 180-4)	4
ECP 215	Creativity & the Young Child (MSCD EDU 236-3)	3

Electives or Contract Minor
These courses may be used as electives or contract minor courses but DO NOT substitute for MSCD-ECP licensure courses:

ECP 148	Guidance Strategies for Children	3
ECP 205	Nutrition & the Young Child	3
ECP 225	Curriculum: Anti-Bias	3
ECP 227	Curriculum Development: Methods/Techniques	3
ECP 275	Curriculum: Violence Prevention	3
ECP	Elective	3

Capstone Course		
ECP 226	Administration of Early Childhood Care & Education Programs	3
ECP Subtotal		34
Total		68-70

Associate of General Studies Degree: MSCD Elementary Education
Teacher Education: Elementary Education (AGS-EE)

The following courses represent the CCD/MSCD Elementary Education (EE) Teacher Education 2-plus-3 transfer agreement. Students completing degree

requirements will be admitted to MSCD as juniors in the EE Teacher Education program.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Core		Credit Hours
I.	English **ENG 121 English Composition I **ENG 122 English Composition II	6
II.	Speech **SPE 115 Principles of Speech	3
III.	Mathematics (any 1 of the following) MAT **121, 125, 135, 201, 202	3-4
IV.	Physical & Biological Sciences (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.	4-5
V.	Social & Behavioral Sciences (Select 9 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 or 102; SOC 101 or 102	9
VI.	Humanities 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	9
General Education Sub-Total		34-36

**Required courses to complete MSCD Elementary Teacher Education requirements.

Teacher Education licensure students will need to declare an academic major and minor when they transfer to MSCD. Courses from the CCD core may be used for lower division major or minor courses.

Major Requirements
MSCD courses that will substitute for CCD courses are listed in parentheses.

EDU 161	Elementary Education in US (MSCD EDU 212-3)	3
EDU 162	Urban & Multicultural Education (MSCD EDU 264-2)	3
ECP 110	Child Growth & Development (MSCD PSY 180-4)	4
Electives or Contract Minor		
MAT 161	MSCD	3
ENG 346	MSCD	3
One approved course in any major or minor field		3
Capstone Course		
EDU 285	Issues & Trends in Education	3
Additional Recommended General Studies		
HPL	Any MSCD HPL Class	2
Total		60

Associate of Applied Science Degree in Early Childhood Education

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 requirements also 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 completion (80 percent) of the Early Childhood Professions (ECP) capstone course test. Any student not completing CCD's capstone course must successfully complete the exit competency test with a score of 80 percent or better prior to approval of graduation.

Students may take ECP 101 and 102 without enrolling in the Teacher Education program. Students must apply to the Teacher Education program with an Early Childhood major for subsequent course work.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 2 or completion of REA 109 with a C or better; and
   d. math at level 2a or completion of MAT 056 with a C or better.

General Education Requirements		Credits	Contacts
MAT 103	Contemporary College Mathematics	3	45
ENG 100	Composition, Style & Technique	3	45
SPE 115	Principles of Speech	3	45
SOC 101	Intro. to Sociology I	3	45
PSY 235	Psychology of Growth & Development or	3	45
PSY 101	General Psychology		
Course from AAS Humanities Requirement		3	45
Major Requirements			
ECP 101	Intro. to Early Childhood Professions	3	45
ECP 102	Intro. to Early Childhood Lab Techniques	3	75
ECP 110	Child Growth & Development	4	75

ECP 148	Guidance Strategies for Children	3	45
ECP 205	Nutrition & the Young Child	3	45
ECP 226	Administration of Early Childhood Care & Education Programs	3	45
ECP 227	Curriculum Development: Methods/Techniques:	3	45
ECP 235	Curriculum: Music/Movement & the Young Child	3	45
ECP 250	Supervised Student Practicum/Seminar I	5	135
ECP 251	Supervised Student Practicum/Seminar II (Capstone)	5	135
ECP	Elective	3	45
Select 9 credits from the following electives:		9	135
ECP 111	Infant & Toddler Theory & Practice	(3)	(45)
ECP 210	First Start: Including Children with Disabilities	(3)	(45)
ECP 215	Creativity & the Young Child	(3)	(45)
ECP 225	Curriculum: Anti-Bias	(3)	(45)
ECP 245	Curriculum: Art & the Young Child	(3)	(45)
ECP 265	Curriculum: Science/Math & the Young Child	(3)	(45)
ECP 275	Curriculum: Violence Prevention	(3)	(45)
Total		65	1140

Certificate in Early Childhood Education Director

This program prepares graduates for director-qualified positions in early childhood care and education settings. 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 completion (80 percent) of the Early Childhood Professions (ECP) capstone course test. Any student not completing CCD's capstone course must successfully complete the exit competency test with a score of 80 percent or better prior to approval of graduation.

Students may take ECP 101 and 102 without enrolling in the Teacher Education program. Students must apply to the Teacher Education program with an Early Childhood major for subsequent course work.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math: N/A

		Credits	Contacts
ECP 101	Intro. to Early Childhood Professions	3	45
ECP 102	Intro. to Early Childhood Lab Techniques	3	75
ECP 110	Child Growth & Development	4	75
ECP 148	Guidance Strategies for Children	3	45
ECP 205	Nutrition & the Young Child	3	45
ECP 226	Administration of Early Childhood Care & Education Programs (Capstone)	3	45
ECP 227	Curriculum Development: Methods/Techniques	3	45
ECP	Elective	3	45
SOC 101	Intro. to Sociology	3	45
PSY 101	General Psychology	3	45
	or		
PSY 235	Psy. of Human Growth & Development		
Select 1 course from the following:		3	45
ECP 111	Infant & Toddler Theory & Practice	(3)	(45)
	or		
ECP 215	Creativity & the Young Child	(3)	(45)
Total		34	555

Certificate in Early Childhood Education Group Leader (Auraria Campus)

This program prepares graduates for group leader positions in early childhood care and education settings. 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.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math: N/A

ECP 101	Intro. to Early Childhood Professions	3	45
ECP 102	Intro. to Early Childhood Lab Techniques	3	75
ECP 110	Child Growth & Development	4	75
ECP 148	Guidance Strategies for Children	3	45
Select 1 course from the following:		3	45
ECP 111	Infant & Toddler Theory & Practice	(3)	(45)
	or		
ECP 227	Curriculum Development: Methods/Techniques	(3)	(45)
Total		16	285

Early Childhood Education Group Leader Certificate TEC West

Early Childhood Education Group Leader is a QuickTrain program designed for completion in one, 15-week semester. It prepares students to perform

group leader duties for infants, toddlers and pre-school children. Graduates are prepared to enter positions as a childcare group leaders and childcare workers.

The next program level in this career ladder is available on the CCD Auraria Campus. This is the Early Childhood Education Director certificate program. All credits from the QuickTrain Early Childhood Education Group Leader program are accepted into this certificate program. See a faculty advisor at Auraria to develop an approved program plan for completion of this certificate.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
ECP 101	Intro. to Early Childhood Professions	3	72
ECP 102	Intro. to Early Childhood Lab Techniques	3	72
ECP 110	Child Growth and Development (Capstone)	4	96
ECP 111	Infant and Toddler Theory and Practice	3	72
	or		
ECP 227	Curriculum Development: Methods and Techniques		
ECP 148	Guidance Strategies for Children	3	72
Total		16	384

Certificate in Early Childhood Education Group Leader/Child Development Associate (CDA)
Auraria

This program prepares graduates for group leader positions in early childhood care and education settings. 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

1. Assessment scores or course equivalents as follows:
   a. English at level 4 or completion of ENG 060 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math: N/A

ECP 101	Intro. to Early Childhood Professions	3	45
ECP 102	Intro. to Early Childhood Lab Techniques	3	75
ECP 110	Child Growth & Development	4	75
ECP 148	Guidance Strategies for Children	3	45
ECP 290	Special Topics: Early Childhood Education	3	75
Select 1 course from the following:		3	45
ECP 111	Infant & Toddler Theory & Practice	(3)	(45)
	or		
ECP 227	Curriculum Development: Methods/Techniques	(3)	(45)
Total		19	360

Theatre

Associate of Arts Degree with a Theatre Emphasis

See page 39 for complete AA degree information.

General Education Requirements (see page 39)

		Credits	Contacts
THE 111	Acting I	3	45
THE 112	Acting II	3	45
Select 2 courses from the following:		6	90
THE 105	Intro. to Theatre Arts	(3)	(45)
THE 211	Development of Theatre I	(3)	(45)
THE 212	Development of Theatre II	(3)	(45)
Total		12	180

Trades and Industry

Associate of Applied Science Degree in Airframe/Power Plant

Students must register for airframe/power plant courses at Emily Griffith Opportunity School. Upon completion of airframe/power plant courses, students will receive an FAA certificate. With an additional 15 semester 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 division dean in Science and Technology for information on this program.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 2 or completion of ENG 060 with a C or better;
   b. reading at level 2 or completion of REA 060 with a C or better;
   c. study skills at level 1; and
   d. math at level 2a or completion of MAT 035 with a C or better.

Associate of Applied Science Degree in Trades

The Trades AAS degree program consists of a maximum of 58 semester credit hours of trade-specific credits. Students may earn these credits via apprenticeship training (classroom and on-the-job 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 three-year registered apprenticeship program, 20 CCD credit hours will be required. For those completing a

four-year or five-year apprenticeship program, 17 CCD general education credits will be required. Students completing CCD/TEC certificate course sequences and wishing to pursue the AAS degree must complete a minimum of 25 semester 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. Students enrolled in the apprenticeship training part of this program are not eligible for financial aid from CCD.

Program Admission Requirements

1. Assessment scores or course equivalents as follows:
   a. English at level 3 or completion of ENG 100 with a C or better;
   b. reading at level 3a or completion of REA 090 with a C or better;
   c. study skills at level 3 or completion of REA 109 with a C or better; and
   d. math at level 2b or completion of MAT 103 with a C or better.
2. Official transcript showing completion of Emily Griffith Opportunity School's Apprenticeship program.

Apprenticeship Training	Credits	Contacts
Four- to five-year training and Capstone	43	3870
Three-year training and Capstone	40	3600
General Education Requirements		
ENG 121 or 131	3	45
MAT 103 or 121	4	60
Select 1 course from the following		
AAS Physical & Biological Sciences requirements: AST 101, 102; BIO 105, 111, 112* CHE 101, 102, 111, 112; GEY 111; PHY 105, 111, 112, 211, 212	4-5	80-105
Select 1 course from the following		
AAS Humanities requirements: 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	3-4	45-68
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	3	45
SPE 115 Intro. to Speech (3-year apprenticeship program only)	3	45
Total	63-68	3985-4295

Associate Of Applied Science Degree In Trades
CNC Machine Tool Operator

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 40 credits listed in the WorkTrain CNC Machine Tool Operator certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)
Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

CNC Machine Tool Operator Certificate
TEC North

CNC Machine Tool Operator is a WorkTrain 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, or can enter apprentice programs for CNC machinist positions.

The WorkTrain CNC Machine Tool Operator certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Trades, CNC Machine Tool Operator.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
MTO 130	Intro. to Machine Shop	2	48
MTO 131	Machine Math and Prints I	3	72
MTO 132	Mills I	4	96
MTO 133	Engine Lathes I	4	96
MTO 140	Metrology	2	48
MTO 141	Mills II	4	96
MTO 142	Machine Math and Prints II	1	24
MTO 143	Engine Lathes II	3	72

MTO 221	Engine Lathes III	2	72
MTO 223	Job Shop Machining I	3	72
	or		
MTO 297	Cooperative Work Experience	(3)	(135)
MTO 250	Auto Cad I	3	72
MTO 251	CNC Operations (Capstone)	3	72
MTO 252	CNC Principles	4	96
MTO 253	CNC Mathematics I	2	48
Total		40	984-1047

Machine Tool Operator Certificate
TEC North

Machine Tool Operator is an XpressTrain program designed for completion in two, 15-week semesters. It prepares students with the job-entry 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, or can enter apprentice programs for machinist positions.

All XpressTrain Machine Tool operator certificate program credits apply toward the WorkTrain CNC Machine Tool Operator program requirements.

Program Admission Requirements: Minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
MTO 130	Intro. to Machine Shop	2	48
MTO 131	Machine Math and Prints I	3	72
MTO 132	Mills I	4	96
MTO 133	Engine Lathes I	4	96
MTO 140	Metrology	2	48
MTO 141	Mills II	4	96
MTO 143	Engine Lathes II (Capstone)	3	72
MTO 223	Job Shop Machining I	3	72
	or		
MTO 297	Cooperative Work Experience	(3)	(135)
Total		25	600-663

Lathe Operator Certificate
TEC North

Lathe Operator is a QuickTrain 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 QuickTrain Lathe Operator certificate program credits apply toward the XpressTrain Machine Tool Operator certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
MTO 130	Intro. to Machine Shop	2	48
MTO 131	Machine Math and Prints I	3	72
MTO 133	Engine Lathes I	4	96
MTO 140	Metrology	2	48
MTO 143	Engine Lathes II	3	72
MTO 223	Job Shop Machining I (Capstone)	2	48
Total		16	384

Mill Operator Certificate
TEC North

Mill Operator is a QuickTrain 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 QuickTrain Mill Operator certificate program credits apply toward the XpressTrain Machine Tool Operator certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
MTO 130	Intro. to Machine Shop	2	48
MTO 131	Machine Math and Prints I	3	72
MTO 132	Mills I	4	96
MTO 140	Metrology	2	48
MTO 141	Mills II	4	96
MTO 223	Job Shop Machining I (Capstone)	2	48
Total		17	408

Associate Of Applied Science Degree In Trades
Fabrication Welder

This degree is comprised of the 23-24 credits listed below in the General Education Core and the 39 credits listed in the WorkTrain Fabrication Welder certificate program that follow. The General Education Core requirements and choices are:

General Education Requirements		Credits	Contacts
ENG 121	English Composition I	3	45
MAT 103	Contemporary College Math	4	60
Select one course from the following:		4-5	60-90
AST 101	Astronomy I	(4)	(60)
CHE 101	Intro. to Chemistry I	(5)	(90)
PHY 105	Conceptual Physics	(4)	(75)
Select 6 credits from the following:		6	90-105
ART 111	Art History I	(3)	(45)
CIS 118	Intro. to PC Applications	(3)	(60)
HUM 121	Survey of Humanities I	(3)	(45)
LIT 115	Intro. to Literature	(3)	(45)
PHI 111	Intro. to Philosophy	(3)	(45)

Select 6 credits from the following:		6	90
ANT 101	Cultural Anthropology	(3)	(45)
HIS 101	Western Civilization I	(3)	(45)
PSY 101	General Psychology I	(3)	(45)
SOC 101	Intro to Sociology	(3)	(45)
SPE 115	Principles of Speech	(3)	(45)
Total		23-24	345-390

Fabrication Welder Certificate
TEC North

Fabrication Welder is a WorkTrain 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 WorkTrain 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 033.

		Credits	Contacts
WEF 100	Oxyacetylene Welding I	3	72
WEF 102	Air Arc Gouging	2	48
	or		
WEF 297	Cooperative Work Experience	(2)	(90)
WEF 108	SMAW Set Up and Padding	4	96
WEF 109	SMAW I	4	96
WEF 110	SMAW II	4	96
WEF 111	SMAW Structural I	4	96
WEF 112	SMAW Structural II	3	72
WEF 114	Welding Math and Prints I	3	72
WEF 130	GMAW Set Up	2	48
WEF 205	GMAW Thin Gauge and Structural	4	96
WEF 207	GTAW Set Up	2	48
WEF 208	GTAW Thin Gauge and Alloy (Capstone)	4	96
Total		39	936-978

Arc Welder Certificate
TEC North

Arc Welder is an XpressTrain program designed for completion in two, 15-week 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 XpressTrain Arc Welder certificate program credits apply toward the WorkTrain Fabrication Welder program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
WEF 100	Oxyacetylene Welding I	3	72
WEF 102	Air Arc Gouging	2	48
	or		
WEF 297	Cooperative Work Experience	(2)	(90)
WEF 108	SMAW Set Up and Padding	4	96
WEF 109	SMAW I	4	96
WEF 110	SMAW II	4	96
WEF 111	SMAW Structural I	4	96
WEF 112	SMAW Structural II (Capstone)	3	72
WEF 114	Welding Math and Prints I	3	72
Total		27	648-690

Welder Certificate
TEC North

Welder is a QuickTrain 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 QuickTrain Welder certificate program credits apply toward the XpressTrain Arc Welder certificate program requirements.

Program Admission Requirements: Minimum TABE assessment score of 8th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credits	Contacts
WEF 108	SMAW Set-Up and Padding	4	96
WEF 109	SMAW I	4	96
WEF 110	SMAW II	4	96
WEF 111	SMAW Structural I (Capstone)	4	96
Total		16	384

Course descriptions are in alphabetical order by program, prefix and course number. Please refer to the semester class schedules for the list of courses offered each semester.

Alternative Delivery Methods
Courses delivered through traditional methods often are delivered also through alternative methods, such as telecourses or "on-line" courses. The course, delivered through alternative methods, uses the identical content guide, requires the identical student outcomes and awards the identical student credit hours as the same course delivered through traditional methods.

Study Abroad
Course credits are based on the type of instructional delivery and must meet the same criteria as courses delivered on campus.

Course Modifications
The courses listed in the following pages are an indication of college course offerings. Courses and programs are subject to change at any time. CCD does not offer all courses every semester.

Courses Common to More Than One Program

085 Recitation
Variable Credit

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
Carries 1 to 6 credits and 15 to 90 contact hours

Course titles (topics) will vary. Permission of the instructor and division director is required prior to registration. Four-year institutions vary in their acceptance policies for special topic courses. Students planning to transfer should keep a portfolio of their work.

295 Job Search Workshop
Variable Credit

Presents information on the nature of work, employer expectations, rÈsumÈ writing, job interview techniques and job search skills.

297 Cooperative Education (Co-op.)

Provides opportunities to supplement course work with practical work experiences related to the student's educational program and occupational objective. Credit and contact hours are variable. 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 advisor.

199, 299 Independent Study
Variable credit and contact 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 division dean is required prior to registration. Students who plan to transfer should consult with an advisor; 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
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Emphasizes the basic elements of the accounting cycle through statement preparation. Includes common bookkeeping procedures for handling cash receipts and disbursements, and woZXrking with accounts receivable and payable. Includes practice in handling journals and ledgers.

ACC 110 Business Math
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: MAT 035 or equivalent
Emphasizes the application of math to business situations. Teaches problem-solving techniques in areas of merchandising, accounting, general business and personal finance.

ACC 111 Individual Income Tax
AUR 3 credit hours/45 contact hours
Prerequisite: ACC 121
Introduces taxation and explains how the income tax affects individuals.

ACC 113 Computerized Accounting
AUR 4 credit hours/60 contact hours
TECs 4 credit hours/96 contact hours
Prerequisite: ACC 101
Corequisite: ACC 121
Introduces data entry procedures on the computer for accounting applications. Includes a review of manual procedures and extensive hands-on experience with computerized accounting systems. This course is the certificate capstone course.

ACC 115 Computerized Payroll
AUR 2 credit hours/30 contact hours
TECs 2 credit hours/48 contact hours
Provides the student with a better understanding of the laws governing payroll, and the theory and procedures for setting up payroll systems.

ACC 121 Accounting Principles I
AUR 4 credit hours/60 contact hours
TECs 4 credit hours/96 contact hours
Corequisite: ACC 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
AUR 4 credit hours/60 contact hours
TECs 4 credit hours/96 contact hours
Prerequisites: ACC 121, 110
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 211 Intermediate Accounting (Capstone)
AUR 3 credit hours/45 contact 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. This is a capstone course.

ACC 215 Accounting Systems
AUR 3 credit hours/45 contact hours
Prerequisite: ACC 122
Studies the principles, concepts and tools used in the design, implementation and integration of accounting systems, controls and procedures. Illustrates manual and computerized systems through practical application projects.

ACC 226 Cost Accounting
AUR 3 credit hours/45 contact 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.

Administrative Health Assistant

AHA 120 Medical Filing
3 credit hours/72 contact hours
Introduces the student to the basic rules and principles of filing in medical facilities. Topics include numeric filing, terminal digit filing, cross-referencing, color-coding, alphabetic filing, medical records control, computer-assisted filing and interactive participation in a model unit.

AHA 152 Medical Office Communication
3 credit hours/72 contact hours
Develops the skills of expression of ideas when speaking and writing; addresses listening skills and improves awareness of correct speech patterns and listening for incorrect grammar usage; and introduces beginning medical filing with an emphasis placed on alphabetic and numeric methods.

AHA 155 The Medical Manager
3 credit hours/72 contact hours
Prerequisites: BTE 101, CIS 120, THA 114
Uses the Medical Manager software package to explore activities such as making appointments, entering patient information, recording superbills, billing insurance companies and posting payment receipts. Also covers regulations governing insurance billing.

AHA 156 Basic Coding
2 credit hours/48 contact hours
Prerequisites: BTE 101, CIS 120, THA 114
Introduces the basic coding principles for using the International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM), as well as some special coding situations. The student also will learn about procedure codes through the Current Procedural Terminology (CPT).

AHA 158 Medical Unit Coordinating I
7 credit hours/168 contact hours
Prerequisites: BTE 102, THA 110, 114
Introduces the history, growth and development of medical unit coordinating and provides an orientation to the work environment. Includes the knowledge and skills necessary to perform the coordination duties needed in a medical facility, including safety for patients and others, transcription of doctors' orders and other medical tasks as required.

AHA 160 Coding I
2 credit hours/48 contact hours
Prerequisites: BTE 101, CIS 120, THA 114
Introduces the basic rules and principles of medical coding using International Classification of Diseases (ICD-9-CM) formats and conventions, including V Codes and E Codes. Also introduces procedural codes through the Current Procedural Terminology (CPT).

AHA 200 Medical Transcription I
4 credit hours/96 contact hours
Prerequisites: BTE 101, CIS 120, THA 114
Introduces the use of transcription equipment, principles of grammar, proofreading and word processing skills. Provides practice in transcribing history and physical reports, discharge summaries and other reports used in common medical procedures.

AHA 204 Medical Records I
3 credit hours/72 contact hours
Prerequisites: BTE 101, CIS 120, THA 114
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.

AHA 207 Medical Transcription II
6 credit hours/144 contact hours
Prerequisites: AHA 200
Continues the topics of Medical Transcription I and introduces advanced terminology and technical reports. Covers specialty areas of surgery, radiology and general reports. Practice tapes contain various medical background noise and use dictators with foreign accents.

AHA 209 Medical Unit Coordinating II
7 credit hours/168 contact hours
Prerequisites: AHA 158
Continues the topics of AHA 158, Medical Unit Coordinating I and includes laboratory orders, diagnostic orders, treatment orders, miscellaneous orders, health unit coordinator procedures, management techniques, communications and medical/legal considerations.

AHA 211 Medical Secretarial Skills
4 credit hours/96 contact hours
Prerequisites: AHA 152, 155, 200
Covers secretarial topics such as record keeping duties, bank reconciliation, accounting terminology and basic accounting practices. Also presents types of mailing procedures, basic insurance filing and making referral appointments.

AHA 250 Medical Records II
4 credit hours/96 contact hours
Prerequisites: AHA 204
Continues the topics of AHA 204, Medical Records I and presents indexes, registers, statistics, medical records in reimbursement, computer and information systems, legal aspects and quality assurance.

American Sign Language

ASL 101 American Sign Language I
3 credit hours/45 contact hours
Introduces American Sign Language (ASL). Includes both an awareness of 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" questions.

ASL 102 American Sign Language II
3 credit hours/45 contact hours
Prerequisite: ASL 101
Continues topics introduced in ASL 101. Emphasizes critical and logical thinking in ASL. Helps 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.

Anthropology

ANT 101 Cultural Anthropology
3 credit hours/45 contact 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/45 contact 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/45 contact 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/45 contact 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 a cross-cultural perspective. Students will apply general principles in a global context.

ANT 265 Violence and Culture
3 credit hours/45 contact hours
Prerequisites: ANT 101, 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/75 contact hours

Gives students a fundamental understanding of the Arabic language and develops their basic listening, speaking, reading and writing skills.

Art

ART 110 Art Appreciation
3 credit hours/45 contact hours

Introduces the cultural significance of the visual arts to include 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/45 contact 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/45 contact 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 121 Drawing I
3 credit hours/90 contact hours

Introduces various approaches and media to develop drawing skills and visual awareness.

ART 122 Drawing II/Mixed Media
3 credit hours/90 contact 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 Design I
3 credit hours/90 contact hours

Studies basic design elements, visual perception, form and composition.

ART 132 Design II
3 credit hours/90 contact hours
Prerequisite: ART 131

Continues Design I with further examination of composition, modular repetition, color effect and three-dimensional design.

ART 135 Computer Graphics Art I
3 credit hours/90 contact hours
Prerequisites: GRD 102, GRD 103
Corequisite: GRA 109

Approaches fine arts through use of the computer. Computer software based on natural media — pencils, brushes, charcoal, oils, etc. — make possible fine art results. Introduces photo manipulation and graphic design in the field of computer graphics.

ART 151 Fundamentals of Black and White Photography
3 credit hours/90 contact 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 Intermediate Black and White Photography
3 credit hours/90 contact hours
Prerequisite: ART 151

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 interpreting; testing procedures; light metering techniques; controlling film exposure and development; and visualization for expressive black and white prints.

ART 153 Fundamentals of Color Photography
3 credit hours/90 contact hours

Introduces color theory, the nature of light and light sources, the reproduction of color, color films and processing. Emphasizes building individual experience with color transparency films and potential expression through color photography.

ART 154 Intermediate Color Photography
3 credit hours/90 contact hours
Prerequisites: ART 151, 153

Covers printing from color negatives, the most popular mode in use. Emphasizes creative expression coupled with sound lab procedures.

ART 157 History of Photography
3 credit hours/90 contact 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 210 Asia, Africa and the Americas: An Introduction to Non-Western Art
3 credit hours/45 contact hours
Prerequisite: ART 111 or 112

Introduces the art of non-Western culture. Provides a knowledge base to understand the visual arts outside the Western tradition.

ART 211 Painting I
3 credit hours/90 contact hours
Introduces a fundamental technical and formal foundation for the beginning student, including composition, color, materials and techniques of acrylic painting.

ART 212 Painting II
3 credit hours/90 contact 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/90 contact 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/90 contact 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/90 contact hours
Prerequisite: ART 121
Introduces a fundamental, 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/90 contact hours
Prerequisite: ART 231
Continues the study of watercolor techniques with an emphasis on subject development, form, color and theme.

ART 251 The Fine Print
3 credit hours/90 contact hours
Prerequisites: ART 151, 152, 153
Introduces and refines advanced skills of the student interested in producing better quality black and white prints. The experience and instruction gained in this class prepare students for a variety of career objectives, including original fine art printing of the highest caliber.

ART 252 Studio Lighting
3 credit hours/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: ART 151, 153
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 255 Points of View
3 credit hours/90 contact hours
Prerequisites: ART 151, 152
Provides each student with on-site photographic opportunities and direct experience with the changing light and colors of the fabulous American West environment.

ART 270 Figure Drawing I
3 credit hours/90 contact 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.

Astronomy

AST 101 Astronomy I
4 credit hours/60 contact hours
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/60 contact hours
Prerequisite: AST 101
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/75 contact hours
Prerequisites: ENG 100, MAT 100, 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 experience.

BIO 111 General College Biology I
5 credit hours/90 contact hours
Prerequisites: ENG 100 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/90 contact hours
Prerequisite: BIO 111
Continues General College Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. Includes laboratory experience.

BIO 114 Biology of Humans for Psychiatric Technicians
3 credit hours/45 contact hours
Prerequisite: Admission to the Psychiatric Technician (LPT) program or instructor consent
Provides a brief survey of the anatomy and physiology of all systems. Concentration will be on the nervous system along with the muscular system, related drug physiology, the endocrine system and the lymphatic system with immunity.

BIO 116 Human Biology
3-4 credit hours/45-60 contact hours
Prerequisite: Basic Skills Assessment level 2 in reading or REA 060
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. The four-hour option includes a special topics packet that can include information needed in psychiatric technology or gerontology.

BIO 118 Human Ecology and the Environment
3 credit hours/60 contact hours
Prerequisites: Basic Skills Assessment level 3 in English or ENG 100, Basic Skills Assessment level 2b in math or MAT 100
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.

BIO 119 Radiographic and Surgical Anatomy
4 credit hours/60 contact hours
Provides a brief survey of anatomy with very limited physiology for all of the body systems. Concentrates on the skeletal system, body cavities, anatomical landmarks, cross-sectional anatomy, and details of those features that are used by technicians in radiographic or surgical health sciences.

BIO 201 Human Anatomy & Physiology I
4 credit hours/75 contact hours
Prerequisites: Basic Skills Assessment level 3 in study skills or REA 109, Basic Skills Assessment level 3 in reading or REA 090, one year of high school chemistry or instructor consent
Includes atomic, molecular, cellular, histology, gross morphology and physiology of the skeletal, muscular, nervous and endocrine systems. Includes a required laboratory.

BIO 202 Human Anatomy and Physiology II
4 credit hours/75 contact hours
Prerequisite: BIO 201
Includes atomic, molecular, cellular, histology, gross morphology and physiology of the reproductive integumentary, urinary, cardiovascular, lymphvascular, digestive and respiratory systems plus homeostatic mechanisms. Includes required laboratory.

BIO 204 Physiological Aspects of Aging
3 credit hours/45 contact hours
Prerequisites: BIO 105 or above or instructor consent
Covers the normal or expected changes that the older adult may experience. Addresses normal structure and function of body systems, the changes with aging and pathologic conditions that are commonly observed in the aged individual. Reviews health maintenance practices.

BIO 205 Microbiology
4 credit hours/75 contact hours
Prerequisite: BIO 111 or instructor consent
Studies microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying, controlling microorganisms and the study of the role of microorganisms in infectious disease.

BIO 228 Field Biology
3 credit hours/60 contact hours
Prerequisite: BIO 112
Introduces students to field experiences and ecology. Includes identification of plants and animals in their natural environment. The course includes mandatory field trips to nearby natural areas.

Business Administration

BUS 115 Introduction to Business
AUR 3 credit hours/45-72 contact hours
Prerequisites: Basic Skills Assessment level 1c in math or MAT 035, Basic Skills Assessment level 3 in reading or REA 090
Introduces students to the broad spectrum of business activities. Introduces and defines appropriate vocabulary used in the various aspects of business.

BUS 117 Time Management
AUR 1 credit hour/15 contact hours
Provides the student with the conceptual knowledge and tools to make better use of time in management functions and for personal use.

BUS 170 Supermarket Loss Prevention
AUR 3 credit hours/45 contact hours
Familiarizes managers from all areas of the supermarket with the broad spectrum of supervisory areas that can cause profit loss within the overall supermarket company environment. Presents methods to prevent those causes.

BUS 185 Business Certificate (Capstone)
AUR 1 credit hour/15 contact hours
Prerequisites: ACC 121, BUS 115, 217, 221, ECO 201
Reviews and focuses on preceding management and business study; completion during the final semester before receiving a certificate in management.

BUS 205 Small Business Management
AUR 3 credit hours/45 contact hours
Prerequisites: ACC 101, BUS 115
Explores the fundamentals of organizing and operating a small business. Recognizes variations in application suited to individual needs. Studies problems of labor, location, financing, management, accounting, entrepreneurship and research. Provides a view of entrepreneurship in the economy.

BUS 207 Teleservices
AUR 3 credit hours/45 contact hours
Introduces the various components of the teleservices industry, including outsourcing. Provides emphasis on the telephone as a vehicle for customer service.

BUS 210 International Business
AUR 3 credit hours/45 contact hours
Prerequisite: BUS 115
Introduces students to the concept, development, present and future importance of international business.

BUS 211 International Marketing
AUR 3 credit hours/45 contact hours
Prerequisite: BUS 115
Provides a foundation for developing marketing strategies that apply to export and import operations with international businesses.

BUS 215 International Business Environments
AUR 3 credit hours/45 contact hours
Examines the business relationships among nation states, including business environments, business relations, economics power, diplomacy, nationalism, conflict and cooperation, and economic balance of power and influence.

BUS 217 Business Communications
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Helps students meet the demands of today's businesses that seek employees with good communication skills. Introduces students to the principles of good communications, and alerts them to communications barriers.

BUS 218 Business Communications II
TECs 3 credit hours/60 contact hours
Prerequisite: BUS 217 or instructor consent
Continuation of BUS 217 Business Communications. Students continue to develop skills in grammar, sentence development and spelling.

BUS 221 Legal Environment of Business
AUR 3 credit hours/45 contact hours
Prerequisites: ACC 121, BUS 115
Corequisite: BUS 228
Introduces the study of business law and includes topics such as: foundations of the legal system, contracts, sales (UCC) agency, and real and personal property.

BUS 226 Business Statistics
AUR 3 credit hours/45 contact hours
Prerequisites: BUS 115, and MAT 100 or 103
Covers statistical study, descriptive statistics, mobility and the binomial distribution, index numbers, time series, decision theory, confidence intervals, hypothesis testing, testing of 10 samples, chi-square and ANOVA, linear regression and correlation.

BUS 227 Human Resources Management
AUR 3 credit hours/45 contact hours
Prerequisite: BUS 115
Designed to assess the role, organization and evaluation of one of an organization's most valuable resources — personnel. Covers skills and knowledge of human resources (HR) managers, strategic plans and decision making and their contributions toward the achievement of organizational objectives.

BUS 228 Principles of Management
AUR 3 credit hours/45 contact hours
Presents the basic fundamentals of management practice and acknowledges that management concepts have universal application to all problem-solving situations. Completion of this course should occur during the final semester before completing a degree in business administration.

BUS 229 Motivation and Management
AUR 3 credit hours/45 contact hours
Introduces motivation as an inner force that results from an individual's desire to satisfy unmet needs. Productivity is a result of the behavior of members of an organization; influencing behavior through motivation is a manager's key to increasing productivity.

BUS 230 Principles of Finance
AUR 3 credit hours/45 contact hours
Prerequisites: BUS 115, ACC 121, 122
Surveys financial markets, the place of finance in the business economy, the role of the financial manager, the organization of finance intermediaries and the basic techniques of financial analysis.

BUS 231 Principles of Sales
AUR 3 credit hours/45-72 contact hours
Prerequisite: BUS 115
Introduces proper sales techniques. Covers the role of selling in the marketing process, consumer behavioral consideration in the buying-selling process, sales techniques and sales management.

BUS 235 Retail Marketing and Management
AUR 3 credit hours/45 contact hours
Prerequisite: BUS 115
Familiarizes students with the business activities collectively referred to as "retailing."

BUS 236 Principles of Marketing
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Enables the student to obtain a broad understanding of marketing as a functional process and managerial variable. Presents marketing strategies as an integrated system of the marketing mix designed to plan, promote, price, and distribute goods and services to businesses and consumers.

BUS 237 Customer Service
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Enables students to learn the relationship of self to customers, problem solve and understand the importance of communicating with customers.

BUS 238 Customer Service II
TECs 3 credit hours/72 contact hours
Prerequisite: BUS 237
Covers voice quality and the telephone, telephone technology, effective teamwork, service delivery, job enrichment and career paths.

BUS 239 Advertising and Promotion
AUR 3 credit hours/45 contact hours
Prerequisite: BUS 115
Offers an overview of the social, economic and marketing environment that involves advertising.

BUS 285 Business Policy and Ethics
AUR 3 credit hours/45 contact hours
Prerequisites: Last semester of study
Enables students to integrate various business subject areas that are common to decision making in commerce and industry. Teaches students to discern and analyze ethical issues and management approaches toward an organization's social responsibility in local, state and national affairs.

Business of Travel and Tourism

BTT 110 Introduction to Travel
3 credit hours/45-72 contact hours
Introduces various components of the travel and tourism industry, including career opportunities. Provides product knowledge and develops basic skills in researching and selling.

BTT 111 Travel Geography I
3 credit hours/45-72 contact hours
Presents the location of countries and capital cities, as well as major tourist attractions throughout the Western hemisphere. Gives a broad knowledge of the geography and understanding of the culture, with an emphasis on planning travel itineraries.

BTT 112 Travel Geography II
3 credit hours/45 contact hours
Presents the location of countries and capital cities, as well as major tourist attractions throughout the Eastern hemisphere. Gives a broad knowledge of the geography and understanding of the culture, with an emphasis on planning travel itineraries.

BTT 113 Selecting and Selling Cruises
3 credit hours/45 contact hours
Introduces the student to the cruise product. Primarily a hands-on course covering the techniques of selecting, selling and reserving accommodations on a cruise to the client's intended destination during the time period stipulated by the client, and on a ship of the client's choice and in the client's price range.

BTT 210 Domestic Ticketing
3 credit hours/45-72 contact hours
Gives the student experience in manually issued travel documents as required by the Airlines Reporting Corporation. Emphasizes manually issuing airline tickets, interpreting fare and rule displays, and refunding and exchanging airline tickets.

BTT 211 International Travel
3 credit hours/45 contact hours
Provides the student with international travel details such as passports, visas, customs, time zones and currencies. Students plan an itinerary using codes, flight schedules, fares and rules. Provides hands-on experience in manually constructing air fares for worldwide itineraries, and combining several currencies and exchange rates.

BTT 212 Computer Reservations I
3 credit hours/45-72 contact hours
Introduces the student to United Airlines' Apollo reservation system to make scheduled air reservations. Training includes flight availability, selling, canceling and rebooking, finding the best fare, creating a PNR and issuing tickets.

BTT 213 Computer Reservations II (Capstone)
3 credit hours/45 contact hours
Prerequisite: BTT 212 or instructor consent, CIS 118
Introduces the student to advanced Apollo computer skills, including seat assignment, special services, queues, car and hotel availability, selling and canceling and converting Apollo to other reservation systems.

Business Technology: Office Management and Secretarial Studies

BTE 100 Introduction to Keyboarding
AUR 3 credit hours/45-68 contact hours
Introduces touch keyboarding, as well as basic operations and functions of equipment. Emphasizes learning the alphanumeric keyboard, proper techniques, and speed and control. Designed for students who have minimal or no keyboarding skills.

BTE 101 Keyboarding I
AUR 5 credit hours/83 contact hours
TECs 4-5 credit hours/96-120 contact hours
Introduces keyboard, machine parts, correct techniques and accuracy in keyboarding applications of centering, tabulating letters and manuscripts.

BTE 102 Basic Keyboarding Applications
AUR 2-3 credit hours/
45-67 contact hours
TECs 2-3 credit hours/
48-72 contact hours
Prerequisite: BTE 100 or typing speed of 15 wpm
Designed for students with minimal keyboarding skills. Introduces tables, memos and reports. Emphasizes speed and accuracy.

BTE 103 Typing Development I
TECs 2-3 credit hours/
48-72 contact hours
Prerequisite: BTE 101
Improves typing speed and accuracy using the Cortez Peters Championship Typing Method.

BTE 104 Keyboarding SpeedBuilding
AUR 4 credit hours/60 contact hours
TECs 1-5 credit hours/
24-120 contact hours
Prerequisite: BTE 101
Builds keyboarding speed and improves accuracy through course technique and concentrated effort using the Cortez Peters Championship Typing Method.

BTE 108 Business Machines: Ten Key by Touch
AUR 1-2 credit hours/23-45 contact 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 Filing and Records Control
AUR 4 credit hours/68 contact 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
AUR 4 credit hours/60 contact 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
AUR 3 credit hours/45 contact hours
Prerequisites: BTE 101, 151
Prepares students for the central roles they will play in the electronic office. Provides them with the opportunity to acquire the conceptual knowledge essential to today's and tomorrow's office environment. Presents a thorough explanation of the rapidly changing and expanding nature of office technology.

BTE 138 Windows 95
AUR 3 credit hours/68 contact hours
Introduces the functions of an environment or shell. Demonstrates the use of Windows 95 showing the mechanisms of control and of file manipulation, as well as program and graphic regulation.

BTE 139 Professional Development
AUR 3 credit hours/45 contact hours
Helps the student find the key to success and professional development. Examines the role of professional ethics, job search strategies and professional image. Integrates speech communication throughout the course.

BTE 151 WordPerfect
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: BTE 101
Provides instruction in WordPerfect, which includes preparation of business documents for the modern office using basic software commands and functions. This includes originating, processing and editing documents using WordPerfect.

BTE 152 Microsoft Word
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: BTE 101
Provides instruction in Microsoft Word, which includes the preparation of business documents for the modern office using basic software commands and functions. This includes originating, processing and editing documents using Microsoft Word.

BTE 155 Spreadsheets for Office Management
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118
Covers such topics as basic spreadsheet functions, Excel, LOTUS command structure, file saves, retrieval, combining, printing, database development, extracts, macros, graphics, fonts, menu-driven macros and what-if tables.

BTE 160 Data Entry I
TECs 3 credit hours/72 contact hours
Prerequisite: BTE 101
Introduces basic data-entry activities for the microcomputer. A number of activities provide source documents with fields for entering information. Stresses speed and accuracy in keyboarding.

BTE 200 Office Procedures
TECs 3 credit hours/72 contact 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
AUR 5 credit hours/83 contact hours
Prerequisite: BTE 101
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
AUR 4 credit hours/60 contact hours
Prerequisite: BTE 101
Builds greater keyboarding speed and improves accuracy through the use of course technique and concentrated effort.

BTE 206 Health Insurance Methods Claims
AUR 3 credit hours/45 contact hours
Prerequisites: BTE 101
Instructs students in the general types of health insurance plans on the market, methods of payment, common insurance terms, benefits and limitations of government-sponsored and mandated insurance plans.

BTE 209 Legal Terminology
AUR 2 credit hours/30 contact hours
Prerequisite: BTE 101
Provides a background in basic legal terminology.

BTE 230 Machine Transcription
AUR 5 credit hours/83 contact hours
Prerequisite : ENG 100
Helps the student attain competency in transcribing from machine dictation using the language arts and formatting office papers.

BTE 251 Advanced Word Processing
AUR 3 credit hours/67 contact hours
TECs 3 credit hours/72 contact hours
Prerequisites: BTE 101
Provides advanced instruction in the application of word processing concepts using the microcomputer. Teaches word processing and applications using current commercial software, the manufacturer's manuals, and supplementary text and exercises. Students may choose either WordPerfect or Microsoft Word, depending on previous experience.

BTE 288 Model Office
AUR 3 credit hours/45 contact hours
Prerequisite: BTE 151 or 152
Prepares students to make the transition from college to the workplace. Assimilated office environment gives students a realistic work experience in answering the telephone using the fax machine, personal computers, making decisions and increasing proficiency in all office-related skills.

Chemistry

CHE 085 Problem Solving
1 credit hour/30 contact hours
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/105 contact hours
Prerequisites: ENG 110, MAT 105
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 these concepts qualitatively and quantitatively.

CHE 102 Introduction to Chemistry II
5 credit hours/105 contact hours
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 these topics quantitatively and qualitatively.

CHE 106 General, Organic and Biochemistry
4 credit hours/60 contact 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/105 contact hours
Prerequisites: CHE 101, ENG 121, MAT 121
Corequisites: ENG 121, MAT 121
Includes the study of thermodynamics, chemical kinetics, chemical equilibrium, acid-base 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 will demonstrate qualitative and quantitative analytical techniques.

CHE 112 General College Chemistry II
5 credit hours/105 contact 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/45 contact hours
Gives students a fundamental understanding of the Chinese language, and develops basic listening, speaking, reading and writing skills. Emphasizes practical conversation, basic sentence structure, vocabulary and culture.

CHN 111 First-Year Chinese I
5 credit hours/75 contact 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/75 contact 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.

Commercial Credit Management

CRM 217 Business Credit Principles (Capstone)
3 credit hours/45 contact hours
Prerequisites: ACC 121, CIS 118
Acquaints the student with the concepts and principles of credit and identifies the interdependent types of credit encountered in everyday life. Concepts include department organization, personnel, training, policies, procedures and systems development, techniques used to gather credit information and making credit decisions.

Communications

COM 126 Introduction to Mass Media
3 credit hours/45 contact hours
Examines the basic concepts, principles and social issues relating to various traditional and emerging mass media for the communications, journalism and general student.

COM 251 Introduction to Television Production
3 credit hours/45 contact hours
Introduces students to television studio production. Emphasizes skills in the operation of video equipment and production of television programs.

COM 252 Videography/Editing
3 credit hours/45 contact hours
Prerequisites: COM 251 or MUM 107
Corequisite: MUM 100
Introduces theory and practice, history and processes of camera and editing formats that will be integrated with instruction or digital editing software/platforms.

COM 253 Script and Storyboard Writing
3 credit hours/45 contact hours
Prerequisites: ENG 121, 122
Introduces theory and practice of script writing and storyboarding within a multimedia environment, incorporating graphics, video, text, animation and interactivity.

COM 254 Media Writing/Media Overview
3 credit hours/45 contact hours
Prerequisites: ENG 121, 122
Surveys the history of mass media and industry, including structure, legal issues, regulation, ethics and future trends from a critical perspective. Incorporates writing for the media in light of these issues and practices.

COM 255 Survey of Film
3 credit hours/45 contact hours
Introduces students to the history and appreciation of film. Explores the major movements and issues in the cinema. Covers visual literacy skills used film analysis.

Computer Information Systems

CIS 110 Introduction to PC Operation Systems
AUR 2 credit hours/45 contact hours
TECs 2 credit hours/48 contact hours
Introduces concepts, terminology and skills in the use of a PC operating system. Emphasizes understanding and using the operating system in a practical way to complement the student's use of a microcomputer.

CIS 112 Introduction to Windows
AUR 2 credit hours/45 contact hours
TECs 2 credit hours/48 contact hours
Introduces the functions and capabilities of Microsoft Windows. Topics include using, configuring and modifying the operating environment.

CIS 117 Computer Access Methods for the Disabled
AUR 2-4 credit hours/
45-90 contact hours
Acquaints student with the concepts and principles of computer adaptations for disabilities. These concepts include initial terminology, application packages, adaptation packages, and etc.

CIS 118 Introduction to PC Applications
AUR 4 credit hours/68 contact hours
TECs 3 credit hours/72 contact hours
Introduces computer concepts and components, as well as application suite software and 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
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces major programming concepts, including numbering systems, program documentation and design, the DOS operating system and authoring computer programs. Uses BASIC programming language.

CIS 130 Introduction to the Internet
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces the Internet, the global network of computer networks, and explores the Internet's resources and tools. Topics include history, topology, E-mail, lists, Telnet, FTP, World Wide Web and various search engines.

CIS 131 Introduction to Web Authoring
AUR 3 credit hours/45 contact hours
TEC E 3 credit hours/72 contact hours
Prerequisite: CIS 130 or instructor consent
Introduces the basic concepts of Web authoring. Students will write source code, format text and use various tags, develop links, use images and develop tables. Introduces students to Javascript fundamentals and how Javascript fits into HTML.

CIS 132 Intermediate Web Authoring
AUR 2 credit hours/45 contact hours
TEC E 2 credit hours/48 contact hours
Prerequisite: CIS 131 or instructor consent
Expands on the skills learned in the previous class using intermediate authoring techniques. Develops skills to create Web pages containing text, graphics and links using software such as FrontPage.

CIS 133 Advanced Web Authoring
AUR 3 credit hours/45 contact hours
TEC E 3 credit hours/72 contact hours
Prerequisite: CIS 131 or instructor consent
Continues to build on skills learned in the previous course using advanced authoring techniques. Advances skills to create interactive Web pages using scripting languages such as CGI and PERL.

CIS 134 Web Page Layout and Design
AUR 3 credit hours/45 contact hours
TEC E 3 credit hours/72 contact hours
Prerequisite: CIS 133 and CIS 182 or instructor consent
Introduces the development of Web pages using structured design to document layout. May include concepts such as text manipulation, cross-platform calibration, graphics formats, data tables and file downloading requirements. Develops skills to synchronize and animate media elements and objects into interactive Web pages or multimedia creations.

CIS 135 Graphics Technology
AUR 2 credit hours/45 contact hours
TECs 1-2 credit hours/
24-48 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces students to concepts and techniques of computer graphic applications. Students will use graphic software tools to complete projects.

CIS 138 Business Applications on the World Wide Web
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent
Explores, demonstrates and illustrates the World Wide Web as a powerful business tool. Hands-on and interactive, the course familiarizes students with Web tools, transactional Web sites, electronic commerce, and business applications in a variety of areas and industries.

CIS 139 Integration Software
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisites: BTE 101 and BTE 151/152 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 140 Introduction to PC Databases
AUR 2 credit hours/45 contact hours
TECs 2 credit hours/48 contact hours
Introduces the functions of a database. Includes skills such as file creation, searches, sorts, and simple editing and indexing. May be designated as Microsoft Access, dBase, FoxPro, Paradox or another popular database software.

CIS 142 Advanced PC Databases
AUR 2 credit hours/45 contact hours
Prerequisite: CIS 140 or instructor consent
Introduces database programming, problem solving and interfacing with other software packages. Continues work with query language. May be designated as advanced Microsoft Access, advanced dBase, advanced FoxPro, advanced Paradox or another popular advanced database software.

CIS 145 Database Concepts
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces the operations of a PC database management system. Topics may include database design, table operations, searches, sorts, edits, queries, forms and reports.

CIS 150 Introduction to PC Spreadsheets
AUR 2 credit hours/45 contact hours
TECs 2-3 credit hours/
48-72 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces the student to concepts and applications of an electronic spreadsheet. Includes calculations, built-in functions and spreadsheet design. Introduces graphics, databases and macros. May show as Microsoft Excel, Lotus, Quattro or another popular spreadsheet software.

CIS 152 Advanced PC Spreadsheets
AUR 2 credit hours/45 contact hours
Prerequisite: CIS 150 or instructor consent
Introduces menu-driven macros, graphics, fonts and interfacing with other software packages. May be designated as advanced Microsoft Excel, advanced Lotus 1-2-3, advanced Quattro or another popular advanced spreadsheet software.

CIS 155 Spreadsheet Concepts
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces the use of an electronic spreadsheet. Topics may include spreadsheet design, formatting, formulas, functions, charts, databases, statistical, and "what if" analysis and macros.

CIS 156 Advanced Spreadsheets
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 155 or instructor consent
Covers advanced electronic spreadsheet concepts. Topics may include macro programming and use of the spreadsheet as a planning and analytical tool.

CIS 166 Visual BASIC Programming
AUR 3 credit hours/45 contact hours
TEC N 3 credit hours/72 contact hours
Prerequisites: CIS 119 or instructor consent
Introduces the student to programming concepts using the Visual Basic Programming language. Topics may include program design, input/output, decisions, loops, arrays, functions, arithmetic, and VB topics such as form layout and design, control properties and methods, event and general procedures and modules.

CIS 167 Programming in C++
AUR 3 credit hours/45 contact 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.

CIS 168 JAVA Programming
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 119 or instructor consent
Introduces students to JAVA programming basics such as thread, event handlers, procedures, user interfaces and multimedia. Students will write and test multiple applets.

CIS 170 Microcomputer Hardware
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: CIS 118 or instructor consent
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 175 Introduction to Telecommunications
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisites: CIS 118 or instructor consent
Introduces the concepts of telecommunications. Includes hardware devices, transmission characteristics, network configurations, codes and modes of transmission, software and protocols.

CIS 179 Software/Systems Survey
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent
Compares numerous software packages (word processing, databases, spreadsheets) using hands-on analysis. Introduces the procedures of various operating systems. Presents the techniques of expert systems.

CIS 180 Introduction to Multimedia Technology
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces the hardware and software used to develop multimedia and computer-based training applications.

CIS 181 Digital Image Editing
TEC E 2 credit hours/48 contact hours
Prerequisite: CIS 130

Develops skills to edit pixel-based images using software such as Adobe PhotoShop to create and produce high-quality, digital images for Web pages or multimedia creations.

CIS 182 Digital Video Imaging
TEC E 2 credit hours/48 contact hours
Prerequisite: CIS 181 or instructor consent

Develops skills to edit video post-productions using software such as Adobe Premier to create and produce high-quality video for Web pages and multimedia creations. Includes non-linear editing and creation of digital movies.

CIS 183 Digital Sound Editing
TEC E 1 credit hours/24 contact hours
Prerequisite: CIS 181 or instructor consent

Develops skills to edit and optimize digital sound and formats by the application of digital signal processing (DSP) functions and techniques. Uses software such as Sound Forge.

CIS 185 Computer Capstone (Certificate)
AUR 1 credit hour/23 contact hours
Prerequisite: Instructor consent and must be taken during last semester of study

Designed to ensure the student understands basic concepts and principles of a specific computer area. Concepts may include the computer system, software use and applications, networking principles, programming techniques and others as appropriate.

CIS 190 Speech Dictation Applications
AUR 1-2 credit hours/
15-30 contact hours
Prerequisite: CIS 118 or instructor consent

Trains students to use continuous speech applications.

CIS 200 Local Area Networking Concepts
AUR 2 credit hours/45 contact hours
TECs 2 credit hours/48 contact hours
Prerequisites: 12 CIS credit hours or instructor consent

Introduces networking concepts and terminology, including architecture, transmission media, structure, access and network protocols.

CIS 212 UNIX
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 119 or instructor consent

Introduces the UNIX operating system. Includes UNIX fundamentals, logging-in, the UNIX file structure, listings, searching, comparing, sorting, text editors, manual pages and KornShell programming.

CIS 217 Advanced Computer Access Methods for the Disabled
AUR 2-4 credit hours/
45-90 contact hours
Prerequisite: CIS 117 or instructor consent

Continues the concepts and principles of adaptations for students with disabilities. Emphasizes the more sophisticated capabilities for their adaptation. Includes advanced terminology in adaptations and applications.

CIS 218 Advanced PC Applications
AUR 2 credit hours/45 contact hours
Corequisite: CIS 118 or instructor consent

Covers the advanced capabilities of a microcomputer application's suite. Studies computer concepts and terminology at a higher level. Continues the review of standard word processing, spreadsheets and database software.

CIS 220 PC Data Recovery and Software Repair
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent

Covers how data is stored on personal computers, how to recover data from bad disk media, and how to handle flip allocation problems, disk errors and computer boot problems.

CIS 226 Computer Diagnosis and Repair
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: CIS 170 or instructor consent

Covers the hands-on trouble-shooting, configuration and installation of microcomputers and their peripherals.

CIS 227 A+ Certification Preparation
AUR 1 credit hour/22 contact hours
TECs 1 credit hour/24 contact hours
Prerequisites: CIS 226 or instructor consent

Prepares students for the A+ certification examinations by reviewing hardware and software concepts and using A+ certification techniques.

CIS 228 PC Help Desk Skills
TECs 3 credit hours/72 contact hours
Prerequisite: CIS 118 or instructor consent

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 241 Oracle
AUR 3 credit hours/45 contact hours
Prerequisites: CIS 118 or instructor consent

Acquaints students with the concepts, principles and use of the Oracle package. These concepts include database fundamentals, creating and populating, organizing a database, screen forms and reports, queries, expressions and functions, relational databases, database systems, programming and other related topics.

CIS 254 Windows NT Workstation
AUR 4 credit hours/60 contact hours
TEC N 4 credit hours/96 contact hours
Prerequisites: CIS 119 and 9 CIS credit hours or instructor consent

Introduces Windows NT workstation administration, including login, file systems, security, print services, network architecture, performance monitoring and event viewing.

CIS 255 Novell 4x Administration
AUR 4 credit hours/60 contact hours
Prerequisites: CIS 119 and 9 CIS credits or instructor consent

Introduces Novell 4x network administration, including login, file systems, Netware Directory Services, security, login scripts, menus and printing. Includes common CLUs, menu utilities, NLMs and network management.

CIS 256 Novell 3x Administration
AUR 3 credit hours/67 contact hours
Prerequisite: CIS 119 and 9 CIS credits or instructor consent

Introduces Novell 3x network administration, including login, file systems, security, login scripts, menus and printing. Includes common CLUs, menu utilities, NLMs and network management.

CIS 257 Advanced Novell Administration
AUR 4 credit hours/60 contact hours
Prerequisite: CIS 255 or 256 or instructor consent

Continues the study of Novell network administration. Includes start-up procedures, protocol support, memory optimization, server maintenance, advanced print services, network diagnosis tools, client management, and client and server installation.

CIS 258 Windows NT Server
AUR 4 credit hours/60 contact hours
TECs 4 credit hours/96 contact hours
Prerequisite: CIS 119 and 9 CIS credits or instructor consent

Covers Windows NT server management, including server installation, configuring system settings, server and network management, network interoperations, network optimization and troubleshooting.

CIS 260 COBOL Programming
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 119 or instructor consent

Examines the elements of the COBOL language. Students design, code, debug and document solutions to a variety of business-oriented problems. Includes I/O operations, editing, mathematical operations, simple and complex IF statements, tables, sorts and searches.

CIS 261 Advanced COBOL Programming
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 260 or instructor consent

Continues the study of the COBOL programming language. Emphasizes the more sophisticated capabilities of COBOL. Includes sequential file maintenance, subprograms, indexed files, multilevel tables, string operations and mainframe topics.

CIS 263 CICS/COBOL Programming
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 260

Introduces the basics of CICS command-level programming. Includes an overview of a CICS on-line system, the CICS language, terminal device concepts and programming techniques for mapping the terminal screen.

CIS 266 Advanced Visual BASIC Programming
AUR 3 credit hours/45 contact hours
TEC E 3 credit hours/72 contact hours
Prerequisite: CIS 166 or instructor consent

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.

CIS 269 On-line Program Development
AUR 2-3 credit hours/
30-45 contact hours
Prerequisite: CIS 118 or instructor consent

Acquaints the student with the various techniques and software packages used to develop computer programs on an IBM mainframe computer running under OS/MVS. Utilizes IBM's time-sharing option (150) and interaction system productivity (ISPF) to develop, test and execute COBOL source programs and JCL job streams.

CIS 276 Systems Analysis and Design
AUR 3 credit hours/45 contact hours
Prerequisite: CIS 118 or instructor consent

Introduces the materials, techniques, procedures and human interrelations involved in developing a computerized business system. Includes systems approach, fact-gathering techniques, forms design, input/output, file design, file organization, system audits, project management and evaluation.

CIS 277 Operating Systems and JCL
AUR 3 credit hours/45 contact hours
Prerequisites: CIS 260, one programming language and instructor consent

Introduces the IBM OS/VS operating system and Job Control Language. Includes components of the operating system, JOB, EXEC and DD statements for sequential, partitioned and indexed data sets; in-stream and cataloged data sets; utility routines; and the function of virtual storage.

CIS 285 Computer Capstone
AUR 1 credit hour/23 contact hours
Prerequisite: Last semester of study and Instructor consent

Designed to ensure the student understands more advanced concepts and principles of a specific computer area. Concepts may include the computer system, software use and applications, networking principles, programming techniques and others as appropriate.

Computer Science

CSC 160 C++ Programming I
3 credit hours/45 contact hours
Prerequisites: CIS 119, MAT 121

Introduces the C++ programming language, a mid-level language whose economy of expression and data manipulation features allow a programmer to deal with the computer at any level.

Computer-Aided Drafting (CAD)

CAD 100 Commercial Blueprints and Computer-Aided Drafting (CAD)
3 credit hours/67.5 contact hours
Introduces students to reading architectural blueprints and computer-aided drafting (CAD) skills and concepts. Includes DOS commands, architectural drawing set up, editing and blueprint reading.

CAD 110 Computer-Aided Drafting I
3 credit hours/67.5 contact hours
Prerequisites: DRI 105, 106
Introduces computer-aided drafting for drafting majors and non-majors. Includes an overview of equipment and CAD applications in various engineering, drafting and architectural environments. Concepts include the CAD menu, two-dimensional drawing commands, drawing set-up procedures, editing and plotting techniques, basic blocks and symbols, dimensioning and text commands.

CAD 111 Computer-Aided Drafting II
3 credit hours/68 contact hours
Prerequisite: CAD 110
Introduces basic 3-D concepts; intermediate usage of blocks, symbols and shapes; attributes and data extractions; menu customization; and techniques. Introduces AutoLisp, intermediate plotting techniques, assembling multiple drawings, and use of macros and script files.

CAD 210 Computer-Aided Drafting III
3 credit hours/68 contact hours
Prerequisite: CAD 111
Introduces students to three-dimensional and surface modeling, extended and wire-frame construction, and editing 3-D objects. Covers customization of AutoCAD with macros and menus.

CAD 211 Computer-Aided Drafting IV
3 credit hours/68 contact hours
Prerequisite: CAD 210
Continuation of CAD 210 with the customization of AutoCAD with macros, menus and AutoLisp. Also introduces students to AutoLisp and how AutoCAD and AutoLisp work together. Students will maximize AutoCAD through the use of AutoLisp.

Dental Hygiene

DEH 101 Pre-Clinic Dental Hygiene Science
2 credit hours/30 contact hours
Prerequisite: Program acceptance
Corequisites: 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/60 contact hours
Prerequisite: Program acceptance
Corequisites: 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/30 contact hours
Prerequisite: Program acceptance
Corequisites: 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/45 contact hours
Prerequisite: Program acceptance
Corequisites: 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 107 Head and Neck Anatomy
2 credit hours/30 contact hours
Prerequisite: Program acceptance
Corequisites: First-semester DEH courses
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 109 Dental Anatomy
3 credit hours/45 contact hours
Prerequisite: Program acceptance
Corequisites: First-semester DEH courses
Explores the anatomy of the teeth, including crown and root morphology. Students are expected to become proficient at identifying extracted specimens as to their dentition, arch, class and order of eruption.

DEH 111 Medical and Dental Emergencies
3 credit hour/45 contact hours
Prerequisite: Program acceptance
Corequisites: 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 150 Dental Hygiene Clinic Science I
2 credit hours/30 contact hours
Prerequisites: First-semester DEH courses
Corequisites: 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 I
3 credit hours/135 contact hours
Prerequisites: First-semester DEH courses
Corequisites: 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 154 Periodontology I
3 credit hours/45 contact hours
Prerequisites: First-semester DEH courses
Corequisites: Second-semester DEH courses
Explores the epidemiology of periodontitis, periodontal assessment, etiology, progression, classification and diagnoses of periodontal diseases, histopathology and periodontal structures, treatment planning and non-surgical treatment of periodontal diseases.

DEH 156 Applied Pharmacology
3 credit hours/45 contact hours
Prerequisites: First-semester DEH courses
Corequisites: 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/45 contact hours
Prerequisites: First-semester DEH courses
Corequisites: 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 Preventive Dentistry
3 credit hours/45 contact hours
Prerequisites: First-semester DEH courses
Corequisites: 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 fluorides, oral physiotherapy aids and home care instruction.

DEH 201 Dental Hygiene Clinic Science II
2 credit hours/30 contact hours
Prerequisites: First year DEH courses
Corequisites: 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/180 contact hours
Prerequisites: First year DEH courses
Corequisites: 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/45 contact hours
Prerequisites: First year DEH courses
Corequisites: 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/45 contact hours
Prerequisites: First year DEH courses
Corequisites: 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/45 contact hours
Prerequisites: First year DEH courses
Corequisites: Third-semester DEH courses
Explores the principles, methods and materials related to community dental health. Includes a service-learning component.

DEH 250 Clinic Science III
2 credit hours/30 contact hours
Prerequisites: Third-semester DEH courses
Corequisites: Fourth-semester DEH courses
Provides learning activities 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/180 contact hours
Prerequisites: Third-semester DEH courses
Corequisites: Fourth-semester DEH courses
Facilitates the integration of clinical skills with the development of time management skills necessary for private practice.

DEH 253 Extended Clinic
1-3 credit hours/30-90 contact hours
Prerequisites: Second year DEH courses
Provides additional time for clinical practice of dental hygiene skills.

DEH 254 Periodontology II
3 credit hours/45 contact hours
Prerequisites: Third-semester DEH courses
Corequisites: Fourth-semester DEH courses

Explores applied periodontics with patients presenting advanced levels of periodontal disease. Explores surgical options and mechanisms and examines rationale for referral to specialists.

DEH 256 Community Field Experience
3 credit hours/90 contact hours
Prerequisites: Third-semester DEH courses
Corequisites: 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/30 contact hours
Prerequisites: Third-semester DEH courses
Corequisites: 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/30 contact hours
Prerequisites: Third-semester DEH courses
Corequisites: Fourth-semester DEH courses

Provides practical guidelines and applications of dental hygiene practice management principles.

Drafting for Industry

DRI 105 Introduction to Drafting
5 credit hours/112.5 contact hours

Introduces drafting for drafting majors and non-majors. Includes lettering, line work, reproduction methods and geometric constructions, orthographic projections and sketching, isometric sketching, orthographic and sectioning drafting practices and introduction to inking.

DRI 106 Dimensioning and Tolerancing
2 credit hours/45 contact hours
Prerequisite: DRI 105

Introduces the principles of basic dimensioning and tolerancing practices. Uses cumulative, aligned fractional and unidirectional, coordinate and decimal dimensional systems.

DRI 107 Geometric Tolerancing
2 credit hours/45 contact hours
Prerequisite: DRI 105, 106

Introduces the principles of geometric tolerancing practices. Includes terms and datums, straightness, flatness, roundness, cylindricity, parallelism, perpendicularity, angularity, concentricity and run outs.

DRI 109 Pictorial Drawing
2 credit hours/45 contact hours
Prerequisite: CAD 110, DRI 107

Introduces the principles of pictorial drawing practices. Includes isometric drawing, oblique drawing, perspective drawing, charts and graphs.

DRI 111 Descriptive Geometry and Auxiliary Views
2 credit hours/45 contact hours
Prerequisite: DRI 109

Introduces line problems: true length, point view, bearing, slope, azimuth and plane problems; edge view, dihedral angles, true size and shape of any plane; true length of a line by principal line method; and shortest distance between parallel and non-parallel lines, lines and planes, and intersecting lines and planes.

DRI 113 Intersections and Developments
3 credit hours/68 contact hours
Prerequisites: CAD 110, DRI 111

Introduces the principle of flat- and curved-surface intersection and their resulting developments in terms of thin materials and heavy plate applications. Completes right and oblique prisms, cylindrical and conical surface transitions, and their resulting intersections and developments.

DRI 116 Mechanical Detail Drafting
5 credit hours/112.5 contact hours
Prerequisites: CAD 110, DRI 105, 106, 107

Introduces the drawing of threads, fasteners and springs. Covers welding drawings, along with gear and cam drawings and manufacturing processes.

DRI 200 Introduction to Civil/Topographic Drafting
3 credit hours/67.5 contact hours
Prerequisites: CAD 110, DRI 105-116

Introduces various techniques of civil/topographic drafting using a specific platform. Includes working with field notes, bearings and distances, traverses, coordinates, plat maps, plot or site plans, contours, and various civil and topographic conventions.

DRI 203 Introduction to Architectural Drafting
3 credit hours/67.5 contact hours
Prerequisites: CAD 110, DRI 105-200

Introduces the field of architectural drafting by preparing students to draw a small single-family residence. Floor plans, foundation and framing plans, elevations and all necessary detail plans along with roofing plans will be required.

DRI 205 Introduction to Process Pipe Drafting
2 credit hours/45 contact hours
Prerequisites: CAD 110, DRI 105-116, DRI 203

Introduces the symbols, flanges, fittings and various types of valves. Covers flow diagrams and symbols, piping and general specifications, along with piping details.

DRI 207 Introduction to Structural Drafting
2 credit hours/45 contact hours
Prerequisites: CAD 110, DRI 105-205
Introduces a general overview of drawing, checking, correcting and the revising process. Product fabrication, shipping and structural connections are also covered.

DRI 220 Advanced Mechanical Drafting I
8 credit hours/180 contact hours
Prerequisites: CAD 110, DRI 116
Introduces the drawing of mechanical and operating mechanical assemblies and subassemblies and may include cast, welded, or machined materials and purchased parts. Includes preparation of appropriate assembly drawings and necessary detail drawings, utilizing required parts, call outs and material list and appropriate dimensioning for the subject matter.

DRI 225 Advanced Mechanical Drafting II (Capstone)
4 credit hours/90 contact hours
Prerequisites: CAD 110, DRI 220
Introduces the development of large mechanical assemblies, their subassemblies and detailed drawings pertinent to their manufacturing and assembly.

DRI 230 Civil/Topographic Drafting I
8 credit hours/180 contact hours
Prerequisites: CAD 110, DRI 209
Introduces methods and theories used in civil/topographic drafting, the use of map scales and measurements, standard civil drafting symbols and abbreviations, interpretation of surveyor's notations, legal land descriptions, map drafting procedures, and plats and subdivisions.

DRI 235 Civil/Topographic Drafting II (Capstone)
4 credit hours/90 contact hours
Prerequisites: CAD 110, DRI 230
Introduces topographic mapping, transportation mapping, municipal mapping and structural drafting as it applies to the civil/topographic drafting area.

DRI 240 Structural Drafting I
8 credit hours/180 contact hours
Prerequisites: CAD 110, DRI 209
Introduces structural steel drafting, including steel framing plans, steel connections, steel sections, fabrication details and bills of material. Covers the area of pre-cast concrete drafting, pre-cast concrete framing plans, concrete sections and concrete fabrication details and pre-cast concrete bill of materials.

DRI 245 Structural Drafting II (Capstone)
4 credit hours/90 contact hours
Prerequisites: CAD 110, DRI 240
Continues Structural Drafting I and covers structural poured-in-place concrete foundations, walls and columns, concrete floors systems, stairs and ramps. Also covers structural wood drafting with structural wood flooring systems, structural wood walls, structural wood roofs, and structural wood posts, beams, girds and arches.

DRI 250 Process Piping Drafting I
8 credit hours/180 contact hours
Prerequisites: CAD 110, DRI 209
Introduces piping drawings, control stations, orifice flanges, meters, runs, pipe racks, instrument details and specifications. Covers isometric definitions, dimensioning, spools and call-outs.

DRI 255 Process Piping Drafting II (Capstone)
4 credit hours/90 contact hours
Prerequisites: CAD 110, DRI 250
Reviews equipment foundations, piping specifications and general specifications, standard piping details and general piping details. Students draw major project-plan, elevation, sections and isometric pipe runs of depropanizer area.

Early Childhood Professions

ECP 101 Introduction to Early Childhood Professions
AUR 3 credit hours/45 contact hours
TEC W 3 credit hours/72 contact hours
Corequisite: ECP 102
Provides an introduction to Early Childhood Professions. 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.

ECP 102 Introduction to Early Childhood Lab Techniques
AUR 3 credit hours/75 contact hours
TEC W 3 credit hours/72 contact hours
Corequisite: ECP 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.

ECP 110 Child Growth and Development
AUR 4 credit hours/75 contact hours
TEC W 4 credit hours/96 contact hours
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.

ECP 111 Infant and Toddler Theory and Practice
AUR 3 credit hours/45 contact hours
TEC W 3 credit hours/72 contact hours
Prerequisite: ECP 110
Presents an overview of theories and applications, including observations and issues pertinent to infant and toddler development in group or family settings. Includes state requirements for licensing, health, safety and nutrition issues. Ages addressed: prenatal through age 2.

ECP 112 Introduction to Infant/Toddler Lab Techniques
TEC W 3 credit hours/
45-72 contact hours
Prerequisites: Health check, TB tine test, CBI background check, and three letters of reference
Corequisite: ECP 111
Includes a classroom seminar and a placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interaction and techniques, and to develop effective guidance and nurturing techniques. Ages addressed: prenatal through age 2.

ECP 113 Responsive Care Giving for Infants and Toddlers
TEC W 3 credit hours/
45-72 contact hours
Prerequisites: Health check, TB tine test, CBI background check, and three letters of reference
Explores the roles and skill development of the care giver in the areas of a child's behavior, feeding and communication through routine-based play.

ECP 114 Environments for Children Ages Birth to 3 Years
TEC W 3 credit hours/
45-72 contact hours
Prerequisites: Health check, TB tine test, CBI background check, and three letters of reference
Explores the roles of the family, care giver, child development program and community in providing a supportive environment for children ages birth to 3 years.

ECP 148 Guidance Strategies for Children
AUR 3 credit hours/45 contact hours
TEC W 3 credit hours/72 contact hours
Prerequisite: ECP 110
Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues and pro-social skills. Ages addressed: birth through age 8.

ECP 150 Supervised Lab for Infants/Toddlers and Preschoolers
TEC W 3 credit hours/
45-72 contact hours
Prerequisites: Health check, TB tine test, CBI background check, and three letters of reference
Facilitates interaction with infants, toddlers and preschoolers in an open, supervised, approved lab site. At the completion of ECP 150, the student will decide on a specialty in Early Childhood Professions.

ECP 205 Nutrition and the Young Child
AUR 3 credit hours/45 contact hours
Focuses on nutrition as a key factor for optimal growth and development of young children. Includes nutrient knowledge, menu planning, food program participation, food management and safety, appropriate nutrition activities, and communication about nutrition with families. Ages addressed: prenatal through age 8.

ECP 210 Curriculum: First Start: Including Children with Disabilities
AUR 3 credit hours/45 contact hours
Prerequisite: ECP 110
Covers services for infants, toddlers, and young children with disabilities and chronic health 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.

ECP 215 Creativity and the Young Child
AUR 3 credit hours/45 contact hours
Provides an emphasis on encouraging and supporting creative self-expression and problem-solving skills in children. Explores creative learning theories and research. Focuses on developmentally appropriate curriculum strategies in all developmental domains. Ages addressed: birth through age 8.

ECP 225 Curriculum: Anti-Bias
AUR 3 credit hours/45 contact hours
Prerequisites: ECP 110, 227
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. Ages addressed: birth through age 8.

ECP 226 Administration of Early Childhood Care and Education Programs
AUR 3 credit hours/45 contact hours
Prerequisites: ECP 101, 102, 110, 148, 227
Examines Colorado's minimal licensing requirements, as well as optimal standards 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.

ECP 227 Curriculum Development: Methods/Techniques
AUR 3 credit hours/45 contact hours
TEC W 3 credit hours/72 contact hours
Prerequisite: ECP 110
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.

ECP 235 Curriculum: Music/Movement and the Young Child
AUR 3 credit hours/45 contact hours
Prerequisites: ECP 110, 227
Early childhood educators learn techniques for facilitating music and movement with young children. Ages addressed: birth through age 8.

ECP 245 Curriculum: Art and the Young Child
AUR 3 credit hours/45 contact hours
Prerequisites: ECP 110, 227
Prepares students to plan and implement a comprehensive and developmentally appropriate art program for young children. Investigates the development of self-taught art techniques in young children. Ages addressed: birth through age 8.

ECP 250 Supervised Student Practicum/Seminar I
AUR 5 credit hours/135 contact hours
Prerequisites: ECP 101, 102, 110, 148, 227
Develops 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.

ECP 251 Supervised Student Practicum/Seminar II (Capstone)
AUR 5 credit hours/135 contact hours
Prerequisite: ECP 250
Includes organization, management and implementation of instruction, resources and administration. Requires a weekly seminar. Ages addressed: birth through age 8.

ECP 265 Curriculum: Science/Math and the Young Child
AUR 3 credit hours/45 contact hours
Prerequisites: ECP 110, 227
Examines Piaget's theory of cognitive development as a framework for conceptualizing the manner in which young children acquire scientific and mathematical skills, concepts and abilities. Includes researching and developing appropriate individual and group scientific/mathematical activities for young children. Ages addressed: birth through age 8.

ECP 275 Curriculum: Violence Prevention
AUR 3 credit hours/45 contact hours
Prerequisites: ECP 110, 227
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.

Economics

ECO 105 Introduction to Economics
3 credit hours/45 contact hours
Provides an introduction to economic thinking through an examination of the history of economic thought and a brief discussion of contemporary concepts.

ECO 118 Labor Economics
3 credit hours/45 contact 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 Macro Economics
3 credit hours/45 contact hours
Prerequisites: Basic Skills Assessment levels 3 in Math, 3b in reading and 3 in English or instructor consent.
Presents an overview of the American economy, stressing the interrelationships among the consumer, business and government sectors. Analysis of savings and investment decisions, underemployment, inflation, national income accounting, Federal Reserve system, and the money and banking systems.

ECO 202 Principles of Micro Economics
3 credit hours/45 contact hours
Prerequisites: Basic Skills Assessment levels of 3 in Math, 3B in Reading and 3 in English or ECO 105
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 005 ACT Exam Preparation
3 credit hours/45 contact hours
Prepares students to take the American College Test, a college admissions test frequently required of matriculating students by colleges and universities.

EDU 161 Elementary Education in the USA
3 credit hours/45 contact hours
Corequisite: EDU 162
Provides students with an understanding of elementary education within the context of the preschool through 12th grade perspective from a variety of philosophical, historical, sociological and psychological contexts.

EDU 162 Urban and Multicultural Education
3 credit hours/45 contact hours
Corequisite: EDU 161
Acquaints education students with a changing technological society. Investigates cultural and ethnic variations, human relations and the school as a social institution within an interdisciplinary environment.

EDU 205 Review for PLACE Exam: Basic Skills
1-3 credit hours/15-45 contact hours
Assesses knowledge and skills of candidates for admission to educator preparation programs and for licensure in Colorado. Covers the following areas: reading, mathematics and writing.

EDU 206 Review for PLACE Exam: Liberal Arts and Sciences
1-3 credit hours/15-45 contact hours
Assesses knowledge and skills in the following areas: scientific processes; historical and social scientific awareness; artistic expression and the humanities; communication skills and written analysis/expression.

EDU 207 Review for PLACE Exam: Professional Knowledge
1-3 credit hours/15-45 contact hours
Assesses pedagogical knowledge of candidates seeking teaching licenses. Covers knowledge and skills in the following areas: knowledge of the learner, instructional planning and assessment, instructional delivery, the professional environment and written performance assignment.

EDU 216 Children's Literature
3 credit hours/45 contact 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 285 Issues and Trends in Education
3 credit hours/45 contact hours
Corequisites: EDU 161, 162
Gives students relevant experience in identifying historical and current issues and trends relating to education in the United States.

EDU 295 Job Search Skills
3 credit hours/45 contact hours
Provides ESL students with basic pre-employment skills that include developing a résumé, completing applications, interviewing for a job, calling for job information, focusing the job search and discussing other job search skills.

Electronics Technology

ELT 100 DC Fundamentals
3 credit hours/67.5 contact hours
Prerequisite: Basic Skills Assessment scores that assure placement in REA 105, MAT 103 and ENG 100
Introduces the student to simple components and DC circuits, and develops safe work habits. The student will construct and evaluate series and parallel circuits to show relationships of voltage, current, resistance and power using DC meters to measure circuit values.

ELT 101 DC Circuits and Magnetism
2 credit hours/45 contact hours
Prerequisite: ELT 100
Continues the study of DC circuits by examining properties of magnetism, inductance and capacitance, series-parallel resistive circuits, such as loaded voltage dividers, and RC/RL time constant circuits.

ELT 102 AC Fundamentals
2 credit hours/45 contact hours
Prerequisite: ELT 101
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, power and impedance with phasor analysis.

ELT 103 AC Circuits
3 credit hours/67.5 contact hours
Prerequisite: ELT 102
Continues the study of AC circuits with RCL phasor analysis. Students construct, analyze and troubleshoot complex series-parallel circuits, both on and off resonance, with filter applications.

ELT 104 Complex Circuit Analysis
3 credit hours/67.5 contact hours
Prerequisite: ELT 103
Applies advanced analysis to AC and DC circuits with Thevenin's, Norton's, Superposition and Maximum Power Transfer theorems. Students also construct and analyze vacuum tube amplifiers using DC load lines and curve families.

ELT 108 Introduction to Networking, The Physical Layer
2 credit hours/30 contact hours
Prerequisite: Basic Skills Assessment level 3 in reading
Provides students with the skills necessary to secure entry-level positions as network technicians. Includes hands-on practice and theory related to the skills of terminating, testing, troubleshooting and installing network wiring and cabling.

ELT 110 Diode Circuits
3 credit hours/67.5 contact hours
Prerequisite: ELT 104
Introduces the fundamentals of solid-state devices, both diodes and transistors. Students construct and analyze diode circuits, including rectifiers, clippers and clampers, and examine characteristics of zener- and transistor-related power supplies.

ELT 111 Transistor Amplifiers (Certificate Capstone)
3 credit hours/67.5 contact hours
Prerequisite: ELT 110
Continues the study of transistors by examining three basic amplifier configurations for AC and DC characteristics using load lines and equivalent circuits. Students construct class A and B power amps, phase splitters and phase inverters.

ELT 112 JFETs and Oscillators
2 credit hours/45 contact hours
Prerequisite: ELT 111
Continues the study of amplifiers with classes C, D and S, and introduces the junction field-effect transistor and principles of oscillation. Students construct and analyze JFET amplifiers and oscillator circuits, including multivibrators, phase-shift, and Hartley Culpitts and Schmitt triggers.

ELT 113 Waveforms, Harmonics and Direct Digital Sensors
2 credit hours/45 contact hours
Prerequisite: ELT 112
Examines a variety of special-application solid-state devices. The student will determine operating characteristics of MOSFETs, SCRs, UJTs, TRIACs, LEDs and opto-couplers, while constructing power-control and other circuits.

ELT 114 Operational Amplifiers
3 credit hours/67.5 contact hours
Prerequisite: ELT 113
Examines the OP amp by analyzing and demonstrating a wide range of applications. Students construct differential and IC operational amplifier circuits, including summers, integrators, differentiators, active filters and 555 timers.

ELT 200 Digital Fundamentals
3 credit hours/67.5 contact hours
Prerequisite: ELT 114
Introduces digital electronics. Students demonstrate the principles of digital integrated circuits using binary, octal, hexadecimal and other codes, logic gates, truth tables, Boolean algebra and combinational logic.

ELT 201 Digital Circuits
3 credit hours/67.5 contact hours
Prerequisite: ELT 200
Continues the study of digital circuits by demonstrating the principles and operation of logic circuits, including flip-flops, counters, registers and memory circuits. Includes algebraic techniques and Karnaugh mapping as tools for circuit simplification.

ELT 202 Microprocessor Fundamentals
2 credit hours/45 contact hours
Prerequisite: ELT 201
Introduces the microprocessor by examining the arithmetic logic unit, microprocessor families, memories and bus construction. Demonstrates the operation of a computer using the 8080A and 6800 microprocessor.

ELT 203 Microprocessor and Microcomputer Systems (Certificate Capstone)
3 credit hours/67.5 contact hours
Prerequisite: ELT 202
Continues the study of microprocessors by writing assembly language programs for an 8080A and 6800A, continuing converting programs to machine code, applying digital to a real computer by examining interfacing and timing cycles for computer systems, including display and printer. Includes minor troubleshooting and alignment using software and other test equipment.

ELT 210 Communications I
3 credit hours/67.5 contact hours
Prerequisite: ELT 114
Introduces the theory of communications by examining and demonstrating the principles of amplitude and frequency modulation and single sideband transmission. Covers both transmitters and receivers at the circuit level.

ELT 211 Instruments and Measurements
3 credit hours/67.5 contact hours
Prerequisite: ELT 204
Demonstrates principles of measurements and measuring systems with selection, application and limitation of test instruments. Examines operation, special applications and circuitry of analog and digital meters, oscilloscopes and function generators.

ELT 215 Instruments and Measurements II
3 credit hours/67.5 contact hours
Prerequisite: ELT 211
Examines applications and limitations of specialized test equipment, including frequency counters, spectrum analyzers and storage scopes. Students select and apply signal conditioners and transducers and test citizens band transceivers.

ELT 217 Basic Television and Video Systems
3 credit hours/67.5 contact hours
Prerequisites: ELT 210 or AAS, instructor consent
Prepares the student for an entry-level position in the video industry. Covers the fundamentals of television and video systems. Qualifies students to take the broadcast technician certification exam from the Society of Broadcast Engineers.

ELT 285 Troubleshooting Techniques for Analog and Digital Systems (Capstone)
5 credit hours/113 contact hours
Prerequisite: ELT 100 - 203
Provides students with opportunities to apply all accumulated theory by analyzing and isolating representative circuit faults using troubleshooting procedures such as signal tracing/substitution and measurements.

English

ENG 005 English Grammar
3 credit hours/45 contact 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 and the construction of clear, effective sentences, paragraphs and essays.

ENG 030 Basic Language Skills
3 credit hours/45 contact hours
Prerequisite: Assessment Placement
Reviews basic grammar, usage and punctuation. Emphasizes sentence structure and other elements of effective writing. Introduces paragraph format.

ENG 060 Language Fundamentals
AUR 1-5 credit hours/15-75 contact hours
TECs 1-5 credit hours/
24-120 contact hours
Prerequisite: ENG 030
Advances the student from sentence to paragraph structure. Incorporates critical-thinking skills through formulation of topic sentences and effective paragraph development. Emphasizes writing as a process, including prewriting and revising activities, and reviews grammar, usage and punctuation.

ENG 061 Language Fundamentals II
TECs 1-5 credit hours/
24-120 contact hours
Prerequisite: ENG 060
Uses various approaches to develop writing and study techniques according to the student's needs. Can focus on basic paragraph, essay writing or study skills critical for student success.

ENG 070 Applying Technology to Writing
1-3 credit hours/15-45 contact hours
Uses technology (word processing tools) to improve writing for writers at all levels. Offers support for working on writing assignments in a structured setting.

ENG 080 Workshop in Reading, Writing and Speaking
3 credit hours/45 contact hours
Prerequisite: Basic Skills Assessment level 2 in English, level 3 in reading, level 2 in study skills or instructor consent
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 100 Composition Style and Technique
3 credit hours/45 contact hours
Introduces academic writing with an emphasis on the writing process, information sources, and organization and development of written assignments for specific audiences and purposes. Examines composition techniques, including language fluency, effective diction, and appropriate sentence, paragraph and essay structure.

ENG 121 English Composition I
3 credit hours/45 contact hours
Prerequisite: ENG 100 or assessment level 3, instructor/advisor consent
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/45 contact 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 persuasive papers that incorporate research.

ENG 131 Technical Writing I
3 credit hours/45 contact hours
Prerequisite: ENG 100
Develops proficiency in technical writing, emphasizing principles for organizing, drafting and revising a variety of documents for industry, business and government.

ENG 221 Creative Writing I
3 credit hours/45 contact 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/45 contact 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 ESL Spelling Strategies
AUR 3 credit hours/45 contact hours
Introduces ESL students to techniques that increase basic spelling skills in English. Includes structured word analysis, rule analysis and word attack skills for words not governed by rules.

ESL 011 Basic Pronunciation
AUR 1-3 credit hours/
15-45 contact hours
TECs 1-3 credit hours/
24-72 contact 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
AUR 1-3 credit hours/
15-45 contact hours
TECs 1-3 credit hours/
24-72 contact hours
Prerequisite: ESL 011
Provides listening, speaking and reading activities that help students recognize and produce a variety of stress and intonation patterns in English. Focuses on helping ESL students speak and read English more clearly and confidently.

ESL 021 Basic Grammar
AUR 1-3 credit hours/
15-45 contact hours
TECs 1-3 credit hours/
24-72 contact hours
Helps the non-native speaker of English master basic structures in English grammar.

ESL 022 Intermediate Grammar
AUR 1-3 credit hours/
15-45 contact hours
TECs 1-3 credit hours/
24-72 contact hours
Prerequisite: ESL 021
Reviews basic structures in English grammar and introduces more advanced structures.

ESL 023 Advanced Grammar
AUR 1-3 credit hours/
15-45 contact hours
TECs 1-3 credit hours/
24-72 contact hours
Prerequisite: ESL 022
Helps the non-native speaker of English develop and use more advanced English grammar structures. Prepares the student for introductory ESL composition courses.

ESL 031 Basic Conversation
AUR 3 credit hours/45 contact hours
Provides speaking and listening activities that help the student communicate more competently. Develops vocabulary use and clearer pronunciation.

ESL 032 Intermediate Conversation
AUR 3 credit hours/45 contact hours
Prerequisite: ESL 031
Provides speaking and listening activities that increase the student's communication skills. Continues to help the student increase vocabulary range and improve pronunciation skills.

ESL 033 Advanced Conversation
AUR 3 credit hours/45 contact hours
Prerequisites: ESL 022, 032, 041
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
AUR 3 credit hours/45 contact hours
TECs 1-3 credit hours/
24-72 contact hours
Helps the student improve comprehension of simple written texts by discussing the meaning, developing word analysis skills and enhancing vocabulary range.

ESL 042 Intermediate Reading
AUR 1-3 credit hours/
15-45 contact hours
TECs 1-3 credit hours/
24-72 contact hours
Prerequisite: ESL 041
Helps the student read more quickly and accurately and understand a variety of more complex reading material.

ESL 052 Intermediate Composition
AUR 3 credit hours/45 contact hours
Prerequisite: ESL 023
Introduces the fundamentals of paragraph organization and development. Helps student develop sentence variety and grammatical competency within well-organized paragraphs.

ESL 053 Advanced Composition
AUR 3 credit hours/45 contact hours
Prerequisite: ESL 052
Reviews paragraph organization and structure and introduces the student to essay writing. Emphasizes writing as a process, and continues to aid students in improving syntactic and grammatical competency in English.

ESL 061 Vocational ESL I
TECs 1-4 credit hours/
24-96 contact hours
Teaches limited English vocational students basic communication skills in preparation for vocational training and work.

ESL 062 Vocational ESL II
TECs 1-4 credit hours/
24-96 contact hours
Provides instruction in advanced English skills for those with limited English for vocational courses and employment.

ESL 080 High Intermediate Language Skills
AUR 6-15 credit hours/
90-225 contact hours
Prerequisite: ESL assessment score at the high intermediate level
Provides 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.

ESL 090 VESL English
AUR 1-5 credit hours/
15-75 contact hours
Corequisite: Appropriate vocational course or instructor consent
Facilitates English language development of key concepts and terminology related to vocational content curricula for second-language learners.

French

FRE 111 First-Year French I
5 credit hours/90 contact hours
Instructs the student in the pronunciation of all 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.

FRE 112 First-Year French II
5 credit hours/73-75 contact 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 I
3 credit hours/45 contact 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
AUR 1-12 credit hours/
15-180 contact hours
TECs 1-12 credit hours/
24-288 contact hours
Prepares the student for the five areas of the Colorado High School Equivalency Examination (formerly the GED Test): writing, social studies, science, interpreting literature and the arts and mathematics. Includes diagnostic and simulated GED test practice.

GED 052 GED Preparation (Off-campus)
1-12 credit hours/15-180 contact hours
Prerequisite: Student must be 17 years of age
Prepares the student for the five areas of the Colorado High School Equivalency Examination (formerly the GED Test): writing, social studies, interpreting literature and the arts and mathematics. Includes diagnostic assessment and simulated test practice. Offered by the GED Institute at community-based sites.

Geography

GEO 105 World Regional Geography
3 credit hours/45 contact 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 125 Geography of Colorado
3 credit hours/45 contact hours
Surveys Colorado, including physical and cultural aspects, such as land forms, weather and climate, natural resources, economic activities, cultural migration and trends. Also studies regional differences and human impact on the environment.

GEO 200 Human Ecology
3 credit hours/45 contact 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/60 contact hours
Studies the materials of the earth, its structure, surface features and the geologic processes involved in its development. Includes laboratory experience.

GEY 225 Planet Earth
3 credit hours/45 contact hours
Introduces students to an interdisciplinary approach to earth sciences and human ecology. Topics include continental drift, paleomagnetism, theories of climate change, the origin of the solar system, the sun's effect on earth, earth resources and humans' impact on the environment.

Gerontology

GNT 101 Nutrition
3 credit hours/45 contact hours
Prerequisites: ENG 100, MAT 105, REA 090
Introduces basic nutrition with emphasis on personal nutrition. Satisfies the nutrition requirement for students entering the Nursing program. Attendance at first session is required.

GNT 201 Introduction to Gerontology
3 credit hours/45 contact hours
Prerequisites: Program enrollment and instructor consent
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, the interrelationships between elders and key social institutions, and provides an overview of physical and psychological factors associated with aging.

GNT 213 Psychology of Aging
3 credit hours/45 contact hours
Prerequisites: GNT 201 and instructor consent
Studies adult development and aging. Contrasts existing myths about adult development with the best available scientific data to separate fact from fiction. Identifies important questions for the existing scientific or empirical data.

GNT 214 Social Issues and Aging
3 credit hours/45 contact hours
Prerequisites: Program admission and instructor consent
Explores the various social issues related to the aging process and the ways in which an aging population affects social structure. Introduces demographic processes, demographics related to the current older population and current social issues identified by community agencies and advocate groups as relevant to older adults. Includes intergenerational service-learning opportunities.

GNT 215 Aging in a Diverse Society
3 credit hours/45 contact hours
Corequisite: GNT 201 or instructor consent
Explores ethnic, religious and sexual diversity issues as they relate to older Americans. Ties together gerontological and diversity concerns to develop students into more sensitive and effective practitioners when dealing with older adults.

GNT 221 Overview of Programs and Services
3 credit hours/45 contact hours
Prerequisites: Program admission and instructor consent
Examines the myriad programs and services available to elderly individuals and their families. Explores legislative history and demographic trends in the field of aging: health and mental health, information and referral, income maintenance, housing, transportation, long-term care, nutrition, employment and senior centers. For anyone who interacts with the elderly, either professionally or personally.

GNT 236 Nutrition and Aging
3 credit hours/45 contact hours
Prerequisite: GNT 212
Emphasizes that aging is not synonymous with deterioration, and many of the signs and symptoms of chronic nutritional imbalances often are identified as changes attributed to aging. Studies effects of various nutrients on the aging process.

GNT 237 Death and Dying
3 credit hours/45 contact hours
Pre- or Corequisite: GNT 101 or instructor consent
Examines the event of death and the process of dying. Explores the causes of death and the experience of dying in nursing homes, emergency rooms and hospices. Reviews the ethical and political issues of death and dying.

GNT 285 Gerontology Practicum (Capstone)
3 credit hours/45-90 contact hours
Prerequisite: GNT 201
Provides the student with a practical experience in gerontology. Emphasizes developing observation skills, individual growth in self-awareness, establishing effective communication and understanding case management skills.

GNT 295 Leadership Development
3 credit hours/45 contact hours
Prerequisite: ENG 100, PSY 101 or instructor consent
Studies and applies the theories and techniques of leadership and group processes. Introduces leadership skills and experience with applications in a group setting.

Graphic Arts

GRA 101 Introduction to Graphic Arts and Traditional Layout
3 credit hours/67.5 contact hours
Introduces the student to offset printing, processes and job opportunities. Teaches the basics of traditional layout.

GRA 102 Electronic Composition, Art and Copy Preparation
3 credit hours/67.5 contact hours
Prerequisite: GRA 101
Introduces concepts and techniques of desktop publishing. Covers treatment of original art and graphics for reproduction and paste up of electronic mechanicals, including display type, illustrations, registration work and typesetting elements.

GRA 103 Line and Halftone Photography
3 credit hours/67.5 contact hours
Prerequisites: GRA 101, 102
Introduces the student to basic darkroom work and theory. Teaches the production of halftone photos and various methods of exposure and development including various types of film, paper and chemistry used in the darkroom.

GRA 104 Digital Halftone Photography
3 credit hours/67.5 contact hours
Prerequisites: GRA 101, 102, 103
Introduces the student to digital halftone photography. Teaches the proper use of digital camera images and their conversion into a format that can be accessed through a computer.

GRA 105 Résumé and Portfolio (Capstone)
3 credit hours/67.5 contact hours
Prerequisites: GRA 101, 102, 103, 104
Introduces the student to portfolio presentation and preparation. Teaches résumé writing, including composing the cover letter and comparing job opportunities in the Graphic Arts industry.

GRA 107 Introduction to Web and Homepage
3 credit hours/67.5 contact hours
Introduces students to the Internet, its history and functionality. This course uses the computer to browse the World Wide Web, and create web presentations and on-line teaching/learning modules.

GRA 111 Beginning Offset Presses
3 credit hours/60 contact hours
Prerequisites: GRA 101, 102, 103, 104, 105
Introduces basic concepts of how to set up and operate an offset press. Teaches press set up for paper feeder, register board, delivery and printing.

GRA 112 Stripping, Image Assembly, Platemaking and Inks
3 credit hours/60 contact hours
Prerequisites: GRA 101, 102, 103, 104, 105, 111
Introduces basic concepts of how to strip negatives into flats for plate making and how to make plates. Increases expertise in small press preparation, while learning simple, advanced book and process color stripping, as well as the use of register pins.

GRA 113 Paper and Ink Management and Print Production I
3 credit hours/60 contact hours
Prerequisites: GRA 101, 102, 103, 104, 105, 111, 112
Introduces the different facets of paper and ink, while students prepare and produce small production jobs. Presents data on paper, small press and production time.

GRA 114 Intermediate Offset Press and Print Production II
3 credit hours/60 contact hours
Prerequisites: GRA 101, 102, 103, 104, 105, 111, 112, 113
Introduces the student to large presses and the quick-copy system while presenting more detailed information on small presses. Instructs students on pressure settings and adjustments, registering techniques, the 25-inch press, and multicolor registering and running.

GRA 185 Bindery and Portfolio (Capstone)
3 credit hours/60 contact hours
Prerequisites: GRA 101, 102, 103, 104, 105, 111, 112, 113, 114
Introduces the student to small and large bindery operations and to small press operations while learning about paper, job pricing, job planning, scheduling, work flow and portfolio preparation.

GRA 201 Electronic Graphics
3 credit hours/68 contact hours
Prerequisite: ENG 100
Introduces the combination of traditional skills and applicable Macintosh electronic prepress technology necessary to begin the preparation of camera-ready art.

GRA 202 Electronic Page Layout
3 credit hours/68 contact hours
Prerequisite: GRA 201
Continues topics introduced in GRA 201, applying Macintosh computer skills for assembling workable solutions to various types of print media.

GRA 203 Electronic Scan and Color Theory
3 credit hours/68 contact hours
Prerequisite: GRA 201, 202
Introduces the use of the scanner and Macintosh computer equipment for bringing both black and white and color images into an electronic environment for manipulation.

GRA 204 Electronic Prepress
3 credit hours/68 contact hours
Prerequisite: GRA 201, 202, 203
Continues topics introduced in GRA 201 through GRA 203, working with photo imaging service bureaus in the industry, as well as within the Graphic Arts department. Students produce camera-ready art.

GRA 205 Photo Manipulation & Portfolio
3 credit hours/68 contact hours
Prerequisite: GRA 201, 202, 203, 204
Continues topics introduced in GRA 201 through GRA 204, combining images, design elements and type into a single image as camera-ready art.

GRA 285 Printer Portfolio and Advanced Printing Techniques (Capstone)
3 credit hours/68 contact hours
Prerequisite: GRA 212
Continues to prepare student for printing presentation and job interviewing techniques. Develops skills for competing in the local job market. Includes developing specifications and estimating for the industry.

Graphic Design

GRD 100 Lettering and Typographic Design
3 credit hours/90 contact hours
Introduces the history and concepts of typography as applied to graphic communications. Explores appropriate use of typography in a variety of design and advertising applications, emphasizing hand and digital lettering. Covers type recognition and typographic terms. Explores career possibilities with tours.

GRD 102 Introduction to Macintosh
3 credit hours/90 contact hours
Acquaints students with the Macintosh computer, its terminology and development, system management, graphics applications and business applications.

GRD 103 MAC Computer Art
3 credit hours/90 contact hours
Prerequisite: CIS 118 or instructor consent
Introduces methods for creating artistic output using various computer software programs currently used by the graphic design industry. Emphasizes skills with two-dimensional media that are applicable to a variety of visual communication professions.

GRD 105 Advertising Typography and Layout
3 credit hours/90 contact hours
Prerequisite: GRD 100
Covers production of layouts for graphic projects from conceptualization and research, to copy fitting and indication of headlines, subheads and text. Develops skills in rendering of thumbnails and rough and comprehensive layouts, as well as skills in working with clients and presenting designs. Introduces digital layout.

GRD 107 Rendering/Mixed Media
3 credit hours/90 contact hours
Prerequisite: ART 121
Introduces product rendering in a variety of media, including opaque water media, scratch and textured board, and pen and ink for both two- and three-dimensional design projects. Prepares for print production, both traditionally and digitally. Explores freehand and electronic methods.

GRD 200 Advertising Design and Portfolio Preparation
3 credit hours/90 contact hours
Prerequisites: GRD 100, 103, 105
Covers the process of comprehensive problem solving of complex and advanced print design. Provides experience in digital production of designs using multiple computer applications and exploring a variety of color output options.

GRD 203 Adobe Illustrator
3 credit hours/90 contact hours
Prerequisite: GRD 103
Uses the computer to create object-based 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 Graphic Design Production and Prepress I
3 credit hours/90 contact hours
Prerequisites: GRD 100, 103, 105
Introduces the production of final print-ready art, both mechanically and electronically. Emphasizes black and white, one-, two- and three-color processes and the production of digital prepress files for printed projects.

GRD 207 Graphic Design Production and Prepress II
3 credit hours/90 contact hours
Prerequisites: GRD 100, 103, 105, 206
Continues to explore digital prepress production, emphasizing more complex, multi-color printing projects, including four-color process. Includes problem solving from initial concept to the final printed piece and mastering the necessary computer applications.

GRD 209 Quark Xpress (Capstone)
3 credit hours/90 contact hours
Prerequisite: GRD 103
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/90 contact hours
Prerequisite: GRD 103
Acquaints students with Adobe Photoshop software, its tools and features. Exercises in photo retouching and manipulation and image generation for preparation of print medium or as finished product.

GRD 285 Creative Graphic Design and Portfolio Preparation (Capstone)
3 credit hours/90 contact hours
Prerequisites: GRD 100, 103, 105, 200
Corequisite: GRD 209
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/135-225 contact hours
Prerequisites: GRD 207, 285
Introduces students to an on-site internship experience in a wide variety of graphic design-related situations.

Health and Wellness Management

HWM 050 Swimming I
2 credit hours/30 contact hours
Introduces basic floating and breathing techniques. Teaches elementary crawl, breast stroke, side stroke and back stroke.

HWM 060 Water Exercise
2 credit hours/30 contact hours
Provides instruction and practice in a variety of aerobic exercises conducted in the swimming pool.

HWM 070 Tai-Chi
2 credit hours/30 contact hours
Introduces the fundamental movements of Tai-Chi. Explores the use of Tai-Chi as exercise, meditation and stress reduction.

HWM 101 Essentials of Total Fitness and Wellness
3 credit hours/45 contact hours
Prerequisite: PSY 101 or SOC 101
Provides a systematic introduction to explore health-related fitness and wellness; general principles of exercise for health and fitness; connections among nutrition, health and fitness; and connections among exercise, diet and weight control. Explores relationships of exercise to the environment, to rehabilitation and to disease prevention.

HWM 103 First Aid and CPR
2 credit hours/30 contact hours
Presents basic information and practice in identifying ways to prevent injury and/or illness, recognize emergencies, follow three emergency action steps in any emergency, and provide basic care for injury and/or sudden illness until victim receives medical help. On successful demonstration of specific skills and 80 percent or higher score on written exam, student will receive an American Red Cross certificate.

HWM 201 Health Psychology
3 credit hours/45 contact 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.

HWM 205 Educational Principles of Health and Wellness
3 credit hours/45 contact hours
Prerequisite: HWM 101
Provides a systematic introduction to the principles of health and wellness education. Provides opportunity for students to analyze various methods of health and wellness instruction, and to prepare teaching units appropriate for K-12 and adult education.

HWM 285 Health and Wellness Management Practicum (Capstone)
2 credit hours/90 contact hours
Prerequisites: HWM 101, 103, 201, 205
Provides practical experience in health and wellness management that facilitates students' learning how to apply theoretical concepts to hands-on situations and how to problem solve given practical limitations of real-world environments. Emphasizes developing professional behaviors and skills, addressing individual needs of clients, and developing research, entrepreneurial and job-search skills.

Health Occupations

HOC 100 Medical Terminology
2 credit hours/30 contact hours
Surveys the origin and structure of medical terms; helps the student interpret and pronounce medical terms used in various health-related areas.

HOC 107 Speedy Spanish for Medical Personnel
2 credit hours/30 contact 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/45 contact 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/45 contact hours
Prerequisite: HIS 101
Explores the major political, historical, economic, social, cultural and intellectual events in Western civilization from beginnings to 1650 to the present.

HIS 201 United States History I
3 credit hours/45 contact hours
Examines the major political, historical, economic, social, cultural and intellectual events in U.S. history from beginnings to 1865.

HIS 202 United States History II
3 credit hours/45 contact hours
Prerequisite: HIS 201
Examines the major political, historical, economic, social, cultural and intellectual events in U.S. history from 1865 to present.

HIS 205 Women in History
3 credit hours/45 contact 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 218 Vietnam History, Culture
3 credit hours/45 contact hours
Explores the socio-political, religious and cultural developments from ancient to present-day Vietnam.

HIS 225 Colorado History
3 credit hours/45 contact 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.

HIS 226 History of Denver
3 credit hours/45 contact hours
Focuses primarily on the history of Denver from its founding in the Pikes Peak Gold Rush to the present time. The prime focus is on the colorful people and the major events by which Denver established itself as the "Queen City of the High Plains."

HIS 235 The American West
3 credit hours/45 contact hours
Traces the major political, social, economic, cultural and environmental forces that have made the American West a distinct region.

Human Services

HSE 105 Introduction to Social Welfare
AUR 3 credit hours/45 contact 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.

HSE 106 Survey of Human Services
AUR 3 credit hours/45 contact hours
Provides a philosophical, political, statutory and contemporary overview of social problems as they relate to social work. Includes future trends.

HSE 107 Interviewing Principles and Practices
AUR 3 credit hours/45 contact hours
Provides a beginning level of information on theoretical concepts, primary principles, strategies and interventions implemented in the practice and delivery of human services to individuals and families using the human services interview.

HSE 108 Introduction to Therapeutic Systems
AUR 3 credit hours/45 contact hours
Prerequisites: HSE 107 or instructor consent
Introduces basic concepts of major therapeutic systems, including backgrounds, developmental theories and practices of specific systems from psychoanalysis to reality therapy. Offered spring semester only.

HSE 109 Social Issues in Human Services
AUR 3 credit hours/45 contact hours
Prerequisites: HSE 105 or instructor consent
Provides an analytical overview of the social functions of human services. Examines the welfare system from the liberal, conservative and radical perspectives. Presents idealism and pragmatism of the present state of human services and trends for the future. Offered fall semester only.

HSE 110 Overview of Special Populations
TEC N 3 credit hours/72 contact hours
Provides students with knowledge in the areas of laws and history of special education; roles and responsibilities of paraprofessionals in schools; planning for students with disabilities; basic learning concepts; and cognitive, communicative, physical and affective needs of students with disabilities.

HSE 111 Communication Skills with Special Populations
TEC N 3 credit hours/72 contact hours
Provides knowledge in the areas of effective communication skills, problem-solving skills and analyzing self as a communicator.

HSE 112 First Aid/CPR
TEC N 1 credit hour/24 contact hours
Provides students with knowledge in the areas of health and safety issues in schools, basic first aid and CPR procedures.

HSE 113 Human Services for Persons with Developmental Disabilities
AUR 3 credit hours/45 contact hours
Prerequisites: REA 060, 109, MAT 035, 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 114 Student Behavior Management
TEC N 3 credit hours/72 contact hours
Provides students with knowledge in the areas of behavior modification, teaching appropriate behaviors, contingency contracts, observing and recording behavior, lunchroom supervision and playground supervision.

HSE 115 Human Services Practicum I (Certificate Capstone)
AUR 1-6 credit hours/ 45-150 contact hours
Prerequisite: 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 Public Assistance Practicum
AUR 3 credit hours/105 contact 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
AUR 1 credit hour/15 contact hours
Emphasizes working with mental health and substance abuse clients 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
AUR 3 credit hours/45 contact hours
Prerequisites: ENG 060, MAT 035, REA 060, REA 109
Provides students with an overview of models and methods that can prevent and treat behavior problems in individual adults with developmental disabilities.

HSE 141 Basic Instructional Techniques
TEC N 3 credit hours/72 contact hours
Prerequisite: HSE 111
Provides students with knowledge in the areas of delivering instruction, grouping students, reading with students, modifying instructional materials and using technology and adaptive equipment.

HSE 142 Transitional Support Skills
TEC N 3 credit hours/72 contact hours
Prerequisite: HSE 111
Provides students with knowledge in the areas of transition planning, job coaching and student self-advocacy.

HSE 205 Human Services for Groups
AUR 3 credit hours/45 contact 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
AUR 3 credit hours/45 contact hours
Prerequisite: HSE 108 or instructor consent
Introduces family theory and practice. Covers such topics as: systems theory, communication theorists, structure therapists, developmental theory and future directions in research of family therapy. Offered fall semester only.

HSE 207 Community Organization
AUR 3 credit hours/45 contact 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
AUR 3 credit hours/45 contact hours
Prerequisite: HSE 109 or instructor consent
Presents models for social policy analysis, program planning and evaluation. Applies models to relevant social welfare issues. Offered spring semester only.

HSE 209 Crisis Theory and Intervention
AUR 3 credit hours/45 contact hours
Prerequisites: HSE 107, 108, 115
Introduces basic theories and principles of crisis intervention from an historical and practical orientation. Offered spring semester only.

HSE 211 Human Services Practicum II
AUR 4 credit hours/150 contact 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 212 Human Services Practicum III (AAS Capstone)
AUR 7 credit hours/285 contact 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 213 Substance Abuse: A Multi-Model Approach
AUR 3 credit hours/45 contact hours
Prerequisite: HSE 108
Provides a study of major treatment modalities in the area of substance abuse. Topics include the history of treatment approaches, prevention with emphasis on adolescent groups and the families. Emphasizes the delivery of services in helping people with substance abuse problems. Offered spring semester only.

HSE 215 Introduction to Delinquency and Justice
AUR 3-7 credit hours/ 45-150 contact hours
Prerequisite: HSE 108 or instructor consent
Provides an historical and philosophical background of theories, ideologies, statutes, political processes and policies of the American Juvenile Justice System. Examines juvenile process from predelinquency and adjudication, through corrections.

HSE 217 Cultural Diversity in Human Services
AUR 3 credit hours/45 contact hours
TEC N 3 credit hours/72 contact hours
Prerequisites: HSE 107, 108
Presents an analysis of multicultural issues that can have an impact on the human services workforce. Emphasizes cultural differences and backgrounds of African Americans, Latinos/Chicanos, Native Americans and immigrants of Asian heritage, and how they respond to mental health services.

HSE 221 Substance Abuse Counseling
AUR 4 credit hours/60 contact hours
Emphasizes two areas of Drug and Alcohol Counselor preparatory work for state certification: 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
AUR 3 credit hours/45 contact hours
Prerequisite: HSE 221
Corequisites: 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 297 Internship Work Experience
TEC N 1-6 credit hours/
30-180 contact hours
Prerequisite: HSE 114 or 217
Provides students desiring jobs as paraprofessionals with the guided opportunity to practice skills that have been learned in the classroom.

Humanities

HUM 115 Introduction to Chicano Studies
3 credit hours/45 contact 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/45 contact hours
Emphasizes significant contributions of African-American writers, artists, scientists and political leaders to American civilization. Examines key African-American cultural contributors.

HUM 117 Introduction to Asian-American Studies
3 credit hours/45 contact hours
Examines the contemporary experiences, as well as the historical background of Asians in America. Students will be introduced and will introduce each other to characteristics of diverse Asian-American populations. Study will include variables such as culture, cuisine, history, family politics and society, which shape the Asian-American character. Classroom sessions and enrichment activities will include biographical interviews and field trips.

HUM 121 Survey of Humanities I
3 credit hours/45 contact hours
Introduces students to the history of ideas in Western cultures through a study of the visual arts, literature, drama, music and philosophy of early civilizations, Greek and Roman antiquity and Christian eras. Emphasizes connections among the arts, values and diverse cultures.

HUM 122 Survey of Humanities II
3 credit hours/45 contact hours
Examines the medieval, Renaissance and baroque periods through a study of the visual arts, literature, music and philosophy. Compares and contrasts diverse cultural ideas, and feminine and masculine viewpoints.

HUM 123 Survey of Humanities III
3 credit hours/45 contact hours
Examines the cultures of the 17th through the 20th centuries, focusing on the interrelation of art, ideas and history. Considers the influences of industrialism, scientific development and non-European peoples.

HUM 185 Cultural Diversity in the Humanities
3 credit hours/45 contact 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 215 Ideas in a Changing Society
1-3 credit hours/15-45 contact hours
Prerequisite: ENG 121 or instructor consent
Presents an interdisciplinary study of the modes of change as manifested in the arts, mass culture, language or lifestyles.

HUM 225 Contemporary Chicano Culture
3 credit hours/45 contact 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/45 contact 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/45 contact hours
Prerequisites: 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.

Japanese

JPN 101 Conversational Japanese I
3 credit hours/45 contact hours
Introduces basic vocabulary and grammar to students with no knowledge of Japanese. Includes simple vocabulary, sentence structure, the writing system and emphasizes practical conversational skills to develop a basic understanding of the language.

JPN 111 First-Year Japanese I
5 credit hours/75 contact hours
Emphasizes continued development of conversational ability, reading and writing skills and more complex grammatical forms. Intended for students who have a basic prior understanding of Japanese phrases and simple sentence structure.

JPN 112 First-Year Japanese II
5 credit hours/75 contact 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 I
3 credit hours/45 contact hours
Prerequisite: JPN 112
Introduces complex grammatical structures, emphasizes development of conversational ability and stresses additional reading/writing skills for students having a good understanding of Japanese sentence structure, vocabulary and the writing system.

Journalism

JOU 105 Introduction to Mass Media
3 credit hours/45 contact hours
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/45 contact 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/45 contact hours
Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading.

LIT 150 The Bible as Literature
3 credit hours/45 contact hours
Prerequisite: ENG 121 or instructor consent
Introduces various Biblical texts and exegetical methods of reading and interpreting such texts. Emphasizes the aesthetics and multiplicity of meaning in Biblical literature through the discussion of various Biblical writings, and published academic and student interpretations.

LIT 201 Masterpieces of Literature I
3 credit hours/45 contact 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/45 contact 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/45 contact 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/45 contact hours
Examines the techniques and issues of science fiction through a close reading of a variety of writers in the genre.

LIT 245 Literature of the American West
3 credit hours/45 contact hours
Prerequisite: ENG 121
Examines works in various genres by writers of the American West. Investigates predominant themes and social and historical backgrounds.

Machine and CNC Tool Operator

MTO 130 Introduction to Machine Shop
2 credit hours/48 contact hours
Provides basic instruction on the use of bench tools, power saws, drill presses, pedestal grinders, lathes, mills, heat-treat equipment, belt sanders and hardness-testing equipment.

MTO 131 Machine Math and Prints I
3 credit hours/72 contact 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 I
4 credit hours/96 contact 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/96 contact 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 contact hours/48 contact 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/96 contact hours
Prerequisite: MTO 132
Develops advanced skills and knowledge of horizontal and vertical mills: includes 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 hours/24 contact hours
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/72 contact hours
Prerequisite: MTO 133
Provides the knowledge and skills required to perform lathe operations at plus/minus .005" tolerances. 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/24-120 contact hours
Allows students to practice on basic machine equipment for the purpose of upgrading job skills.

MTO 221 Engine Lathes III
2 credit hours/48 contact hours
Prerequisite: MTO 143
Provides advanced skills and knowledge on the engine lathe, holding to .002" and .0005" tolerances.

MTO 223 Job Shop Machining I
2-3 credit hours/48-72 contact hours
Prerequisites: 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 I
3 credit hours/72 contact hours
Prerequisite: MTO 251
Provides more advanced instruction on using the CNC for production of parts, and introduces the student to the use of AutoCAD software.

MTO 251 CNC Operations
3 credit hours/72 contact 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/96 contact hours
Prerequisites: 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 pre-written programs as well as macros.

MTO 253 CNC Mathematics I
2 credit hours/48 contact 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/24 contact hours
Provides an overview of the basic use of the Disk Operating System.

MTO 262 CNC Office 97 Word
1 credit hour/24 contact hours
Provides basic instruction in the use of Office 97 Word software for word-processing activities in CNC operational programming.

MTO 263 CNC Programming I
3 credit hours/72 contact hours
Prerequisites: 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/72 contact hours
Prerequisite: MTO 250
Provides advanced instruction in the use of AutoCAD software and DXF files.

MTO 265 CNC Programming II
3 credit hours/72 contact hours
Prerequisites: 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 3D.

Magnetic Resonance Imaging

MRI 274 Clinical Applications of Magnetic Resonance Imaging I
1 credit hour/15 contact hours
Prerequisite: Program acceptance
Corequisites: MRI 276, 277, 278
Covers the imaging procedures performed and explains the results in imaging from MRI clinical protocols. Includes parameters for setting instrumentation and emphasizes expected results in normal (non-pathological) studies. Commences fall semester, and is presented in a self-study/self-paced format.

MRI 276 Physics and Instrumentation of Magnetic Resonance Imaging
2 credit hours/30 contact hours
Prerequisite: Program acceptance
Corequisites: MRI 274, 277, 278
Provides the physical theory of electromagnetism and explains how physical principles are applied in obtaining diagnostic magnetic resonance images of internal human anatomy. Commences fall semester, and is presented in a self-paced/self-study format.

MRI 277 Magnetic Resonance Imaging Laboratory
1 credit hour/30 contact hours
Prerequisite: Program acceptance
Corequisites: MRI 274, 276, 278
Provides for students' observation and limited involvement in the actual clinical environment. Includes experience in communications with and preparation of patients, equipment familiarization and introduction to actual procedural protocols. Thirty contact hours are arranged at the clinically affiliated site for 1 credit in the fall.

MRI 278 Cross-sectional Anatomy in Imaging
1 credit hour/15 contact hours
Prerequisite: Program acceptance
Examines human anatomy as viewed in transaxial, sagittal and coronal planes. Incorporates magnetic resonance images as a basis of recognition for anatomy in other diagnostic imaging modalities. Self-paced/self-study format.

MRI 284 Clinical Applications of Magnetic Resonance Imaging II
2 credit hours/30 contact hours
Prerequisite: MRI 277
Corequisite: MRI 287
Expands on clinical applications of MRI I with emphasis on the in-depth knowledge of protocols as applied to pathologies and recognition of pathologies in MRI images. Presented in a self-study format, spring semester.

MRI 287 Clinical Internship in Magnetic Resonance Imaging
9 credit hours/412 contact hours
Prerequisite: MRI 278
Corequisite: MRI 284
Provides for experience in the actual practice of MRI technology. Gives the student an opportunity to apply theoretic knowledge, learn and refine skills needed in the practice of magnetic resonance imaging technology. On completion of 412 contact hours at a clinically affiliated site, the student earns 9 credit hours.

Massage Therapy

MST 201 Basic Massage Therapy
3 credit hours/75 contact hours
Prerequisites: BIO 201, 202
Provides an overview of massage therapy in the United States, the effects, benefits and indications, the contraindications and cautions and the general principles for giving massage. Classic/Swedish massage will be taught to and practiced by the students.

MST 202 Deep Tissue Massage
3 credit hours/75 contact hours
Prerequisite: MST 201
Introduces various methods and techniques of deep tissue massage. Students practice in a clinical setting under supervision of certified instructors.

MST 203 Advanced Massage Modalities and Therapies
3 credit hours/90 contact hours
Prerequisites: MST 201, 202
Explores a variety of related treatment modalities and somatic therapies. Students will demonstrate their academic and clinical skills under the direction of certified instructors.

MST 204 Massage Therapy in Action (Capstone)
3 credit hours/90 contact hours
Prerequisites: MST 201, 202, 203
Explores the establishment of a massage therapy practice, the legal and insurance aspects of the business, care of equipment, infection control and client confidentiality. Provides opportunity to practice massage in a variety of clinical settings, including the program's clinic, private homes, senior centers, and places of business and employment.

Mathematics

MAT 013 Basic Operations I
TECs 1-12 credit hours/
24-120 contact hours
Provides review of basic math through multiplication.

MAT 014 Basic Operations II
TECs 1-12 credit hours/
24-120 contact hours
Provides review of multiplication, place values, long division and word problems.

MAT 030 Operations of Whole Numbers, Decimals and Percents
3 credit hours/45 contact hours
Reviews multiplication tables and strengthens skills in adding, subtracting, multiplying and dividing whole numbers and decimals. Teaches the concepts of roots, prime factoring and least common multiples. Includes percents and solving basic percent and simple/compound-interest word problems.

MAT 033 General Skills in Math
TECs 1-10 credit hours/
24-240 contact hours
Reviews arithmetic principles, including fractions, decimals, percents, and ratios and proportions. Prepares students for basic math skills needed in vocational programs.

MAT 035 Fractions, Proportions and Applied Geometry
3 credit hours/45 contact hours
Reviews adding, subtracting, multiplying and dividing both arithmetic and simple algebraic fractions, including order of operations. Reviews proportions and their applications in general and in percent word problems. Deals with basic terminology in geometric figures.

MAT 056 Pre-Algebra
3 credit hours/45 contact hours
Prerequisite: Basic Skills Assessment level 1c in math or MAT 035
Teaches integer operations and how to solve linear equations in one variable, as well as solving them for one variable in terms of others. The second half of the semester teaches students to solve a variety of word problems taken from various courses using the techniques covered in the first half of the semester.

MAT 080 Basic Mathematics Review
3 credit hours/45 contact hours
Reviews basic arithmetic. Includes whole numbers, decimals, percents, fractions, proportions, and pre-algebraic and geometric concepts and applications. May review set theory, probability, logic and the Cartesian Coordinate System.

MAT 100 Elementary Algebra
3 credit hours/60 contact hours
Prerequisite: Basic Skills Assessment level 2a in math or MAT 035
Includes manipulation of algebraic expressions, solving first-degree equations in one and two variables, factoring, solving quadratic equations using factors, solving fractional equations, graphing and oral problem solving.

MAT 103 Contemporary College Mathematics
3 credit hours/45 contact hours
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 105 Intermediate Algebra
4 credit hours/60 contact hours
Prerequisite: High school algebra or Basic Skills Assessment level 2b in math or MAT 100
Covers sets, axiomatic approach to the set of real numbers, extension of exponents, radicals, first- and second-degree equations in one and two variables and graphs.

MAT 121 College Algebra
4 credit hours/60 contact hours
Prerequisite: MAT 105 or equivalent
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/45 contact hours
Prerequisite: MAT 121 or instructor consent
Designed primarily 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/45-60 contact hours
Prerequisite: MAT 105 or instructor consent
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/60 contact hours
Prerequisites: MAT 121, 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/45 contact hours
Prerequisite: MAT 105
Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis-testing comparison of populations, correlation and regression.

MAT 201 Calculus I
5 credit hours/75 contact hours
Prerequisite: MAT 121, 122
Corequisite: MAT 122
Introduces single variable calculus and analytic geometry.

MAT 202 Calculus II
5 credit hours/75 contact hours
Prerequisite: MAT 201
Extends and further develops concepts of single variable calculus and analytic geometry studies as found in MAT 201. Emphasis on applications of differentiation, integration, and techniques of integration and infinite series.

MAT 203 Calculus III
4 credit hours/60 contact 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 226 Computer Applications for Statistical Procedures
1 credit hour/30 contact hours
Prerequisite: MAT 105
Corequisite: MAT 135
Includes computer applications of statistical procedures such as correlation and chi-square analysis. Data analysis uses commercially prepared computer software. Laboratory course.

MAT 265 Ordinary Differential Equations
3 credit hours/45 contact hours
Prerequisite: MAT 202
Introduces ordinary differential equations. Includes equations of first and second order with applications, linear equations, series methods and transformation methods.

Multimedia Design

MUM 100 Introduction to Macintosh
1 credit hour/22.5 contact hours
Introduces the student to the skills necessary to understand and operate the Macintosh computer for computer graphic applications.

MUM 101 Introduction to Multimedia
3 credit hours/68 contact hours
Prerequisites: MUM 100, GRD 103
Corequisite: GRA 109
Examines the latest developments in the field of multimedia production. Produces a multimedia project on the computer.

MUM 104 Design for the Computer
3 credit hours/68 contact hours
Prerequisite: MUM 100
Corequisite: GRA 109
Introduces the student to the computer skills necessary for visual production for multimedia presentations, color theory, shape, design and composition. Teaches continuity for the storyboard.

MUM 105 Image Processing and Manipulation
3 credit hours/68 contact hours
Prerequisites: MUM 100, GRD 103
Corequisite: GRA 109
Introduces the skills necessary to process and manipulate visual images from photographic and videographic input for the production of multimedia assets.

MUM 107 Integrated Video Production
3 credit hours/68 contact hours
Prerequisite: MUM 100
Corequisite: GRA 109
Introduces practices and issues in transition from traditional analog studio production to studio production in digital multimedia environment.

MUM 206 Fractal Painter I
3 credit hours/68 contact hours
Prerequisites: GRD 103, MUM 100
Corequisite: GRD 109
Introduces the student to a paint software for digital illustration and painting for multimedia applications.

MUM 207 Multimedia Animation
3 credit hours/68 contact hours
Prerequisites: MUM 100, 101, GRD 103
Corequisite: GRD 109
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/90 contact hours
Prerequisites: GRD 103, MUM 207
Familiarizes students with desktop multimedia using the Macintosh. Includes color illustration, 3-D illustration, animation, audio processing and video imaging. Due to the advanced nature of the material, students must have prior Macintosh experience.

MUM 285 Multimedia Portfolio Preparation
3 credit hours/68 contact hours
Prerequisites: GRD 103, MUM 103
Corequisite: GRA 109
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
3-6 credit hours/68 contact hours
Prerequisites: GRD 103, MUM 100, 101
Corequisite: GRA 109
Introduces the student to an "on-site" experience as an intern, working in a multimedia production facility.

Music

MUS 100 Fundamental Music Theory
3 credit hours/45 contact hours
Provides each student with a working knowledge of musicianship and includes the study of melody, harmony and rhythm.

MUS 101 Fundamentals of Music Theory
3 credit hours/45 contact 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/45 contact hours
Prerequisite: MUS 101 or instructor consent
Corequisite: MUS 112
Emphasizes diatonic, four-part harmony, analysis, ear training and keyboard harmony.

MUS 111 Ear Training and Rhythm Drill I
2 credit hours/40 contact hours
Corequisite: 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/40 contact 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/45 contact hours
Outlines what is needed to develop a thorough 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/45 contact 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/45 contact hours
Continues Introduction to Music History I with a study of music from the early romantic movement to the present.

MUS 131 Performance Class I
1-2 credit hours/30-60 contact hours
None may be repeated for credit
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 141 Private Instruction I (Guitar, Piano or Voice)
1-2 credit hours/15-30 contact hours
Prerequisites: MUS 100, audition
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 or Voice)
1-2 credit hours/15-30 contact hours
Prerequisite: MUS 141
Emphasizes practical skills and information relevant to performing and intensifies 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 practical skills and information relevant to performing.

MUS 143 Private Instruction III (Guitar, Piano or Voice)
1-2 credit hours/15-30 contact hours
Prerequisite: MUS 142
Emphasizes practical skills and information relevant to performing and intensifies 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 practical skills and information relevant to performing.

MUS 144 Private Instruction IV (Guitar, Piano or Voice)
1-2 credit hours/15-30 contact hours
Prerequisite: MUS 143
Emphasizes practical skills and information relevant to performing and intensifies 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 practical skills and information relevant to performing.

MUS 180 Music and the Media
3 credit hours/45 contact 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 190 Introduction to Computer Music
3 credit hours/45 contact hours
Acquaints the student with the fundamentals of writing music on the personal computer, including sequencing and music engraving.

MUS 201 Music Theory III
3 credit hours/45 contact hours
Prerequisites: MUS 102 and 116
Presents chromatic, harmonic materials, form and analysis and modulation formulae.

MUS 202 Music Theory IV
3 credit hours/45 contact hours
Prerequisites: MUS 102 and 116
Presents 20th century composition techniques.

MUS 211 Performance (Ear Training and Rhythm Drill) III
2 credit hours/40 contact hours
Prerequisites: MUS 102, 111, and 112
Provides the student with instruction and drill in the complex rhythmic and melodic patterns of the 20th century musical performance.

MUS 212 Performance (Ear Training and Rhythm Drill) IV
2 credit hours/40 contact hours
Prerequisites: MUS 211
Provides instruction and drill in the complex rhythmic and melodic patterns of 20th century musical performance.

MUS 220 Computer Music
3 credit hours/45 contact hours
Provides an understanding of how to write music on a personal computer using music engraving software.

Nursing

NUR 100 Nurse Aide Procedures and Patient Care
1-9 credit hours/24-216 contact hours
Demonstrates and provides practice of clinical skills essential for five nurse aide roles. Includes 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 101 Core Concepts of Pharmacology
1 credit hour/22.5 contact hours
Prerequisites: BIO 201, 202, ENG 121, MAT 100 or higher, PSY 235 for NUR students
Corequisites: NUR 102, 109, 111 for NUR students; BIO 114, HSE 113, LPT 110, NUR 109 for LPT students
Introduces general core concepts and ethical/legal implications of pharmacology, including the nursing process and biopsychosocial aspects of medication administration. Demonstrates and provides practice of medication administration and dose calculation.

NUR 103 Pharmacology for Nursing
2 credit hours/45 contact hours
Prerequisites: NUR 101, 102, 109, 111
Corequisites: NUR 112, 113, 114
Combines details of the clinical use of drugs with implications for nursing practice, emphasizing absorption, distribution, biotransformation, excretion of drugs, interactions, indications, contraindications, side/adverse effects and dosing. Provides medication administration practice in the laboratory.

NUR 109 Basic Nursing Skills
4 credit hours/120 contact hours
Prerequisites: BIO 201, 202, MAT 100
Corequisites: NUR 101, 111
Demonstrates and provides practice of clinical skills essential for the nursing role of care provider, including maintenance of a safe, effective care environment, task organization and implementation, time management, documentation and application of critical thinking to solve clinical problems.

NUR 111 Nursing Concepts and Issues
6 credit hours/135 contact hours
Prerequisites: BIO 201, 202, ENG 121, MAT 100, NUT 100, PSY 235
Corequisites: NUR 101, 102, 109
Introduces concepts and behaviors of nursing roles within the context of the nursing process, holistic health care and the health care industry. Develops skills of critical thinking, communication and health care education. Examines nursing issues across the life span with emphasis on the aging adult.

NUR 112 Nursing Care of the Hospitalized Client I
7 credit hours/157-158 contact hours
Prerequisites: NUR 101, 109, 113
Corequisite: NUR 103
Provides practice of nursing care for the acutely ill client who requires hospitalization, emphasizing maintenance of a safe, effective environment and protection of physiological and psychosocial integrity. Includes the causes, pathology, treatment and practical nursing care of commonly occurring diseases in adults. Presents ethical dilemmas common when caring for hospitalized adults.

NUR 113 Nursing Care of the Older Adult
3 credit hours/67-68 contact hours
Prerequisite: NUR 111
Corequisites: NUR 101, 109
Provides practice of nursing care for the elderly client, emphasizing maintenance of a safe, effective environment and protection of physiological and psychosocial integrity. Includes the causes, pathology, treatment, principles of rehabilitation and nursing care of commonly occurring diseases in the elderly adult. Discusses ethical dilemmas common in health care of the elderly.

NUR 114 Family-Centered Nursing I
5 credit hours/112-113 contact hours
Prerequisites: NUR 112
Corequisites: 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.

NUR 126 Nursing Process Concepts and Skills
2 credit hours/45 contact hours
Prerequisites: BIO 201 and 202, MAT 100 or higher
Corequisites: BIO 205, ENG 121, PSY 235
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 PN concepts of communication, mental health, basic nursing skills, care of the hospitalized adult and family-centered nursing.

NUR 208 Nursing Assessment and Diagnosis
3 credit hours/90 contact hours
Prerequisites: BIO 205, entry in Level II
Corequisites: NUR 211, 212
Develops skills of nursing assessment of the health client across the life span using effective interviewing and examination; develops ability to analyze data to identify actual or potential health care needs or nursing diagnosis. Reinforces concepts of health promotion and maintenance of physiologic and psychosocial integrity.

NUR 210 Family-Centered Nursing II
4 credit hours/90 contact hours
Prerequisites: NUR 212
Corequisites: NUR 214
Provides practice in the nursing care of families facing health concerns in both clinical and community settings. Includes concepts of family theory, and issues related to contraception, infertility, unwanted pregnancy, teen pregnancy, and disturbances of psychosocial and physiologic integrity of family members. Includes health teaching and access to community resources.

NUR 211 Principles of Psychiatric Nursing
5 credit hours/112 contact hours
Prerequisite: BIO 205
Corequisite: NUR 208
Develops the concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families through the use of the therapeutic relationship and nursing process.

NUR 212 Nursing Care of the Hospitalized Client II
8 credit hours/180 contact hours
Prerequisites: BIO 205, NUR 111
Corequisite: NUR 208
Presents the causes, pathology and treatment of complicated illnesses of adults requiring hospitalization; provides clinical practice of nursing care, emphasizing maintenance of a safe, effective environment and protection of physiological and psychosocial integrity.

NUR 214 Leadership and Management in Nursing
2 credit hours/45 contact hours
Prerequisite: NUR 212
Corequisites: NUR 210, 285
Provides nursing practice and instruction in the health care environment, and develops basic principles of leadership and management, including leadership styles, management issues and professional responsibilities.

NUR 285 Comprehensive Nursing Internship
3-4 credit hours/135-180 contact hours
Prerequisites: NUR 101, 102, 103, 109, 111, 112, 113, 114, 208, 211, 212
Corequisites: NUR 210, 214
Facilitates the transition from student to graduate nurse by applying all principles and concepts of nursing to clinical practice during a structured internship. Faculty collaborate with clinical preceptor and student to design an internship that individualizes the student's learning needs and preparation for job readiness. Includes review of nursing theory.

Nutrition

NUT 100 Foundations of Nutrition
2-3 credit hours/45-60 contact hours
Prerequisites: ENG 100, REA 090, MAT 105
Introduces basic nutrition with emphasis on personal nutrition. Satisfies the Nutrition requirement for students entering the Nursing program. Attendance at first session is required.

NUT 101 Nutrition for Health Care Providers
2-3 credit hours/45-67 contact hours
Prerequisite: BIO 201
Corequisite: BIO 202
Studies essential nutrients and their function in promoting total well-being of the individual. Analyzes necessary food requirements and identifies ways of satisfying these requirements.

NUT 236 Nutrition of Aging
3 credit hours/45 contact hours
Prerequisite: GNT 212
Emphasizes that aging is not synonymous with deterioration and that many of the signs and symptoms of chronic, nutritional imbalances often are (mis)identified as changes attributed to aging. Studies the relationships between the aging process and various nutrients.

Operating Room Nurse

ORN 220 Perioperative Nursing I
6 credit hours/90 contact hours
Prerequisite: RN or BSN required
Delineates the role of the perioperative nurse in the operating room, focusing on intraoperative nursing care. Includes traditional, endoscopic and laser surgery.

ORN 221 Perioperative Nursing II
8 credit hours/300 contact hours
Prerequisite: ORN 220
Provides the second-semester Perioperative Nursing student with basic supervised clinical experience necessary to implement the transition from the basic intraoperative environment to entry-level placement as an operating room nurse. Allows for assessment of student performance of technical and cognitive course objectives.

Paralegal

PAR 101 Legal Writing
3 credit hours/45 contact hours
Prerequisite: ENG 121
Begins development of legal thinking through legal terminology, effective legal writing, legal interviewing, legal reading skills and professional conduct.

PAR 105 Torts
3 credit hours/45 contact hours
Introduces basic area of law dealing with civil wrongs, with emphasis in negligence, defamation and products liability.

PAR 109 Property
3 credit hours/45 contact hours
Emphasizes substantive legal rules related to property law with added emphasis in Real Estate Law Practice.

PAR 115 Domestic Relations
3 credit hours/45 contact 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/45 contact hours
Introduces students to the paralegal field, including, but not limited to, legal terminology and scope of paralegal skills and responsibilities, vis-‡-vis the practice of law.

PAR 124 Legal Research
3 credit hours/45 contact hours
Introduces basic concepts and methods of legal research, emphasizing practical applications by the preparation of two case opinion briefs and two memorandums.

PAR 185 Paralegal Synthesis I (Capstone)
3 credit hours/45 contact hours
Prerequisites: PAR 124, 221, 222
Helps the student synthesize information and skills previously learned in courses such as Legal Research, Civil Procedures and Evidence. Includes legal terms, preparation of legal briefs, documents and legal research.

PAR 201 Business Organizations
3 credit hours/45 contact hours
Emphasizes substantive legal rules related to corporations, partnerships, agency and securities law.

PAR 205 Probate
3 credit hours/45 contact 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/45 contact 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/45 contact hours
Prerequisites: PAR 124, 207
Continues from Legal Research Seminar I with computer-assisted legal research used in drafting appeals court briefs.

PAR 214 Administrative Law
3 credit hours/45 contact 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/45 contact hours
Provides students with an introduction to the civil procedural rules and their application by use of a trial notebook assignment and other related exercises.

PAR 222 Evidence
3 credit hours/45 contact hours
Prerequisite: ENG 121
Introduces the student to the basic concepts and terminology of evidence as they apply in Colorado courts, and the basic methods of marshaling of evidence and investigative procedures.

PAR 223 Computers and the Law
3 credit hours/45 contact hours
Prerequisites: PAR 221, 222, CIS 120, 140
Introduces students to computer-assisted litigation support systems. Use of computers includes dBase III, Litidex and time management systems software programs.

PAR 231 Investigation
3 credit hours/45 contact 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/45 contact hours
Prerequisite: ENG 121
Introduces basic concepts of criminal law and criminal procedure including Colorado and procedural rules related to this area.

PAR 252 Constitutional Law
3 credit hours/45 contact hours
Introduces basic concepts of constitutional law, including information relating to federal government structure and powers, and individual liberties granted under the federal Constitution.

PAR 258 Contracts
3 credit hours/45 contact hours
Prerequisite: ENG 121
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/270 contact 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/45 contact hours
Prerequisites: 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 091 Parenting
1-3 credit hours/24-72 contact hours
Provides skills in understanding and integrating child values, behavior, discipline, development, emotions and special needs in the processes of positive parenting practices.

PGD 098 Career Exploration
1 credit hour/24 contact hours
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/45 contact hours
Prerequisite: ENG 121, REA 090, or Basic Skills Assessment level 3 in reading
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/45 contact hours
Prerequisite: ENG 121, REA 090, or Basic Skills Assessment level 3 in reading
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/45 contact hours
Prerequisite: ENG 121, REA 090, or Basic Skills Assessment level 3 in reading
Studies effective thinking. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving skills.

PHI 115 World Religions - West
3 credit hours/45 contact 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/45 contact hours
Introduces students to common and different concepts predominant in religions originating in Asia. Includes sociological, political, psychological and philosophical aspects of a variety of belief systems.

Photography

PHO 101 Fundamentals of Photography
3 credit hours/90 contact 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/90 contact hours
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/90 contact 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 111 Intermediate Black and White Photography
3 credit hours/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: PHO 101, 102
Presents the student with 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/90 contact hours
Prerequisites: PHO 101, 102
Introduces professional quality techniques, the zone system, the view camera, photographic chemistry, proper use of the light meter, 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: PHO 101, 111
Introduces digital imaging to students who have no previous computer experience, 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: 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/90 contact hours
Prerequisites: 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.

Physics

PHY 105 Conceptual Physics
4 credit hours/75 contact hours
Prerequisite: Basic Skills Assessment level 2 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/105 contact hours
Prerequisites: MAT 121, Basic skills Assessment level 3 in reading or REA 090
Corequisite: MAT 122
Offers the first semester of a two-semester sequence of classical physics, namely mechanics, heat and thermodynamics and wave motion.

PHY 112 Physics: Algebra-Based II
5 credit hours/105 contact hours
Prerequisite: PHY 111
Offers the second semester of a two-semester sequence of classical physics, including electromagnetism, optics and modern physics.

PHY 211 Physics: Calculus-Based I
5 credit hours/105 contact hours
Prerequisites: MAT 201
Studies mechanics and heat. Includes laboratory experience.

PHY 212 Physics: Calculus-Based II
5 credit hours/105 contact hours
Prerequisite: PHY 211
Studies wave motion, electricity and magnetism and light. Includes laboratory experience.

PHY 281 Modern Physics
3 credit hours/45 contact hours
Prerequisites: PHY 211, 212, MAT 201, 202
Offers a one-semester introduction to Modern Physics. The topics include quantum mechanics, atomic and nuclear physics, superconductivity, the special and general theories of relativity and elementary particles. Discusses theoretical and experimental foundations with examples of major applications.

Political Science

POS 105 Introduction to Political Science
3 credit hours/45 contact hours
Surveys political science, including political philosophy and ideology, democratic and nondemocratic governments and processes and international relations.

POS 111 American Government
3 credit hours/45 contact hours
Includes background of the U.S. Constitution; the philosophy of the American government; general principles of the Constitution; civil liberties; public opinion and citizen participation; political parties, interest groups and the electoral process; and the structure and functions of the national government.

POS 125 American State and Local Government
3 credit hours/45 contact hours
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/45 contact hours
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/45 contact hours
Analyzes critical issues in Political Science. Topics determined each term.

Postal Service

PST 105 Postal Service History and Organization
3 credit hours/45 contact hours
Traces delivery of written communication and merchandise from earlier eras to present. Compares private corporate and governmental agencies responsible for mail services, and studies postal organizations, philosophies, policies, procedures, rules and regulations.

PST 106 Postal Service Finance
3 credit hours/45 contact hours
Prerequisite: PST 105
Covers sources, receipt and control of postal revenue, procedures of the Board of Governors and Postal Commission, budgeting, financial accounting and reporting, timekeeping, travel regulations, Postmaster General/CEO annual report and administrative services.

PST 112 Postal Mail Processing I
3 credit hours/45 contact hours
Prerequisite: PST 105
Covers mail classifications and rate service standards. Also covers the following topics: postal terminology, mail processing functions, distributions systems, including automation and mechanization; objectives and responsibilities; mail preparation operation; platform operation; manual distribution; revenue protection; and bulk mail centers.

PST 114 Delivery and Collections
3 credit hours/45 contact hours
Prerequisite: PST 105
Designed to familiarize the student with the procedures used in the delivery and collection of mail within the United States Postal Service. Includes the basis of the delivery unit, organizational structure and route management. Identifies the intricacies of the delivery and collections operations.

PST 200 Postal Service Automation
3 credit hours/45 contact hours
Prerequisite: PST 105
Acquaints the student with the USPS employee relations practices, policies, procedures, and etc.

PST 205 Personnel Services
3 credit hours/45 contact hours
Gives an understanding of the functions provided in the employee relations of the United States Postal Service. Provides students with knowledge related to numerous aspects of the personnel services area, though not inclusive or exclusive to the overall services provided to postal employees.

PST 226 Postal Labor Relations I
3 credit hours/45 contact hours
Prerequisite: PST 105
Gives U.S. Postal employees/students a detailed introduction and review of the history, legislation, procedures and outcomes of the various facts relative to labor relations when viewed from the USPS perspective.

PST 227 Labor Relations II (Capstone)
3 credit hours/45 contact hours
Prerequisites: PST 105, 226
Outlines collective bargaining issues for bargaining employees; reviews management rights, employee classifications, principles of seniority, posting and re-assignments; reviews local implementation and union-management cooperation.

Psychiatric Technician

LPT 100 Fundamental Concepts and Clinical Applications
2 credit hours/45 contact hours
Prerequisite: NUR 109
Corequisites: BIO 114, HSE 113, NUR 101
Introduces concepts of wellness, death/dying, 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 110 Nursing Concepts for Advanced Placement PT
1 credit hour/22.5 contact hours
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/210 contact hours
Prerequisites: BIO 113, HSE 113, LPT 110, NUR 101, 109
Corequisite: LPT 100
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/45 contact hours
Examines the biological foundations of behavior, including physiological psychology, consciousness, sensation, perception, learning, memory, language, intelligence 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 102 General Psychology II
3 credit hours/45 contact hours
Examines the psycho-social foundations of behavior, including child, adolescent and adult development, motivation, emotion, personality, psychological disorders, psychotherapy, social psychology, stress and 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 115 Psychology of Adjustment
AUR 1-3 credit hours/
15-45 contact hours
TEC N 1-3 credit hours/
24-72 contact 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/45 contact 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/45 contact hours
Prerequisite: PSY 101 or instructor consent
Examines the psychological theories and research on the American experience of death and dying. Examines emotional, cross-cultural, philosophical and historical influences of attitudes about mourning, death and dying.

PSY 235 Psychology of Human Growth and Development
3 credit hours/45 contact hours
Surveys human development from conception to death, emphasizing physical, cognitive, emotional and psychosocial factors.

PSY 249 Abnormal Psychology
3 credit hours/45 contact hours
Abnormal Psychology is 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/45 contact hours
Prerequisites: Program admission, instructor consent, GNT 201
Studies adult development and aging. Contrasts existing myths about adult development with the best available scientific data to separate fact from fiction. Identifies important questions for the existing scientific or empirical data.

PSY 265 Violence and Culture
3 credit hours/45 contact hours
Prerequisite: ANT 101, 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 295 Leadership Development
3 credit hours/45 contact hours
Prerequisites: ENG 100, PSY 101, or instructor consent
Studies and applies the theories and techniques of leadership and group processes. Introduces leadership skills and experience with applications in a group setting.

Radiography

RTR 102 Imaging I
3 credit hours/45 contact hours
Prerequisites: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101
Corequisites: RTR 103, 104, 105
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.

RTR 103 Radiographic Equipment I
3 credit hours/45 contact hours
Prerequisites: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101
Corequisites: RTR 102, 104, 105
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.

RTR 104 Radiographic Internship I
5 credit hours/225 contact hours
Prerequisites: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101
Corequisites: RTR 102, 103, 105
Introduces the clinical education experience at the clinical education center. Students will apply knowledge learned in the classroom to the actual practice of radiography.

RTR 105 Radiographic Patient Care I
3 credit hours/45 contact hours
Prerequisites: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101
Corequisites: RTR 102, 103, 104
Provides an introduction to radiology and the knowledge necessary for the radiography student to provide safe patient care, including communication skills, legal and ethical issues in medicine, body mechanics, patient transfer, medical terminology, valuing diversity, universal precautions and radiography as a profession.

RTR 112 Radiographic Imaging II
3 credit hours/45 contact hours
Prerequisites: RTR 102, 103, 104, 105
Corequisites: RTR 113, 114, 115
Introduces material in addition to that covered in RTR 102, including the knowledge of anatomy, pathology, and skills necessary to perform radiographic procedures of the lower extremity, pelvis, spine and boney thorax.

RTR 113 Radiographic Equipment II
3 credit hours/45 contact hours
Prerequisites: RTR 102, 103, 104, 105
Corequisites: RTR 112, 114, 115
Introduces material in addition to that covered in RTR 103 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, fluoroscopic equipment and how pathophysiological change relates to exposure.

RTR 114 Radiographic Internship II
5 credit hours/225 contact hours
Prerequisites: RTR 102, 103, 104, 105
Corequisites: RTR 112, 113, 115
Introduces additional concepts and more complex radiographic procedures to those learned in Internship I.

RTR 115 Radiographic Patient Care II
2 credit hours/45 contact hours
Prerequisites: RTR 102, 103
Corequisites: RTR 112, 113, 114
Expands the information presented in RTR 105 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.

RTR 124 Radiographic Internship III
7 credit hours/315 contact hours
Prerequisites: RTR 112, 113, 114, 115
Reinforces the basic concepts of Internships I and II.

RTR 202 Radiographic Imaging III
3 contact hours/45 credit hours
Prerequisite: RTR 124
Corequisites: RTR 203, 204
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.

RTR 203 Radiation Biology/Protection
2 credit hours/30 contact hours
Prerequisite: RTR 124
Corequisites: RTR 202, 204
Provides the basic knowledge and understanding of the biologic effects of ionizing radiation protection and safety.

RTR 204 Radiographic Internship IV
8 credit hours/360 contact hours
Prerequisite: RTR 124
Corequisites: RTR 202, 203
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.

RTR 214 Radiographic Internship V
11 credit hours/495 contact hours
Prerequisites: RTR 202, 203, 204
Corequisite: RTR 216
Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, as well as increasing proficiency in general radiography.

RTR 216 Radiographic Capstone
2 credit hours/30 contact hours
Prerequisites: RTR 202, 203, 204
Corequisite: RTR 214
Prepares the student for a job search and emphasizes the five major subject areas covered during the two-year study program, prior to the student sitting for the National Registry Examination.

Reading

REA 020 Basic Reading Skills
TECs 1-5 credit hours/24-120 contact hours

Intended for those who score at 1-1.5 reading level using the AVT Placement Test. Includes beginning phonics, spelling, vocabulary, comprehension and writing skills.

REA 030 Vocabulary Development I
AUR 3 credit hours/45 contact hours
Prerequisite: Basic skills assessment level 2 in English, 3 in reading and 2 in study skills

Emphasizes various vocabulary strategies, dictionary and thesaurus skills, words in context, word analysis, sight vocabulary and pronunciation, personalized vocabulary cards, spelling, analogies and other unique strategies for vocabulary improvement.

REA 031 Building Reading Skills I
TECs 1-5 credit hours/
24-120 contact hours

Provides instruction in spelling, reading, comprehension and writing skills.

REA 041 Building Reading Skills II
TECs 1-5 credit hours/
24-120 contact hours

Provides instruction in spelling, vocabulary, comprehension, getting meaning from selections and following directions.

REA 060 Foundations of Reading
AUR 1-6 credit hours/
15-90 contact hours
TECs 1-6 credit hours/24-144
Prerequisite: Basic Skills Assessment level 1 in English, 1 in reading and 1 in study skills

Provides intensive review of basic reading concepts based on diagnostic/prescriptive methods. Helps students build a solid foundation of basic word analysis, vocabulary development and reading skills. Builds on students' strengths and is recommended for students who need an intensive review of the basic reading skills necessary for successful comprehension.

REA 070 Foundations of Reading II
AUR 3 credit hours/45 contact hours
Prerequisite: Basic Skills Assessment level 2 in English, 3 in reading and 2 in study skills

Helps students build a solid foundation of word analysis, vocabulary development and reading skills. Builds on students' strengths and is recommended for students who need reading instruction that provides additional support between the core reading classes.

REA 090 College Preparatory Reading
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisite: REA 060, Basic Skills Assessment level 2 in English, 3 in reading and 2 in study skills

Introduces students to reading skills necessary to succeed in a college environment. Includes how to read textbooks more effectively, locate main ideas and supporting details, develop literal and critical comprehension, improve vocabulary development and increase reading rates. Emphasizes applying these strategies to content area courses.

REA 105 Workshop in Reading, Writing and Speaking
AUR 3 credit hours/45 contact hours
Prerequisite: Basic Skills Assessment level 2 in English, level 3 in reading, level 2 in study skills or instructor consent

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 106 Vocabulary Development II: College Vocabulary
AUR 3 credit hours/45 contact hours
Prerequisite: REA 030, Basic Skills Assessment level 2 in English, 3 in reading and 2 in study skills

Designed to facilitate the transfer of basic vocabulary skills to more advanced levels of usage. Requires students to apply advanced vocabulary concepts to content area classes through analyzing word structure and visualizing concepts. Also introduces specialized vocabulary.

REA 107 Computerized Speed Reading
AUR 3 credit hours/45 contact hours

Designed to meet the needs of students who want to develop reading power, reading speed and reading comprehension. Built on the fundamental principles of increasing speed and comprehension, this course focuses on the mechanics of reading, the purpose for reading, the various components of comprehension, reading rate and vocabulary enrichment.

REA 108 Planning for Success
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours

Provides an introduction to the nature of a college education. Helps freshmen develop a better understanding of the learning process and acquire basic academic "survival skills."

REA 109 Advanced Learning Strategies
AUR 3 credit hours/45 contact hours
TECs 3 credit hours/72 contact hours
Prerequisites: Basic Skills Assessment level 2 in English, 2 in reading and 2 in study skills

Focuses on critical-thinking and problem-solving techniques. Offers a dynamic and practical approach to providing students with opportunities to determine and improve how they learn and succeed in a college environment. May include listening techniques, concept development, memory devices, note-taking methods, and test-taking, time-management, textbook-reading and concentration strategies.

REA 151 College Reading
AUR 3 credit hours/45 contact hours
Prerequisite: REA 090, Basic Skills Assessment level 3 in English, 3 in reading, 3 in study skills or instructor consent

Develops cognitive and metacognitive strategies for improving reading comprehension in a college environment. Areas covered include critical thinking and analysis, inferential comprehension, concept development, textbook reading strategies, questioning techniques, patterns of organization, evaluating evidence and reasoning logically. Emphasizes the application of reading techniques to academic fields of study.

REA 223 Critical Analysis Reading
AUR 3 credit hours/45 contact hours
Prerequisites: REA 090 or REA 151, instructor consent, Basic Skills Assessment level 3 in English, 3 in reading and 3 in 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.

Recreational Assistant

RAE 010 Golf I
2 credit hours/30 contact hours
Teaches fundamental golf skills, including set up, posture, stance, grip, and short and full swings. Covers the basic rules of golf, golf course etiquette, scoring and equipment selection.

RAE 030 Tennis I
2 credit hours/30 contact hours
Introduces the fundamentals of tennis, including posture, grip, the serve, forehand, backhand and lob.

RAE 201 Introduction to Recreational Leisure
3 credit hours/45 contact hours
Prerequisites (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
Corequisites (for degree or certificate enrollees only): RAE 202, 205, SOC 103
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 Introduction to Recreational Therapy
3 credit hours/45 contact hours
Corequisites: RAE 201, 205,
Introduces the field of Recreational Therapy. 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 203 Recreation and Leisure in Special Populations
3 credit hours/45 contacts hours
Prerequisites: RAE 201, 202, 205, SOC 103
Corequisites: RAE 204, 207, 285
Examines and analyzes each of six recreational processes and models (e.g., medical, long-term care, youth centers, recreation 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 204 Health and Safety in Recreation and Leisure
3 credit hours/45 contact hours
Prerequisites: RAE 201, 202, 205, SOC 103
Corequisites: RAE 203, 207, 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 only to Recreational Assistant program students.

RAE 205 Recreational Assistant Externship I
4 credit hours/180 contact hours
Corequisites: RAE 201, 202, SOC 103
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 207 Specialized Areas in Recreation Electives
1-4 credit hours/15-60 contact hours
Prerequisites (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
Corequisites (for degree or certificate enrollees only): RAE 202, 205, SOC 103
Provides theory and practice of actual activities in the field of recreation and leisure activities, including, but not limited to, golf, Qi Gong (Tai Chi), dance and music therapy, billiards and an activity chosen by the student. Also open for one credit hour to students interested in the four-week segment to learn only the activities.

RAE 285 Recreational Assistant Externship II
5 credit hours/225 contact hours
Prerequisites: RAE 201, 202, 205, SOC 103
Corequisites: RAE 203, 204, 207
Continues RAE 205, Recreational Assistant Externship 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.

Refrigeration, Heating and Air Conditioning (Commercial/Industrial)

RAC 111 Electricity and Electronics I
3 credit hours/68 contact hours
Introduces atomic theory, charges, the basic concepts of electrical circuits and safe procedures when working with electrical breakboards and developing simple circuits.

RAC 112 Electricity and Electronics II
2 credit hours/45 contact hours
Prerequisite: RAC 111
Introduces magnetism, electrical motor design and operation, and the use and care of testing meters.

RAC 114 Fundamentals of Refrigeration I
2 credit hours/45 contact hours
Prerequisites: RAC 111, 112
Introduces molecular theory, heat and methods of heat transfer, the basic compression cycle, molecular construction and nature of refrigerants.

RAC 116 Fundamentals of Refrigeration II
3 credit hours/68 contact hours
Prerequisite: RAC 114
Presents the opportunity to construct, evacuate, charge, start up and test the operation of a basic refrigeration system.

RAC 200 Refrigeration Systems, Components and Applications
3 credit hours/68 contact hours
Prerequisites: RAC 111, 112, 114, 116
Presents the individual components of refrigeration systems and their applications. Includes calculating evaporator and condensing-unit capacities and matching components.

RAC 205 Heat Loads and System Development
2 credit hours/45 contact hours
Prerequisites: RAC 100 courses
Presents the concepts of heat gains and losses. Uses these concepts to calculate heat loads and presents methods of equipment selection.

RAC 208 Special Refrigeration Systems
3 credit hours/68 contact hours
Prerequisite: RAC 116
Examines refrigeration systems in common use, other than normal mechanical refrigeration, that have commercial and industrial applications. Includes absorption, expendable and multi-stage systems.

RAC 211 Installation and Service Refrigeration Systems
3 credit hours/68 contact hours
Prerequisite: RAC 200
Presents the requirements for the installation of refrigeration system components and accessories and the construction of complete refrigeration systems. Introduces the proper procedure for troubleshooting and servicing refrigeration systems and components through the use of manufacturers' specifications and wiring diagrams.

RAC 212 Fundamentals of Air Conditioning
3 credit hours/68 contact hours
Prerequisite: RAC 111
Examines the principles and definitions of atmosphere, humidity, measurements and controls, psychometric charts and tables.

RAC 214 Unitary and Central Station Systems
3 credit hours/68 contact hours
Prerequisites: RAC 200, 212
Examines heat pump operation and the installation of packaged units, components and piping for split systems and evaporative coolers.

RAC 215 Air Flow Principles and Distribution
2 credit hours/45 contact hours
Prerequisite: RAC 116 or equivalent
Presents applications of air requirements, flow and sizing of air flow ducts.

RAC 216 HVAC Control Systems
3 credit hours/68 contact hours
Prerequisite: RAC 116
Examines control methods and devices used in air conditioning, electrical systems and pneumatics.

RAC 275 Direct Digital Control Systems
1 credit hour/22.5 contact hours
Prerequisite: RAC 216
Provides an understanding of the evolution of Direct Digital Control (DDC) in the HVAC industry and its present applications. Introduces the basic features and capabilities of DDC systems and provides a basic understanding of how a DDC system is programmed and commissioned.

RAC 276 Metasys: HVAC Application Specific Controller Engineering
2 credit hours/45 contact hours
Prerequisite: RAC 275
Enables building personnel to install and configure Metasys HVAC Application Specific Controllers (ASCs). HVAC PRO(tm) software is used to configure HVAC controls strategies for the AHU, VAV and UNT.

RAC 277 Metasys DX-9100 Engineering
2 credit hours/45 contact hours
Prerequisite: RAC 276
Provides engineering personnel with the knowledge and skills needed to build programs for the DX-9100 product using the WGX-9100 Windows software tool. Intended for building engineers who plan to implement or modify applications designed for the DX-9100 controller, or to design a unique strategy to solve a control problem.

RAC 278 Metasys Companion Facility Operators
1 credit hour/22.5 contact hours
Prerequisites: RAC 275, 276, 277
Enables facility operators to communicate with their Metasys Companions system, as well as HVAC Application Specific Controllers(ASCs) connected to the Companion. Provides hands-on experience with all aspects of the Companion and shows how to set up Companion features with points from ASCs and adding ASC points to the Companion database. Distinguishes between the panel and PC versions of the Companion.

RAC 279 Metasys Facility Operators
2 credit hours/45 contact hours
Prerequisite: RAC 278
Enables building personnel to use the features of Metasys to control facilities effectively. Provides skills and knowledge to communicate with the Metasys system and interpret systems messages. Demonstrates efficient use of system features using Operator Workstation or Network Terminals to maximize the benefits derived from the Metasys system.

RAC 285 Air Conditioning Troubleshooting and Service (Capstone)
4 credit hours/90 contact hours
Prerequisite: RAC 116
Examines procedures in troubleshooting systems and servicing components of air conditioning systems.

Science

SCI 285 Critical Thinking (Capstone)
3 credit hours/45 contact hours
Prerequisites: 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 problem-solving 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/45 contact hours
Prerequisite: Basic Skills Assessment levels 3 in math, 3 in English, 3 in reading and 3 in study skills

Examines social institutions, mores and principles of sociology, as well as human cultures, social groups, and the social issues of age, gender, class and race.

SOC 102 Introduction to Sociology II
3 credit hours/45 contact hours
Prerequisite: Basic Skills Assessment levels 3 in math, 3 in English, 3 in reading and 3 in study skills

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 103 Sociology of Health Care
3 credit hours/45 contact hours
Prerequisites: SOC 101, PSY 101, PSY 235 or instructor consent

Introduces the student to the health care industry's finances, organization and various occupational roles. Explores the array of educational and vocational opportunities available in health care.

SOC 201 Introduction to Gerontology
3 credit hours/45 contact hours
Prerequisites: Program enrollment, instructor consent

Explores various theoretical perspectives on aging, the demography of aging, the interrelationship between elders and key social institutions, and physical and psychological aspects of aging.

SOC 203 Urban Socio-Anthropology
3 credit hours/45 contact 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.

SOC 205 Sociology of Marriage and Family
3 credit hours/45 contact hours
Prerequisite: SOC 101 or 102 instructor consent

Develops an understanding of marriage and family. Examines the family as an institution and how social, cultural and personal factors influence family relations. Explores the stability and diversity of the family, along with current trends and some alternative life styles.

SOC 215 Contemporary Social Problems
3 credit hours/45 contact hours
Prerequisite: SOC 101 or instructor consent

Explores current social issues that result in societal problems. Focuses on issues such as civil liberties, gender discrimination, substance abuse, crime, poverty and social change.

SOC 220 Race, Gender, Class, Culture
3 credit hours/45 contact hours
Prerequisite: SOC 101 or instructor consent

Explores the variety of intergroup relations: race, nationality, ethnicity, income groups and other minority classifications. Examines patterns of prejudice, discrimination and possible solutions to these issues.

SOC 221 Overview of Programs and Services
3 credit hours/45 contact hours
Prerequisites: Program admission, instructor consent
Corequisite: GNT 201

Examines the myriad programs and services available to elderly individuals and their families. Explores legislative history and demographic trends in the field of aging: health and mental health, information and referral, income maintenance, housing, transportation, long-term care, nutrition, employment and senior centers.

SOC 222 Aging in a Diverse Society
3 credit hours/45 contact hours
Pre- or Corequisite: GNT 201 or instructor consent

Explores ethnic, religious and sexual diversity issues as they relate to older Americans. Ties together gerontological and diversity concerns to develop students into more sensitive and effective practitioners when dealing with older adults.

SOC 236 Social Issues and Aging
3 credit hours/45 contact hours
Prerequisites: Program admission and instructor consent

Explores the various social issues related to the aging process and the ways in which an aging population affects social structure. Introduces demographic processes, demographics related to the current older population, and current social issues identified by community agencies and advocate groups as relevant to older adults. Includes intergenerational service-learning opportunities.

SOC 237 Death and Dying
3 credit hours/45 contact hours
Prerequisites: SOC 101 or instructor consent

Examines the event of death and the process of dying. Explores the causes of death and the experience of dying in nursing homes, emergency rooms and hospices. Reviews the ethical and political issues of death and dying.

SOC 260 Sociology of Deviance
3 credit hours/45 contact hours
Prerequisite: SOC 101 or instructor consent

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/45 contact hours
Prerequisites: ANT 101, 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.

Spanish

SPA 101 Conversational Spanish I
3 credit hours/45 contact 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/45 contact hours
Prerequisite: 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/75 contact 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/75 contact hours
Prerequisite: SPA 111 or instructor consent

Continues Spanish I in the development of functional proficiency in listening, speaking, reading and writing the language.

SPA 211 Second-Year Spanish II
3 credit hours/45 contact hours
Prerequisites: SPA 111, 112

Reviews and reinforces skills and abilities gained in first-year Spanish courses. Emphasis is on conversation, culture, reading short stories and writing compositions. The goal is to expand the functional proficiency in speaking, reading, writing and listening to the language.

Special Learning Support Program (SLSP)

All SLSP courses are for persons with learning disabilities and other special learning needs. Staff approval is needed to enroll in these courses.

SLS 001 Spelling Strategies I
3 credit hours/45 contact 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/45 contact 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/90 contact 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/30 contact hours

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/45 contact hours
Corequisite: SLS 005

Reviews skills introduced in SLS 001 and develops advanced strategies for spelling English 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/45 contact 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.

Speech

SPE 115 Principles of Speech
3 credit hours/45 contact 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/45-72 contact 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/45 contact 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/45 contact 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/45 contact 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/90 contact hours
Prerequisite: Admission to STE Program or instructor consent
Introduces surgical care. Emphasizes theoretical application in areas of asepsis, anesthesia, hemostasis, radiology and care of the surgical patient in the operating room.

STE 105 Pharmacology for Surgical Technology
2 credit hours/30 contact hours
Prerequisite: STE 100
Explores chemical therapy utilized 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/150 contact hours
Prerequisites: STE 100, BIO 201
Corequisite: STE 107
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/60 contact hours
Prerequisites: STE 100, HOC 100
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 Laboratory Experience
3 credit hours/128 contact hours
Prerequisite: STE 107
Applies surgical principles in the clinical setting under supervision of instructor. Emphasizes skill refinement and performance evaluation.

STE 110 Surgical Technology Practicum (Capstone)
7 credit hours/352 contact hours
Prerequisite: STE 107
Emphasizes refinement of skills in STE 109, application of proper aseptic technique and provision of quality patient care in the clinical setting under supervision of hospital personnel.

STE 115 Surgical Pathology and Intervention
4 credit hours/60 contact hours
Prerequisite: STE 107
Deals with functions of the surgical technician related to instrumentation and supplies. Presents surgical intervention theory related to pathology of body systems with focus on preoperative, intraoperative and postoperative progression, prognosis, complications and appropriate actions by operating room staff.

Technical Health Assistant

THA 110 Medical Terminology I
2 credit hours/48 contact hours
Develops the root word and structure of medical terms, and examines the interpretation and pronunciation of terms used in various health-related areas.

THA 111 The Human Body
4 credit hours/96 contact hours
Explores the human body through a systems approach. Presents human anatomy, physiology and pathology.

THA 112 Social Issues in Health
3 credit hours/72 contact hours
Introduces social issues in health care, including medical ethics, law, patient communications, psychology and professionalism of health care workers.

THA 114 Medical Emergencies
1 credit hour/24 contact hours
Explores common medical emergencies and the appropriate response based on education and experience. Includes CPR certification.

THA 151 Technical Procedures
3 credit hours/72 contact hours
Develops the knowledge and skills necessary to perform technical medical procedures, including aseptic technique and infection control, patient history, vital signs, height and weight, examination preparation, assisting with physical exams, medical office emergencies and transporting patients.

THA 153 Medical Terminology II
2 credit hours/48 contact hours
Introduces commonly used medical abbreviations, symbols, names of laboratory tests, common drugs, use of the Physician's Desk Reference, and words used in specialties such as surgery, pathology and radiology.

THA 200 Patient Care
3 credit hours/72 contact hours
Prerequisites: THA 114, 151
Provides student with knowledge of clinical skills essential for Colorado State Board Nurse Aide certification. Includes basic understanding of health care standards, the patients' illnesses and their needs, patient care skills, critical skills, critical thinking, and sensible oral and written communication skills for nursing. Incorporates clinical skills practicum in clinical simulation.

THA 205 Pharmacology Practices
4 credit hours/96 contact hours
Prerequisites: THA 114, 151, 153
Provides an overview of medication measurement, regulation forms, classifications, dosage parameters, safety and routes of administration.

THA 210 Radiology Assisting
6 credit hours/144 contact hours
Prerequisites: THA 114, 151, 153
Develops the knowledge and skills needed to assist the radiologic technologist with radiologic procedures, radiographic film processing, filing systems, contrast media preparation, special radiologic modalities, department organization, patient education and professionalism.

THA 212 Internship Seminar
1 credit hour/24 contact hours
Corequisite: THA 297
Examines the skills and applications learned in a medical facility through an internship; contrasts practical procedures against the ideal; and explores workplace relationships, team skills and conflict management. Provides a faculty advisor to assist with special workplace problems.

THA 220 Orthopedic Assisting
8 credit hours/192 contact hours
Prerequisites: THA 114, 151, 153
Presents basic anatomy in its relation to location, positioning and treatment of orthopedic conditions. Provides practice in the application and removal of plaster and fiberglass casts.

THA 230 Clinical Procedures
7 credit hours/168 contact hours
Prerequisites: THA 114, 151, 153
Develops the knowledge and skills needed to perform clinical medical assisting activities, including drug administration, office surgical procedures, basic laboratory procedures, electrocardiography and radiology. Also examines the assistant's role, legal aspects and professionalism.

Theatre

THE 105 Introduction to Theatre Arts
3 credit hours/45 contact 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/60 contact hours
Prerequisite: Instructor consent
Offers international students and American students the opportunity to share ethnic/cultural experiences by using the theatre techniques of story telling, improvisation, mime, verbal and non-verbal language, scripting and staging techniques resulting in performance projects.

THE 111 Acting I
3 credit hours/45 contact hours
Introduces fundamentals of acting. The course is for students to develop technique, analyze scripts and evaluate performances.

THE 112 Acting II
3 credit hours/45 contact hours
Prerequisite: THE 111
Refines basic acting technique, character vision, performance orchestration and a personal aesthetic sense about the art of acting.

THE 116 Practicum in Stage Acting
1-3 credit hours/30-90 contact hours
Prerequisite: Instructor consent
Offers credit for students rehearsing and performing roles in college theatre productions.

THE 118 Practicum in Technical Theatre
1-3 credit hours/30-90 contact hours
Prerequisite: Instructor consent
Provides hands-on experience in college productions in areas of technical capacities of settings, lighting, sound, costumes, properties, house management and stage management.

THE 206 Oral Interpretation
3 credit hours/45 contact hours
Pre- or Corequisite: SPE 205
Explores writers' experiences in drama, prose and poetry, and employs performance techniques that make the literature come alive for leaders and audiences.

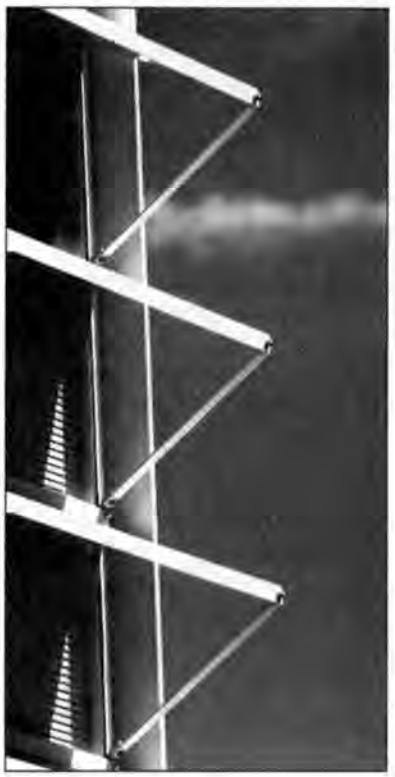
THE 211 Development of Theatre I
3 credit hours/45 contact hours
Traces the evolution of Western-world theatre from primitive rites through the European Renaissance era. Emphasizes historical developments and major plays written in key periods.

THE 212 Development of Theatre II
3 credit hours/45 contact hours
Traces the evolution of the Western-world theatre from neo-classic period through modern drama. Emphasizes historical development and major plays written in key periods.

THE 218 Reader's Theatre
3 credit hours/45 contact hours
Prerequisite: SPE 205, 206
Studies ensemble interpretation of literature — prose and drama — primarily through the medium of the spoken word.

Welding and Fabrication

WEF 100 Oxyacetylene Welding I
3 credit hours/72 contact 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/40 contact 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/96 contact 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/96 contact 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/96 contact 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/96 contact 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/72 contact 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 non-destructive testing.

WEF 114 Welding Math and Blueprints
3 credit hours/72 contact hours
Prerequisite: 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/48 contact 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/24-120 contact hours
Allows students to practice on all welding skills to prepare for certification tests for upgrading job skills.

WEF 205 GMAW Thin Gauge and Structural
3 credit hours/72 contact 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/48 contact 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/72 contact 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.

President's Office

McClenney, Byron
President
Ed.D., University of Texas, 1969
M.Ed., University of Texas, 1963
B.S., University of Texas, 1961

Underwood, Wanda
Program Assistant II
B.S., Regis University, 1997

Administrative Services

Hunter, Stephen T.
Vice President
M.B.A., Regis College, 1982
B.A., Ohio Northern University, 1970

Blash, Melissa
Payroll Officer

Blecha, Donna
Payroll Officer

Callison, Kevin
Subsystems Manager

Dahl, Jerri
Accountant

Downen, Niles
Controller
B.S., Southern Illinois University, 1974

Hasslock, Ray
General Ledger
B.S., University of Colorado at Denver, 1974

Hudak, William
Business Office

Limon, Nora
Business Office

Nitcher, Barrie
Accounts Payable Supervisor

Zinn, Sue
Sponsored Programs Accountant
A.A., Grand Rapids Junior College

Admission, Registration and Records

Gutierrez, Juanita
Interim Director
M.A., University of Denver, 1997
B.A., Metropolitan State College of Denver, 1985

Abeyta, Sandra
Admission and Veteran's Coordinator

Martinez, Paula
Data Specialist II
A.A.S., Community College of Denver, 1994

Nelson, Lia
Transcript Evaluator
B.S., Colorado State University, 1990

Sanchez, Rosie
Graduation Coordinator

Arts and Humanities

Fleck, Richard F.
Division Dean
Ph.D., University of New Mexico, 1970
M.A., Colorado State University, 1962
B.A., Rutgers University, 1959

Edgett, Maureen
Office Manager

Ward, Evelyn
Administrative Assistant II

Business and Governmental Studies

Battaglia, Peter A.
Division Dean
Post-Doctoral Study, University of Texas at Austin, 1997
Ph.D., University of Wisconsin at Madison, 1995
M.P.A. and M.C.R.P., Ohio State University, 1989
B.A., State University of New York at Binghamton, 1985
A.A., Miami-Dade Community College-North, 1980

Evans, Guy
Coordinator, Academic Computer Lab
A.S., Pima Community College, 1983

Higgins, Teri
Interim Office Manager
A.A.S., Community College of Denver, 1998

Jonsson, Karen
Interim Administrative Assistant III

Career Service Center

Holland, Laurie
Student Services Specialist
Cooperative Education/Job Placement

Muniz, Bob
Job Development
M.A., University of Northern Colorado
B.A., University of Colorado

Rodriguez, Frank
Coordinator, Cooperative Education
B.A., University of Wyoming

Center for Persons with Disabilities

King, Jackie
Instructional Support Manager
M.A., California State University, 1979
B.A., California State University, 1977

Aeschlimann, Nancy
Interpreter
B.A., Metropolitan State College of Denver, 1989
Certificate-Interpreter for the Deaf, 1982

Powell, Darlene
Counselor
B.S., Nebraska Wesleyan University, 1963

Continuing Education

Fleming, Richard
Interim Division Dean
M.S., University of Dallas, 1977
M.B.A., University of Dallas, 1976
B.S., Memphis State University, 1968

Baker, Elaine
Director, Workplace Learning
B.A., University of Massachusetts at Amherst, 1974

Blum Garcia, Cheryl L.
Director, Training Partnerships
M.A., Webster University, 1993
B.S.W., University of Wisconsin-Eau Claire, 1982

Burke, Connie
Director, Educational and Economic Development Services
M.S., Amber University, 1985
B.A., Regis University, 1970

Counihan, Carolyn Berkley
Co-Director, Non-Traditional Learning Programs
M.A., University of Southampton, England, 1987
B.A., Kansas State University, 1985

Lamb, Francette J. Priest
Coordinator, Business and Industry Services

Lee, Tamela
Director, Small Business Development Center
B.B.A., Howard University, 1981

Linhart, Lisa
Project Manager, Business and Industry Services
B.A., University of Iowa, 1985

Mattingly, Marsha
Coordinator, Business and Industry Services
B.G.S., University of Colorado, 1985

Shaw, Linda C.
Program Assistant
A.A.S., Denver Technical College, 1993

Smith, Elizabeth Amidon
Co-Director, Non-Traditional Learning Programs
B.A., Bates College, 1987

Schweinfest, Jeffrey
Assistant, Workplace Learning
B.A., Antioch College, 1977

Yearn, Debra K.
Manager, Contracts and Grants
A.A.S., Parks Junior College, 1984

Education and Academic Services

Griego, Orlando
Division Dean
A.B.D., University of Northern Colorado, 1988
M.A., University of Northern Colorado, 1980
B.A., Adams State College, 1969

Cox, Michelle
Office Manager I

DeHerrera, Teresa
Interim Director, Student Support Services
B.A., Adams State College, 1984

Garcia, Gail
Administrative Assistant III, Student Support Services

Gonzalez, Michelle
Office Manager, Academic Support Center

Lee, Chung
Master Teacher, Real Kids Center
B.A., Metropolitan State College of Denver, 1995

Mahan, Shawna
CAI Lab Specialist, Mathematics Emphasis
M.S., University of Colorado at Denver, 1995
B.A., University of Colorado at Boulder, 1988

Polak, Vera
Assistant Coordinator, GED Institute
Ed.S., University of Colorado at Boulder, 1981
M.S., City University of New York, 1977
B.A., Hunter College, 1968

Sanchez, Vicky
Master Teacher, Real Kids Center
A.G.S., Community College of Denver, 1995

Stroh, Jeanne
CAI Lab Specialist, Writing Emphasis
B.A., University of Colorado at Denver

Swiney, Ken
Supplemental Services Coordinator
M.A., University of Colorado at Denver, 1989
B.A., Northeast Louisiana University, 1981

Walton-Hunt, Sharon
Coordinator, Special Learning Support Program
M.A., University of Colorado at Denver, 1993
B.A., Metropolitan State College of Denver, 1988

White-Butler, Janet
Director, Academic Support Center
M.A., University of Colorado, 1988
B.A. University of Alabama, 1971

Educational Opportunity Center

Lovato, Florence
Director
M.Ed., Antioch University, 1982
B.A., University of Colorado, 1975

Hunt, Yvette
Assistant Director
M.A., Webster University, 1984
B.S., Florida A & M University, 1966

Caballero, Jessica
Administrative Assistant II

Chavez, Jan
University Counselor
M.A., University of Colorado, 1985
B.A., University of Northern Colorado, 1977

Davis, Elbria
Administrative Assistant II
A.A., Community College of Denver, 1974

Gallegos, Magdelena
University Counselor
B.A., University of Colorado, 1984

Hamilton, Delmar
University Counselor

Porter, Larry
University Counselor
M.A., State University of New York at Albany, 1971
B.A., Oswego State College, 1969

Educational Planning and Advising Center

Nast, Emilia
Interim Director, Student Development
Academic Advisor/Credit for Prior Learning Coordinator
M.A., University of Northern Arizona, 1994
B.A., Governor's State University, 1984

Griego, Louise
Academic Advisor/Transfer Coordinator

Joda, Kateri
Academic Advisor
M.S.S., University of Colorado, 1997
B.A., University of Colorado, 1983

McCown, Lynnissa
Office Manager
A.A.S., Community College of Denver, 1997

Medina, Jane
Academic Advisor/ Coordinator for Immigrant Students
B.A., University of Denver, 1967
Ryan, Elaine
Academic Advisor/Orientation Coordinator
M.A., University of Colorado at Denver, 1988
B.A., Colorado State University, 1976
Steele, Terry
Academic Advisor/School-to-Work
B.A., Colorado State University
Trujillo, Consuelo
Senior Administrative Clerk
Yamasaki, Christine
International Student Advisor
B.A., Metropolitan State College of Denver, 1983
A.A.S., Community College of Denver, 1980

Financial Aid

Garnett, Carol A.
Director
B.A., University of Connecticut
Allen, Anne
Financial Aid Counselor
B.A., University of Colorado, 1989
Chapman, Tisha
Financial Aid Counselor
M.P.A., University of Colorado at Denver, 1996
B.A., University of Colorado, 1992
Coleman, Susan
Financial Aid Counselor
B.S., University of Texas, 1969
Francavilla, Mary
Financial Aid Counselor
M.A., University of Phoenix, 1994
B.A., Colorado State University, 1981
Maestas, Lisa
Administrative Assistant I
A.A.S., Community College of Denver
Marshall, Crystal
Administrative Assistant III
Martinez, Anita
Office Manager
Martinez, Genevieve
Financial Aid Counselor
A.A., Community College of Denver, 1987

Health and Human Services

Faubion, Betty
Interim Division Dean
B.S., Metropolitan State College of Denver, 1989
A.A.S., Community College of Denver, 1982
Certificate, Presbyterian Medical Center, 1965
Alvarez, Iris
Administrative Assistant II
A.A.S., Community College of Denver, 1997
Dapcevich, Michael
Administrative Assistant II
Robey, John
Office Manager
Ross, Eloise
Program Assistant I
B.A., Metropolitan State College of Denver, 1992
A.A., Gossmont College, 1980
Schell, Pat
Administrative Assistant III
Sally Schroeder
Dental Assistant I

Human Resources

Wilson, Barbara J.
Director
M.S., Chapman University, 1996
B.A., Alaska Pacific University, 1991
A.A.S., Anchorage Community College, 1988
Berry, Cynthia H.
Benefits Officer
Crockett, Saundra
Data Specialist
Knauber, Phyllis
Administrative Assistant III
B.A., University of Wisconsin-Platteville, 1967

Information Resources and Planning

Smith, Gregory P.
Vice President
Ph.D., University of Denver, 1983
M.A., University of Denver, 1979
B.A., Western Illinois University, 1974
Baradan, Mary Ann
Administrative Assistant III
Butler, Will
Programmer/Analyst II
B.A., University of Colorado at Denver, 1989
Fox, Pat
Network Technician
Price, Ken
Network Analyst/Admin. III
B.S., Regis University, 1991

Information Services

Branath, Susan
Interim Office Manager

Institutional Advancement

O'Donnell, Mary Kelly
Vice President
M.A., University of Michigan, 1964
B.A., St. Mary's College, 1960
Elsner, Adene
Administrative Assistant III
M.S., University of Colorado, 1992
B.A., University of Colorado, 1987
Jensen, Patricia
Director, Development and Communications
B.A., University of Northern Colorado, 1972
Jividen, Richard
Director, Marketing and Publications
A.A.S., Community College of Denver, 1987
Occhionero, Gretchen
Designer, Marketing and Publications

Instruction

Bollmann, Barbara
Interim Vice President
Ph.D., Union Institute, 1990
M.S.W., University of Chicago, 1969
B.A., University of Missouri, 1965

Andrews, Carol
Program Assistant I

La Familia Scholars Program

Valdez-Fergason, Peggy
Director
A.B.D., University of Colorado at Boulder, 1993
M.A., University of Colorado at Denver, 1976
B.A., Metropolitan State College of Denver, 1972

Arroyo, Kevin
First Generation Case Manager
B.A., University of Colorado at Boulder, 1992

Marin, Debbie
First Generation Case Manager
B.S., University of Colorado at Denver, 1997

O'Brien, Vicky
Administrative Assistant III

Science and Technology

Halleck, Dianne
Division Dean
Ph.D., University of Colorado at Boulder, 1974
M.S., University of Colorado at Boulder, 1963
B.S., Illinois State University, 1960

Brown, Shirley
Administrative Assistant II

Fox, Georgia
Office Manager

Student Assistance Center and Women's Services

Casados, Benita
Interim Director
B.A., Metropolitan State College of Denver, 1987

Bernstein, Rebecca
Program Specialist/Case Manager
M.N.M., Regis University, 1995
B.S.S., Cornell College, 1989

Messinger, Laura
Program Specialist/Case Manager
B.A., Metropolitan State College of Denver, 1989

Student Life and Activities

Sykes, Felicia
Director
M.A., University of Denver, 1994
B.B.A., Howard University, 1987

Binard, Kris
Leadership Coordinator
M.S., Colorado State University, 1994
B.S., Colorado State University, 1989

McLaughlin, Jackie
Administrative Assistant II
B.A., Metropolitan State College of Denver, 1993

Student Services

Michael Poindexter
Vice President
M.Ed., University of Northern Iowa, 1977
B.A., Creighton University, 1975

Smith, Jacquelyn
Student Service Coordinator

Teaching/Learning Center

Cyr, Dianne
Coordinator
M.A., Colorado State University, 1991
B.S., Regis College, 1986
A.A., Red Rocks Community College, 1978

Bryant, Jim
Instructional Designer
M.A., University of Colorado at Denver, 1990
B.A., University of South Carolina, 1979

Edlin, Michael
Instructional Designer
M.B.A., Colorado State University, 1991
B.S., Colorado School of Mines, 1989

Lewis, Clare
Administrative Assistant III
B.S., Colorado State University, 1984

Technical Education Centers

Hall, James C.
Vice President
Ph.D., Colorado State University, 1980
M.Ed., Colorado State University, 1975
B.E., Colorado State University, 1971

Galiz, Micaela
Marketing/Recruiting, TEC sites
M.A., University of Colorado, 1987
B.A., University of Southern Colorado, 1976

Miller, Carol
Coordinator, Marketing/Recruiting, TEC Sites
M.S., University of Colorado, 1996
B.S./B.A., University of Denver, 1977

Sanchez, Julia
Administrative Assistant

Technical Education Center East

Coe, Fred D.
Division Dean
D.P.A., University of Colorado at Denver, 1987
M.P.A., University of Colorado at Denver, 1978
B.S.B.A., Rockhurst College, 1975

Duran, Dolores
Administrative Assistant III

Matheny, Mary Ann
Case Manager
M.P.A., University of Colorado at Denver, 1997
B.S., Wichita State University, 1981

Technical Education Center North

Dingwall, Wanda M.
Division Dean
Ph.D., Colorado State University, 1996
M.A., University of Northern Colorado, 1983
B.A., University of Northern Colorado, 1975

Alire, Jay
School-to-Career Coordinator
M.A., University of Colorado at Denver, 1996
B.A., Colorado State University, 1975

Bateman, James
Senior Maintenance Mechanic

Berlin, Lora
Project Counselor/Case Manager
M.A., University of Colorado at Denver, 1993
B.A., Roosevelt University, Chicago, 1974

Chaney, Sheila
Child Care Teacher Aide

Espinoza, Elma
Custodian

Evans, Erica
Child Development Center Director
A.A.S., University of Southern Colorado

Gooch, Reva
Child Care Lead Teacher

Hermosillo, Anthony
Project Counselor/Case Manager
Coordinator
M.S., Regis University, 1991
B.A., Loretto Heights, 1979

Johnson, Michael
Project Counselor/Case Manager
B.A., Metropolitan State College of Denver, 1989

Rodriguez, Richard
Case Manager
B.A., University of Texas at San Antonio, 1992

Solt, Jackie
Administrative Assistant

Sullivan, Catherine
Child Care Lead Teacher

Ulibarri, Jim
School-to-Career Case Manager
B.A., Columbia College, 1993

Walker, Kristy
Child Care Lead Teacher

Weise, Mikki
School-to-Career Coordinator
B.A., University of Iowa, 1967

Technical Education Center West

Crespin, Levi
Division Dean
Ph.D., University of Colorado, 1992
M.S., University of Colorado, 1975
B.S., Adams State, 1972

Carter, Patricia
Child Care Master Teacher

Casteel, Diana
Project Counselor/Case Manager
B.A., Metropolitan State College of Denver, 1993
A.A.S., Community College of Denver, 1989

Chacon, Darlene
Administrative Assistant

Counterman, Gary
Job Placement/Job Coach
B.A., Western State College

Fishburn, Sharon
Coordinator, ISP Project

Gayton, Maria
Child Care Master Teacher

Hammond, Wilma
Child Care Master Teacher

Moinzad, Linda
Case Manager, Youth Fair Chance
M.A., University of Phoenix, 1992

Roth, Ann
Director, Child Development Center
A.A.S., Community College of Denver, 1986

Work and Family Resource Center

Pfalmer, Beth
Director
B.A., Metropolitan State College of Denver, 1988

Alexander, Susan (Sue)
Program Specialist II

Boltz, Susan
Database Specialist
B.S., Colorado State University, 1988

Cataline, Cindy
Database Specialist

Dalpes, Anne Marie
Program Specialist I

Gardner, Patty
Provider Liaison
B.A., Southern Illinois University, 1970

Hite, Sarah
Call Line Advisor, 4 Parents Helpline
M.A., University of Colorado at Denver, 1988

Langkamp, Ruby
Program Specialist I

Metherd, Abbie
Child Care Resource and Referral Specialist
B.A., California State University, 1993

Naylor, Kendall
Child Care Resource and Referral Specialist

Sawyer, Barbara
Project Coordinator

Wallace, Anita
Administrative Assistant II

Wahrenbrock, Jill
Child Care Resource and Referral Specialist
B.A., University of Wisconsin, 1990

Faculty

Aaker, Barbara
Assistant Professor, Mathematics
M.B.S., University of Colorado at Denver, 1994
B.S., Northern State University, 1976

Adams, Richard
Assistant Professor, Drafting and CAD
B.S., Colorado State University, 1997

Baade, Randy
Professor, Geography, Geology and Political Science
M.A., University of Northern Colorado, 1975
B.A., University of Northern Colorado, 1969

Battey, Robert
Professor, Paralegal
M. Div., Princeton Theological Seminary, 1966
J.D., University of Nebraska, 1963
B.A., University of Nebraska, 1957

Baumann, Maryann
Associate Professor/Coordinator, Early Childhood Education
M.A., Colorado State University, 1971

Blan, Santito
Professor, Accounting and Business Mathematics
M.B.A., Regis College, 1983
B.S., Metropolitan State College of Denver, 1973

Blasius, Ronald R.
Professor, Psychology and Philosophy
Graduate Certificate, University of Denver, 1986
M.A., DePaul University, 1967
B.A., DePaul University, 1964

Brancard, Ruth
Assistant Professor/Coordinator, English as a Second Language
M.A., University of Northern Colorado, 1980
B.A., Goshen College, 1971

Bratko, Christine
Assistant Professor, Paraprofessional
M.A., University of Colorado at Denver, 1996
B.A., University of Florida, 1989

Carfrae, Cal
Professor, Computer Information Systems
M.A., University of Colorado, 1971
B.A., Grinnel College, 1968

Cassio, Sam
Coordinator, GED Institute
Director, Testing Center
Associate Professor, GED/Mathematics/Education
M.A., Regis University, 1995
B.A., University of Colorado, 1980

Centa, Mary
Assistant Professor/Coordinator, Surgical Technology
B.A., Metropolitan State College of Denver, 1988
A.A.A., Metropolitan State College of Denver, 1971

Chaney, Cobi
Associate Professor, Accounting
M.A., Colorado Christian University, 1996
B.A., Regis College, 1986
A.A.S., Red Rocks Community College, 1977

Choi, Buck
Assistant Professor, Welding
B.A., Kyung Nee University, 1969

Coulter, William
Professor, Computer Science and Mathematics
M.A., University of Colorado, 1977
B.S., University of Michigan, 1966

Dawson, Sandra
Associate Professor, Reading and Study Skills Coordinator, Reading
M.A., University of Colorado at Denver, 1988
B.A., University of Colorado at Denver, 1980

DeMarco, Anita
Associate Professor, Basic Skills
M.A., Regis University, 1995
B.A., Loretto Heights College, 1983

Doherty, Gudryn
Associate Professor, Mathematics
M.A., University of Colorado, 1985
B.A., University of Denver, 1966

Earnest, Vicki V.
Professor/Coordinator, Nursing
M.S., University of Colorado, 1975
B.S.N., Cornell University, 1964

Edwards, Paul
Professor/Coordinator, Dental Hygiene
Ph.D., University of New Mexico, 1993
M.P.H., University of Michigan, 1981
M.S., University of Michigan, 1981
Dental Hygiene Certificate, University of Michigan, 1980
B.A., University of Colorado, 1977

Ellerman, Kevin
Assistant Professor, Computer Training for People with Disabilities
Certificate of Achievement, C.C.D., 1987
A.A.S., Community College of Denver, 1980

Fleischauer, Monica
Assistant Professor, Mathematics
M.A., University of Colorado, 1991
B.S., Colorado State University, 1974

Forkner, Linda
Associate Professor/Coordinator, Radiography
B.A., Regis University, 1994
A.A.S., Mesa College, 1981
Radiologic Technology Certificate, Allen Memorial Hospital, 1965

Frye, Yvonne
Professor, Reading and English
M.Ed., University of Colorado, 1976
B.A., Metropolitan State College of Denver, 1970

Golden, Barbara
Assistant Professor, Basic Skills
B.A., Colorado State University, 1963

Grammer, Sally
Associate Professor, Word Processing
B.S., Regis College, 1990

Green, Janet
Assistant Professor, Word Processing
M.A., Colorado Christian College, 1995
B.S., Southeast Missouri State University, 1982
B.S., Green Memorial Bible College, 1990

Guatney, Jiansheng
Assistant Professor, English as a Second Language
M.A., Eastern Washington University, 1989
B.A., Anhui Teacher's University, China, 1976

Hall, Dianne
Assistant Professor, Computer Information Systems
M.B.A., Regis University, 1997
B.S.B.A., Regis University, 1995

Hamilton, Eric
Associate Professor, Computer Information Systems
M.A., Webster University, 1996
B.S., Thomas Edison State College, 1994

Harr, Dolores
Associate Professor, Word Processing
M.A., University of Northern Colorado, 1973
B.S., University of Northern Colorado, 1968

Hindie, Jean
Assistant Professor, Mathematics
M.S., University of Colorado, 1990
B.S., University of Colorado at Denver, 1988

I, Jesse Cheng-Fan
Professor, Chemistry
Ph.D., University of Colorado, 1973
M.S., Kansas State College, 1968
B.S., Chung-Yuan College, 1965

Ihlenfeldt, Sandie
Assistant Professor, Graphic Design
B.A., Metropolitan State College of Denver, 1981
B.S., University of Wyoming, 1961

Kalam, Abul
Associate Professor, Physics, Mathematics
Ed.D., University of Northern Colorado, 1968
M.A., University of Northern Colorado, 1967
M.S., University of Dalla, 1961
B.S., University of Dalla, 1960

Kleysteuber, Helen
Professor, Business Technology
M.A., Colorado State University, 1980
B.S., University of Colorado, 1969
B.C.S., Oklahoma School of Accounting, 1959

Knauber, David
Professor, Computer Information Systems
Graduate Certificate, University of Denver, 1986
M.A., University of Colorado, 1970
M.Div., McCormick Theological Seminary, 1961
B.A., University of Nebraska, 1958

Knighten, Calvin
Associate Professor, Electronics Technology
A.A.S., Community College of Denver, 1982

Lancaster, Kathy
Assistant Professor, Computer Information Systems
B.S., Southern Oregon State, 1965

Langford, Andrew
Associate Professor, Biology
M.S., Utah State University, 1981
B.S., University of Utah, 1976

LeCoq, Cynthia
Assistant Professor/Clinical Coordinator, Radiologic Health Services
B.A., Regis University, 1995
A.A.S., Community College of Denver, 1975

Lehman, Patricia
Professor, Art
M.F.A., University of Kansas, 1971
B.A., Colorado State University, 1966

Lewis-Cason, Diane
Assistant Professor, Accounting
B.S., Arkansas State University, 1977
A.A.S., Southern Baptist College, 1975

Lindsey, Priscilla E.
Assistant Professor, Administrative and Technical Health Assistant
Ph.D., Friends International Christian University, 1997
B.S.N., Metropolitan State College of Denver, 1974
A.D.N., Community College of Denver, 1972
L.P.N., Queen of the World School of Practical Nursing, 1958

Lundgren, Mary Linda
Professor, Biology
M.S., University of Colorado, 1970
B.S.N., DePaul University, 1969

Mackey, T. Michael
Assistant Professor, English
M.Div., Lutheran School of Theology at Chicago, 1987
M.A., Colorado State University, 1985
B.A., Colorado State University, 1983

Mardones, Harold
Assistant Professor, Mathematics; Coordinator, Developmental Math
M.S., University of Colorado at Denver, 1994
B.A., University of Colorado at Denver, 1983

Martinez, Esteban A.
Assistant Professor, English
M.A., University of Colorado, 1993
B.A., Metropolitan State College of Denver, 1987

McCallin, Maureen
Assistant Professor, Early Childhood Education
B.A., California State University, 1975

McCarthy, Michael
Professor, History
Ph.D., University of Denver, 1969
M.A., University of Denver, 1964
B.A., Regis College, 1962

McCullough, Donald
Associate Professor, Machine Tool Certificate-Machinist/Toolmaker

Mead, Pamela
Assistant Professor, Dental Hygiene
A.S., University of Southern Colorado, 1978

Metier, Amy
Professor, Art
M.F.A., University of Colorado, 1979
B.F.A., Colorado State University, 1975

Miles, Kathy
Professor, English
Ph.D., University of Colorado, 1985
M.A., Northwestern University, 1966
B.A., University of Rochester, 1964

Miranda, Judy
Associate Professor, Graphic Arts
M.A., California State University, 1978
B.A., California State University, 1976

Moran, James
Assistant Professor, Environmental and Refrigeration Technology

Norden, Robert
Professor, Accounting
C.M.A., Institute of Certified Management Accounting, 1995
M.S., University of Colorado, 1986
C.P.A., 1986
B.S., University of Denver, 1969

O'Connell, Helen
Assistant Professor, Accounting
B.A., Metropolitan State College of Denver, 1990

Ortega, Donna
Professor, Nursing
M.S.N., University of Colorado, 1986
B.S.N., Loretto Heights College, 1962

Osborn, Edward
Assistant Professor, Theatre
M.A., University of Northern Colorado, 1969
B.A., University of Denver, 1963

Otii, Albert
Assistant Professor, Accounting
M.B.A., University of Northern Colorado, 1984
B.S., Metropolitan State College of Denver, 1981

Pigford, Lois
Professor, Business Technology and Business Communications
M.A., Colorado State University, 1973
B.S., University of Denver, 1969
A.A., Riverside Junior College, 1955

Rhodes, Arlene
Assistant Professor/Coordinator, Human Services
M.S.W., University of Illinois, Jane Addams Graduate School of Social Work, 1971
B.A., University of Dubuque, 1969

Richards, C. Preston
Professor, English
B.A., Peru State College, 1966

Sabo, Martin
Assistant Professor, Business Administration and Economics
M.S., University of Colorado at Denver, 1998
M.S., Colorado School of Mines, 1997
B.A., Colorado State University, 1988

Salaz, Roberto E.
Professor, Spanish and Humanities
Ph.D., University of Colorado, 1988
M.Ed., Antioch College, 1976
B.A., University of Colorado, 1971

Simons, Susan
Professor, English
Writing Center Coordinator
M.A., Ohio University, 1966
B.A., Denison University, 1964

Spade, Charlotte
Assistant Professor, Nursing
M.S., University of Colorado, 1983
B.S., University of Northern Colorado, 1972
Certified Clinical Specialist in Psychiatric Mental Health Nursing

Staub, Mary
Associate Professor, Word Processing
B.A., University of Colorado, 1968

Stephan, Alice
Associate Professor, Basic Skills
M.Ed., Lesley College, 1987
B.A., Colorado State University, 1966

Stoeckel, Pamella
Assistant Professor, Nursing
Family Nurse Practitioner Certificate, Metropolitan State College of Denver, 1981
M.S., University of Colorado, 1980
B.S., Texas Womens University, 1974

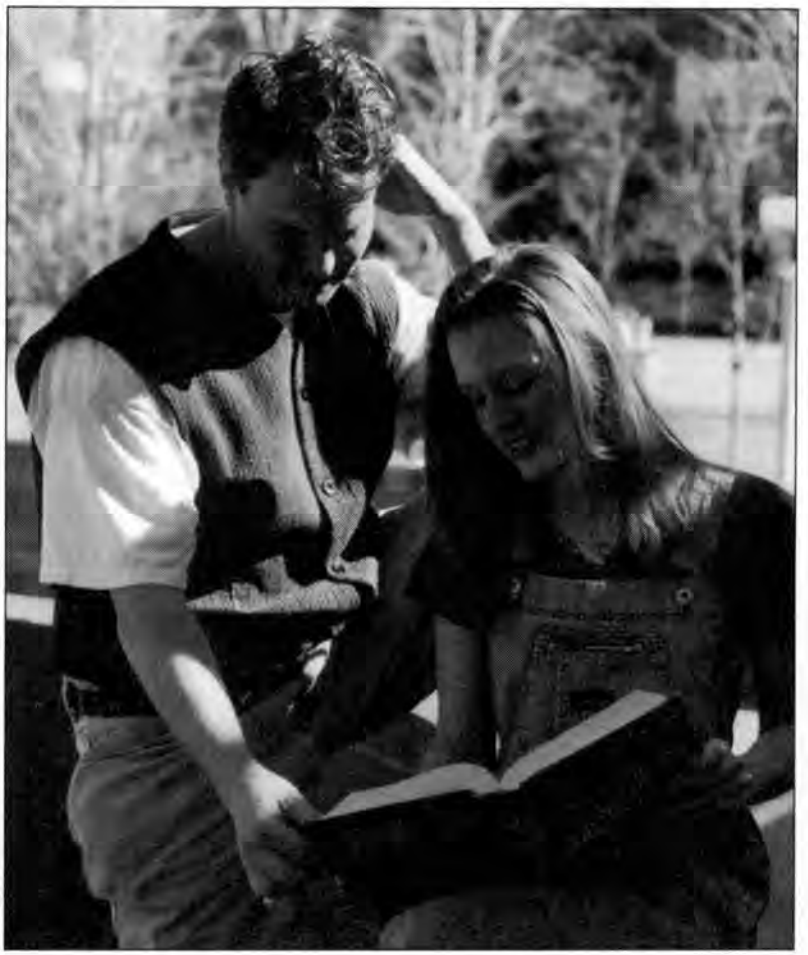
Strand, Connie
Assistant Professor, Administrative Health Assistant
B.A., Western State College, 1971

Swiney, Ken
Associate Professor, Sociology
Supplemental Services Coordinator
M.A., University of Colorado at Denver, 1989
B.A., Northeast Louisiana University, 1981

Thomas, Judy
Professor, Business Technology
M.A., Colorado State University, 1977
B.A., University of Northern Colorado, 1965

Thomas, Stephen
Associate Professor, English
M.A., University of Montana, 1987
B.A., University of Northern Colorado, 1983

Thompson, Kathryn
Assistant Professor, Administrative Health Assistant
B.S., Regis University, 1997
A.A.S., Arapahoe Community College, 1991



Thies-McWilliams, Karen
Assistant Professor/Coordinator, Behavioral Sciences
M.S.W., University of Nebraska, 1977
B.S.W., Wartburg College, 1974

Tjeerdsma, Catrinus
Professor, Mathematics
M.B.A., University of Colorado at Denver, 1985
M.S., University of Notre Dame, 1971
B.S., Calvin College, 1960

Valdez-Fergason, Peggy
Professor, English
M.A., University of Colorado, 1983
B.A., Metropolitan State College of Denver, 1972

Vigil, Ernesto
Assistant Professor, Basic Skills
B.A., Goddard College, 1973

Walo, Abraham
Assistant Professor, Basic Skills
B.S., University of Colorado, 1986

Weber, James
Assistant Professor, Mathematics
Ph.D., Kansas State University, 1966
M.S., University of Denver, 1961
B.S., Regis University, 1959

Whalen, Kathleen (Smith)
Associate Professor, Nursing
M.N., Louisiana State University Medical Center, 1979
B.S.N., Northwestern State University, 1974

Whiting, Ray
Professor, Photography
M.F.A., Ohio University, 1973
B.F.A., University of Denver, 1964

Winograd, Leonard
Professor, English
M.F.A., University of Iowa, 1982
M.A., University of Colorado, 1979
B.A., University of Colorado, 1973

Wohlauer, Ron
Professor, Photography
M.A., University of Oregon, 1973
M.A., University of Colorado, 1970
B.A., University of Colorado, 1969

York, Kathleen
Assistant Professor, Reading
M.A., California State University, 1983
B.A., California State University, 1973

WHAT WE OFFER, AND WHERE TO FIND IT!

A

Ability to Benefit, Financial Aid 11
Academic Calendar vii
Academic Profile 16
Academic Standards 23
Academic Standards of Progress 23
Academic Support Center ..... iv, 18
Accountability xiv
Accounting ..... iv, viii, ix, x, 46, 112
Accounting, AAS Degree 46
Accounting, Certificate 47
Accounting Clerk ..... ix, x
Accounting Clerk, Certificate 47
Accounting Emphasis, AS Degree 47
Accounting with Computer Applications ..... ix, x
Accreditation 3
Add/Drop/Withdrawal 6
Administrative Assistant ..... viii, ix, x
Administrative Assistant, AAS Degree 56
Administrative Assistant, Certificate 57
Administrative Assistant/Office Manager ..... viii, x, 56
Administrative Assistant/Office Manager, AAS Degree 56
Administrative Health Assistant 112-113
Administrative Services 163
Admission Policy 4
Admissions, Registration and Records ..... iv, 163
Advanced Solid State, Digital & IC Principles, Certificate 78
Advising Philosophy 4
Advisory Council, CCD ii
African-American Council 3
Airframe/Power Plant, AAS Degree 107
Alternative Delivery Methods 111
Alumni Association 3
American Sign Language ..... iv, 113
Americans with Disabilities Act 3
Anthropology ..... iv, viii, x, 49, 113-114
Anthropology Emphasis, AA Degree 50
Appeal Procedure 23
Application for Admission 171-172
Application Procedures, Financial Aid 10
Approval 3
Approved Electives for the AA Degree 40
Approved Electives for the AS Degree 42
Arabic ..... iv, 114
Arc Welder ..... ix, xii
Arc Welder, Certificate 110
Area of Emphasis 37
Areas of Emphasis for the AS Degree 42
Art ..... iv, viii, x, 49, 114-115
Art Emphasis, AA Degree 49
Arts and Humanities ..... iv, 163
Arts Management 49
Arts Management Emphasis, AA Degree 49
Assessment 23
Associate of Applied Science Degree 44
Associate of Applied Science Degree in Trades 107
Associate of Arts Degree 1, 39
Associate of General Studies Degree 43
Associate of General Studies-Generalist Degree (AGS-G) 43
Associate of Science Degree 41
Astronomy 115
Attendance 23
Auditing Classes 6
Auraria Campus ii
Auraria Campus Facilities 21
Auraria Child Care Center 21
Auraria Interfaith Center iv
Auraria Library 21

B

Basic Skills Assessment 16
Behavioral Sciences ..... viii, 50
Behavioral Sciences Emphasis, AA Degree 50
Biology ..... iv, viii, x, 50, 115-116
Biology Emphasis, AS Degree 50
Book Center, Auraria iv
Bookkeeper ..... ix, x
Bookkeeper, Certificate 48
Broadcast Technologist ..... ix, xi
Broadcast Technologist, Certificate 78
Business Administration ..... iv, viii, x, 50, 116-117
Business Administration, AGS Degree 50
Business Administration, AAS Degree 51
Business and Governmental Studies ..... iv, 163
Business and Industry Services ..... iv, 36
Business Applications Programmer ..... viii, ix, x
Business Applications Programmer, AAS Degree 66
Business Applications Programmer, Certificate 67
Business Emphasis ..... viii, x
Business Emphasis, AAS Degree 71
Business Generalist Emphasis ..... viii, x
Business Generalist Emphasis, AAS Degree 51
Business Technology: ..... iv, 56, 118-119
Office Management & Secretarial Studies

C

Campus Choices 2
Campus Closure iv
Campus Crime Information 2
Campus Operator iv
Campus Recreation ..... iv, 21
Campus Security 2
Campus Visits 4
Capstone Courses 37
Career Development Services Center ..... iv, 14
Career Service Center 163
Case Management/Residential Service Aide ..... ix, xii
Case Management/Residential Service Aide, Certificate 97
Cashier iv
Catalog Requirements for Graduation 33
CCC Online 35
CCD Rights 24
Center for Persons with Disabilities ..... iv, 14, 163
Certificate Requirements 33
Certificates 45
Chemistry ..... iv, viii , x, 66, 119-120
Chemistry Emphasis, AS Degree 66
Child Care Services 14
Child Development Center iv
Chinese ..... iv, 120
Civil/Topographic Emphasis, AAS Degree 74
Class Testing 17
CLEP – College-level Examination Program 17
Clinical Medical Assistant ..... viii, ix, x, xi
Clinical Medical Assistant, AAS Degree 57, 84
Clinical Medical Assistant, Certificate 57, 84
CNC Machine Tool Operator ..... viii, ix, xii
CNC Machine Tool Operator, AAS Degree 108
CNC Machine Tool Operator, Certificate 108
College Guarantees xiii
College Policies and Academic Standards 23
College Staff 163-170
Colorado High School Equivalency Diploma (CHSED formerly GED) 18
Colorado State Board for Community Colleges and Occupational Education ii
Commercial Credit Management 120
Commercial Credit Management Emphasis ..... x, 47
Commercial/Industrial Refrigeration, Heating and Air Conditioning ..... viii, xi
Commercial Refrigeration Technician Option, AAS Degree 79
Communications ..... iv, 66, 120
Communications Emphasis, AA Degree 66
Communications Emphasis ..... viii, x
Comprehensive Medical Assistant ..... viii, ix, x, xi
Comprehensive Medical Assistant, AAS Degree 58, 84
Comprehensive Medical Assistant, Certificate 58, 84
Computer-Aided Drafting (CAD) ..... iv, ix, xi, 125
Computer-Aided Drafting (CAD) , Certificate 76
Computer Applications, Certificate 48
Computer Graphics Emphasis/Multimedia Design, AAS Degree 100
Computer Graphics/Graphic Design, Certificate 83
Computer Information Systems ..... iv, 66, 121-124
Computer Graphics ..... viii, ix, xi, xii
Computer Labs iv
Computer Science ..... iv, viii, x, 74, 124
Computer Science Emphasis, AS Degree 74
Computer Specialist ..... viii, ix, x
Computer Specialist, AAS 68
Computer Specialist, Certificate 71
Computer Specialist Emphasis, AAS Degree 68
Computer Training for People with Disabilities ..... iv, viii, x, 19
Computer Training Services 36
Computerized Accounting Technician ..... ix, x
Computerized Accounting Technician, Certificate 48
Construction Trades iv
Contact Hour 37
Continuing Education ..... ii, iv, 164
Continuing Education Programs 35
Cooperative Education Program 19
Cooperative Programs with Emily Griffith Opportunity School 24
Core Curriculum 37
Corequisite 37
Course Descriptions 111-162
Course Load 23
Course Modifications 111
Courses Common to More Than One Program 111
Credit and Contact Hours, AA Degree 40
Credit and Contact Hours, AAS Degree 45
Credit and Contact Hours, AGS Degree 43
Credit and Contact Hours, AS Degree 42
Credit for Prior Learning 6
Credit Hour 37
Credit or Contact Hours in Parenthesis 37
Cultural Pluralism at Community College of Denver 2
Customer Service Representative ..... ix, x
Customer Service Representative, Certificate 63
Customer Service Specialist ..... ix, x
Customer Service Specialist, Certificate 63

D

Data Entry Clerk ..... ix, x
Data Entry Clerk , Certificate 63
Dean's Honors List 29
Degree Requirements 32
Dental Hygiene ..... iv, viii, xi, 125-127
Dental Hygiene, AAS Degree 85
Dental Hygiene Center ii
Directory Information 5
Distribution of Refunds, Financial Aid 13
Drafting 74
Drafting for Industry ..... iv, viii, ix, xi, 127-128
Drafting for Industry, Certificate 76
Drug-Free Schools 24

E

Early Application, Financial Aid 10
Early Childhood Education ..... iv, viii, xi, xii, 77
Early Childhood Education, AAS Degree 105
Early Childhood Education Director ..... ix, xi, xii
Early Childhood Education Director, Certificate 106
Early Childhood Education Group Leader ..... ix, xi, xii
Early Childhood Education Group Leader, Certificate 106
Early Childhood Education Group Leader/ Child Development Associate (CDA) ..... ix, xi, xii
Early Childhood Education Group Leader/ Child Development Associate (CDA), Certificate 107

Early Childhood Professions 128-130
Earth Science 77
Earth Science Emphasis ..... viii, xi, 77
Economics ..... iv, viii, xi, 77, 130
Economics Emphasis, AA Degree 77
Education ..... iv, 130-131
Education and Academic Services ..... iv, 164
Educational Opportunity Center ..... iv, 15, 164
Educational Planning and Advising iv
Educational Planning and Advising Center 15, 164-165
Electrical Emphasis ..... viii, xi, 74
Electronics iv
Electronics, Principles of xi
Electronics Technology ..... viii, ix, xi, 77, 131-132
Electronics Technology, AAS Degree 77
Eligibility, Financial Aid 11
Emergency iv
Engineering 78
Engineering Cluster ..... viii, xi
Engineering Cluster, AS Degree 78
English ..... iv, 132-133
English as a Second Language (ESL) ..... iv, 18, 133-134
English/Literature 79
English/Literature Emphasis ..... viii, xi
English/Literature Emphasis, AA Degree 79
Entrepreneurship ..... ix, x
Entrepreneurship, Certificate 52
Environmental Controls Technician Option ..... viii, xi
Environmental and Refrigeration Technology ..... iv, ix, xi, 79
Environmental and Refrigeration Technology: Commercial/Industrial Refrigeration, Heating and Air Conditioning, AAS Degree 79
Environmental and Refrigeration Technology: Refrigeration and Air Conditioning, Certificate 80
Environmental Controls Technician Option, AAS Degree 79
Evening Services 15
Executive Assistant ..... ix, x
Executive Assistant, Certificate 63
Extended Campus 35
Extended-Campus Credit Classes iv
Extra Services Available 8

F

Fabrication Welder ..... viii, ix, xii
Fabrication Welder, AAS Degree 109
Fabrication Welder, Certificate 110
Faculty 168-170
Family Education Rights and Privacy Act of 1974 25
Federal Refund, Financial Aid 13
Fees 10
Finance/Commercial Credit Management ..... ix, x
Finance/Commercial Credit Management, Certificate 52
Finance Emphasis ..... viii, x
Finance Emphasis, AAS Degree 52
Financial Aid ..... iv, 10, 165
Financial Aid Programs 11
Ford, William D., Federal Direct Loan Programs 12
French ..... iv, 134

G

GED Institute 15
General Accounting Emphasis ..... viii, x
General Clerical ..... ix, x
General Clerical, Certificate 64
General Education 37
General Education Development ..... iv, 134
General Education Requirements 32
General Information 1
General Office Clerk ..... ix, x
General Office Clerk, Certificate 64
General Studies - Generalist ..... viii, xi
Geography ..... iv, 134-135
Geology ..... iv, 135
Gerontology ..... iv, viii, ix, x, xi, 80, 135
Gerontology, AA Degree 50, 80
Gerontology, Certificate 80
Getting Started 4
Governance and Locations ii
Grade Changes 27
Grade Point Average 27
Grades 25
Graduation Checklist 34
Graduation Policies, Other 33
Graduation Requirements 32, 33
Grants and Work-Study 11
Graphic Arts ..... iv, viii, xii, 135-136
Graphic Arts, AAS Degree 81
Graphic Arts Emphasis/Multimedia Design, AAS Degree 100
Graphic Arts (Printing) ..... viii, ix, xi
Graphic Design ..... iv, viii, ix, xi, xii, 137
Graphic Design, AAS Degree 83
Graphic Design, AGS Degree 82
Graphic Design, Certificate 84
Graphic Design Emphasis/Multimedia Design, AAS Degree 100
Graphics 81
Grievance Procedure, Informal 31
Grievance Procedure, Formal 31
Grievance Procedure for Students 30
Guarantee for Job Competency xiii
Guarantee for Transfer xiii
Guided Independent Study ..... iv, 35

H

Health and Human Services ..... iv, 165
Health and Wellness Management ..... iv, viii, xi, 137-138
Health and Wellness Management, AAS Degree 86
Health Information Specialist ..... viii, ix, x, xi
Health Information Specialist, AAS Degree 59, 86
Health Information Specialist, Certificate 59, 86
Health Occupations 138
Health Related 84
Health Services 15
Hispanic Council 3
History ..... iv, viii, xii, 95, 138-139
History, College 2
History Emphasis, AA Degree 95
Home Study ..... iv, 35
Honors Program 19
Human Resources 165
Human Services ..... iv, viii, xii, 96, 139-141
Human Services, AAS Degree 96

Human Services, AGS Degree 96
Humanities ..... iv, 141
Humanities/Philosophy 95
Humanities/Philosophy Emphasis ..... viii, xii
Humanities/Philosophy Emphasis, AA Degree 95

I

Information iv
Information Resources and Planning 165
Information Services 165
Institutional Advancement, Office of ..... iv, 165
Instruction 166
Insurance 15
Insurance Emphasis ..... viii, x
Insurance Emphasis, AAS Degree 53
Interfaith Ministry 22
International Business ..... viii, ix, x
International Business, Certificate 53
International Business Emphasis, AAS Degree 53
International Student Services ..... iv, 15
International Study Programs 20
Internet Specialist Emphasis ..... viii, x
Internet Specialist Emphasis, AAS Degree 70

J

Japanese ..... iv, 141
Journalism ..... iv, 142

L

La Familia Scholars Program 20, 166
Lab Tutoring 18
Lathe Operator ..... ix, xii
Lathe Operator, Certificate 109
Law 98
Learning Development Center iv
Legal Secretarial/Legal Assistant ..... viii, x
Legal Secretarial/Legal Assistant, AAS Degree 59
Library, Auraria iv
Literature ..... iv, 142

M

Machine and CNC Tool Operator 142-143
Machine Tool Operator ..... ix, xii
Machine Tool Operator, Certificate 109
Magnetic Resonance Imaging ..... iv, 143-144
Magnetic Resonance Imaging (MRI) Technology, Certificate 91
Mammography iv
Management Emphasis ..... viii, x, 53
Map, Auraria campus v
Map, Lowry vi
Map, TEC East vi
Map, TEC North vi
Map, TEC West vi
Marketing ..... viii, ix, x
Marketing Emphasis, AAS Degree 54
Marketing, Certificate 54
Massage Therapy ..... ix, xi, 144
Massage Therapy, Certificate 93
Mathematics ..... iv, viii, xii, 18, 99, 144-145
Mathematics Emphasis, AS Degree 99
Mechanical Emphasis ..... viii, xi, 75
Medical Clerk ..... ix, x, xi
Medical Clerk, Certificate 61, 87
Medical Cluster ..... viii, xi, 89
Medical Secretarial ..... viii, ix, x, xi
Medical Secretarial, AAS Degree 60, 87
Medical Secretarial, Certificate 61, 87
Medical Secretary ..... viii, ix, x, xi
Medical Secretary, AAS Degree 60, 87
Medical Secretary, Certificate 60, 87
Medical Transcriptionist ..... viii, ix, x, xi
Medical Transcriptionist, AAS Degree 61, 87
Medical Transcriptionist, Certificate 62, 87
Medical Unit Coordinator ..... viii, ix, x, xi
Medical Unit Coordinator, AAS Degree 62, 87
Medical Unit Coordinator, Certificate 62, 87
Microsoft Office Specialist ..... ix, x
Microsoft Office Specialist, Certificate 64
Mill Operator ..... ix, xii
Mill Operator, Certificate 109
Mission Statement, College 2
Money Matters 9
Multimedia ..... iv, 99
Multimedia Design ..... viii, xii, 145-146
Multimedia Design, AAS Degree 99
Music ..... iv, viii, xii, 100, 146-147
Music Emphasis, AA Degree 100
Music Emphasis/Multimedia Design, AAS Degree 100

N

Need More Help? 14
Network Administration Emphasis ..... viii, x
Network Administration Emphasis, AAS Degree 69
Non-Traditional Learning Programs 35
Notice of Nondiscrimination 3
Novell 3x Network Administration ..... ix, x
Novell 3x Network Administration, Certificate 70
Novell 4x Network Administration ..... ix, x
Novell 4x Network Administration, Certificate 69
NT Network Specialist ..... ix, x
NT Network Specialist, Certificate 70
Nuclear Medicine Technology iv
Nurse Aide ..... ix, x, xi
Nurse Aide, Certificate 58, 87
Nurse Assistant ..... ix, x, xi
Nurse Assistant, Certificate 57, 87
Nursing ..... iv, viii, xi, 87, 147-148
Nursing: Advanced Placement ..... ix, xi, 88
Nursing Mobility Profile 17
Nutrition ..... iv, 149

O

Office Management and Secretarial Studies, AAS Degree 56
Official GED Test Center 17
On-line Courses ..... iv, 35
Open Entry 37
Open-entry/Open-exit 37
Operating Room Nurse 149

P

Paralegal ..... iv, viii, xii, 149-150
Paralegal, AAS Degree 99
Paralegal, AGS Degree 98
Paralegal, Certificate 98
Paralegal: General ..... ix, xii
Parking and Transportation, Auraria iv
Parking and Transportation Services 22
Payroll Clerk ..... ix, x
Payroll Clerk, Certificate 49
PC Specialist/LAN Administrator ..... ix, x
PC Specialist/LAN Administrator, Certificate 72
PC Specialist/LAN Administrator, Computer Training for People with Disabilities, AAS Degree 72
PC Repair Specialist ..... ix, x
PC Repair Specialist , Certificate 73
PC Help Desk Specialist ..... ix, x
PC Help Desk Specialist, Certificate 73
Perioperative Nursing ..... iv, ix, xi
Perioperative Nursing, Certificate 93
Personal Growth and Development 150
Petitioning for Waivers and/or Program Substitutions 34
Phi Theta Kappa 29
Philosophy ..... iv, 150
Philosophy, College 2
Photography ..... iv, viii, ix, xii, 100, 150-151
Photography, AGS Degree 101
Photography, AAS Degree 101
Photography, Certificate 102
Photography Emphasis, AA Degree 100
Photography Emphasis/Multimedia Design, AAS Degree 100
Physics ..... iv, viii, xii, 102, 151-152
Physics Emphasis, AS Degree 102
PLACE — Program for Licensing Assessments for Colorado Educators 16
Political Science ..... iv, viii, xii, 103, 152
Political Science Emphasis, AA Degre 103
Postal Service 152
Postal Service Management ..... ix, x
Postal Service Management, AAS Degree 54
Postsecondary Enrollment Options Program 20
Practical Nursing ..... ix, xi
Practical Nursing, Certificate 89
Pre-Collegiate English iv
Pre-Collegiate Mathematics iv
Pre-Dental Emphasis ..... viii, xi, 89
Pre-Engineering General Emphasis ..... viii, xi, 79
Pre-Medical Emphasis ..... viii, xi, 90
Pre-Medical Technology Emphasis ..... viii, xi, 90
Pre-Pharmacy Emphasis ..... viii, xi, 90
Prepress ..... ix, xi, xii
Prepress/Graphic Arts, Certificate 81
Pre-Physical Therapy Emphasis ..... viii, xi, 90
Pre-Physician Assistant Emphasis ..... viii, xi, 90
Pre-Veterinary Science Emphasis ..... viii, 90
Prerequisite 37
President of CCD iv
President's Honors List 29
President's Office 163
Principles of Electronics ix
Principles of Electronics , Certificate 78
Printing 103
Printing/Graphic Arts, Certificate 82
Process Piping Emphasis ..... ix, xi
Process Piping Emphasis, AAS Degree 75
Program Admission Requirements, AA Degree 39
Program Admission Requirements, AS Degree 41
Program Entry, AA Degree 39
Program Entry, AAS Degree 45
Program Entry, AS Degree 41
Program Entry Requirements, Certificates 46
Program Requirements, AA Degree 39
Program Requirements, AAS Degree 45
Program Requirements, AGS Degree 43
Program Requirements, AS Degree 41
Program Titles and Course Prefixes 37
Programming Emphasis ..... ix, x
Programming Emphasis, AAS Degree 71
Pro-Rata Calculation, Financial Aid 13
Pro-Rata Refund, Financial Aid 13
Psychiatric Technician ..... iv, ix, xi, 153
Psychiatric Technician: Advanced Placement ..... ix, xi
Psychiatric Technician: Advanced Placement, Certificate 94
Psychiatric Technician, Certificate 94
Psychological 17
Psychology ..... iv, viii, x, xii, 103, 153
Psychology, AA Degree 103
Psychology Emphasis, AA Degree 50
Public Safety ..... iv, 22

R

Radiography ..... ix, xi, 154
Radiography, AAS Degree 90
Radiologic Health Sciences ..... ix, xi
Radiologic Health Sciences, Certificate 91
Radiologic Technology iv
Radiology/Orthopedic Assistant ..... ix, x, xii
Radiology/Orthopedic Assistant, AAS Degree 65, 91
Radiology/Orthopedic Assistant, Certificate 65, 91
Reading ..... iv, 155-156
Reading and Study Skills 18
Reading Guide to Degree and Certificate Programs 37
Real Estate Emphasis ..... ix, x
Real Estate Emphasis, AAS Degree 54
Real Kids Center ..... iv, 22
Recognition of Achievement or Continuing Education Units (CEU) 27
Recreational Assistant ..... iv, ix, xii, 156
Recreational Assistant, AAS Degree 91
Recreational Assistant, Certificate 92
Recruitment and Outreach iv
Refrigeration and Air Conditioning ..... ix, xi
Refrigeration, Heating and Air Conditioning (Commercial/Industrial) 156-157
Refugee Student Services iv
Refund and Repayment Policies, Financial Aid 12
Release Of Information 5
Repayment, Financial Aid 13
Repeating Courses 27
Residency Classification 9
ROTC Information 16

S

Scholarships 11
Science 158
Science and Technology ..... iv, 166
Secretarial/Computer Applications ..... ix, x
Secretarial/Computer Applications, AAS Degree 66
Senior Citizens 9
Service Bureau ..... ix, xi
Small Business Development Center 36
Sociology ..... iv, viii, x, xii, 103, 158-159
Sociology, AA Degree 50, 103
Spanish ..... iv, 159
Special ASC Programs 18
Special Education Aide ..... ix, xii
Special Education Aide, Certificate 97
Special Education Paraprofessional ..... ix, xii
Special Education Paraprofessional, Certificate 97
Special Learning Support 18
Special Learning Support Program (SLSP) ..... iv, 18, 159
Special Programs 19
Speech ..... iv, viii, xii, 103, 159-160
Speech Emphasis, AAS Degree 103
Speech Intensive Courses 37
State Employee Benefit 9
Statement of Values for Teaching Excellence 2
Stenographic ..... ix, x
Stenographic, Certificate 65
Structural Emphasis ..... ix, xi, 76
Student Assistance Center and Women's Services ..... iv, 16, 166
Student Budget, Financial Aid 10
Student Code of Conduct 27
Student Grievance Procedure 28
Student Legal Services 16
Student Life and Activities ..... iv, 16, 166
Student Performance Objectives for Transfer Education, AA Degree 39
Student Performance Objectives for Transfer Education, AS Degree 41
Student Performance Objectives for Vocational Education, AAS Degree Programs 44
Student Performance Objectives for Vocational Education, Certificate Programs 45
Student Recognition 29
Student Rights and Responsibilities 29
Student Right-to-Know Information 29
Student Services 14, 166
Student Support Services (SSS) ..... iv, 20
Study Abroad 111
Summer Bridge Program 20
Supermarket Management ..... ix, x
Supermarket Management, Certificate 55
Supplemental Services (SS) ..... iv, 18
Surgical Technology ..... iv, ix, xii, 160
Surgical Technology, Certificate 94

T

Teacher Education 103
Teacher Education: Early Childhood Education ..... viii, xi, xii
Teacher Education: Early Childhood Education, AGS Degree 103
Teacher Education: Early Childhood Education/Violence Counseling ..... viii, xi, xii
Teacher Education: Early Childhood Education/Violence Counseling, AGS Degree 104
Teacher Education: Elementary Education ..... viii, xii
Teacher Education: Elementary Education, AGS Degree 104
Teaching/Learning Center ..... iv, 166
Technical Education Centers ..... ii, iv, 166
TEC East ..... ii, 166
TEC North ..... ii, 167
TEC West ..... ii, 167
Technical Health Assistant 160-161
Telephone Directory iv
Television Courses ..... iv, 35
Testing Center ..... iv, 16
Theatre ..... iv, viii, xii, 107, 161
Theatre Emphasis, AA Degree 107
Trades ..... ix, xii
Trades and Industry 107
Transcripts Requests 5
Transferring Credit to CCD 5
Transferring to Four-year Institutions 7
Travel and Tourism ..... ix, x, 118
Travel and Tourism, AAS Degree 55
Travel and Tourism, Certificate 55
Tuition 9
Tuition Refund Policy 9

V

Veterans' Academic Standards of Progress 7
Veterans Affairs Office 17
Veterans' Benefits 8
Veteran's Office iv
Vice President's Honors List 29
Video Production/Communications ..... ix, xii
Video Production/Communications/Multimedia Design, AAS Degree 100
Visiones 36
VP for Instruction iv
VP for Student Services iv
VP for Technical Education Centers iv

W

Web Page Specialist ..... ix, x
Web Page Specialist, Certificate 70
Weekend College ..... iv, 35
Welder ..... ix, xii
Welder, Certificate 110
Welding and Fabrication 161
William D. Ford Federal Direct Loan Programs 12
Windows NT Network Administration ..... ix, x
Windows NT Network Administration, Certificate 69
Word Processor ..... ix, x
Word Processor, Certificate 65
Work and Family Resource Center 17, 36, 167
Workman's Compensation 17
Workplace Education 36
Writing Center 18

Community College of Denver
Campus Box 201
P.O. Box 173363
Denver, CO 80217-3363
(303) 556-2430

Application for Admission

APPLI

*Responses to items marked by an asterisk (*) are voluntary, and will be kept confidential. They will not be used as a factor in acceptance to the College, they are for record keeping purposes only.

INSTRUCTIONS - Please complete all sections of this application in Black Ink.

PLEASE INDICATE THE YEAR AND TERM YOU WISH TO ENROLL 19☐☐ ☐ SUMMER ☐ FALL ☐ SPRING

PLEASE PRINT LEGIBLY

☐☐☐ – ☐☐ – ☐☐☐☐ Student I.D./*Social Security Number

☐ MR ☐ MS OR LIST OTHER: _____

BIRTHDATE ☐☐ MO. – ☐☐ DAY – ☐☐ YR.

Gender ☐ (M) Male ☐ (F) Female

LAST NAME | FIRST NAME | MIDDLE NAME

PREVIOUS NAME

*Marital Status
☐ (S) Single/ Divorced
☐ (M) Married/ Separated

*Current Employment Status
☐ (F) full time (30+ hrs/week)
☐ (P) part time (1-29 hrs/week)
☐ (U) currently not employed

*Ethnic Origin:
☐ (I) American Indian or Alaskan Native
☐ (O) Asian or Pacific Islander
☐ (H) Hispanic
☐ (B) Black Non-Hispanic
☐ (W) White Non-Hispanic

*Veteran/Military Service
☐ None
☐ (1) Veteran or Dependent Eligible for VA Educational Benefits
☐ (2) Veteran Not Eligible for VA Educational Benefits
☐ (3) Active Duty Veteran
☐ (4) Active Duty Military

Are you a U.S. Citizen? ☐ Yes ☐ No
If NO, Country of Citizenship: Visa Type:

You must attach photocopy of I-94 (Arrival-Departure Record), or I-551 (Alien Registration Receipt Card) (both sides).

Office Use Only
VISA
RESIDENCY
LOCAL COUNTY

LOCAL ADDRESS | COUNTY OF LOCAL ADDRESS

CITY | STATE | ZIP CODE | (AREA) RESIDENCE PHONE NUMBER

PERMANENT ADDRESS (IF DIFFERENT FROM ABOVE)

CITY | STATE | ZIP CODE | (AREA) BUSINESS PHONE NUMBER

STUDENT GOALS

While at this institution, do you intend to
☐ (1) Earn an academic degree (AA/AS/AGS)
☐ (2) Earn a vocational - technical degree (AAS)
☐ (3) Earn a vocational - technical certificate
☐ (4) None of the above

Are you enrolling at this college for job or career reasons?
☐ (Y) Yes ☐ (N) No

Program/Major area of study:

Do you plan to transfer to another institution?
☐ (1) Yes, to a 4 year school after graduation
☐ (2) Yes, to a 4 year school before graduation
☐ (3) Yes, to a 2 year school after graduation
☐ (4) Yes, to a 2 year school before graduation
☐ (5) No, I do not plan to transfer

Please indicate planned length of study at this institution:
☐ (1) semester ☐ (3) 2 years
☐ (2) 1 year ☐ (4) More than 2 years

ENROLLMENT DATA

Which best describes your current status?
☐ (RA) Re-entering former student at this institution
Transfer, attended another college
☐ (TR) will transfer credit in
☐ (TN) will not transfer credit in
☐ (NE) New Student, first college attended

Which best describes the level of education you have completed ? (choose one)
☐ (LT) Less than High School
☐ (HS) High School Graduate/GED
☐ (CE) Certificate
☐ (AD) Associate Degree
☐ (BD) Bachelor's Degree
☐ (PD) Professional Degree (MD, JD, MBA, Ed S)
☐ (DD) Doctorate (Ed D, Ph D)

*The college provides services for students with disabilities (physical disability,chronic health problem or learning disability). Would you like to receive information about these services? ☐ yes ☐ no

*Do you consider yourself economically disadvantaged? ☐ yes ☐ no

*Do you consider yourself academically disadvantaged? ☐ yes ☐ no

*Would you learn better using a language other than English? ☐ yes ☐ no

Language _____

Have your parents earned a baccalaureate (4 -year) degree?
☐ (M) Mother ☐ (F) Father ☐ (B) Both ☐ (N) Neither

Name of Last High School Attended
City | State

Name of Last College Attended
City | State

Type of Secondary Diploma
☐ High School Diploma, (Y) Year Received 19☐☐
☐ (G) G.E.D. - Year Received 19☐☐
☐ (C) Currently enrolled in High School Expected Graduation Date 19☐☐
☐ (N) Non-Graduate

OFFICE USE ONLY

COLLEGE | CLASS | DEGREE | MAJOR | MINOR | SPEC | HIGH SCHOOL CODE | COLLEGE CODE

SELECTIVE SERVICE STATEMENT

Information on Selective Service registration status must be provided in order to comply with Colorado state law. Individuals providing false information are subject to penalty of law.

Are you required to be registered with the Selective Service? ☐ Yes ☐ No

If yes, are you registered? ☐ Yes ☐ No

TUITION CLASSIFICATION: (Has no effect on admission to the college)

COMPLETE FOR COLORADO RESIDENCY CLASSIFICATION

Please answer the following questions carefully. If appropriate indicate "none" or "not applicable". You may write explanatory notes on this form and/or attach addi tional sheets as necessary. Use the word "present" for month/year if the date extends to the time you are completing this application. Failure to answer a question may result in your being misclassified. Please contact the Office of Admissions if you need assistance.

CURRENT AGE

	YOU	and	YOUR PARENT (if you are under 23)
Dates of continuous physical presence in Colorado.....	mo day yr to mo day yr		mo day yr to mo day yr
List the last two years Colorado income taxes have been filed.....	yr and yr		yr and yr
List the last two years of employment or source of income.	Employer State mo yr to mo yr Employer State mo yr to mo yr		Employer State mo yr to mo yr Employer State mo yr to mo yr
Date current Colorado Driver's License or Colorado I.D. was issued	mo yr		mo yr
List the last two years of Colorado Motor Vehicle Registration.....	mo yr and mo yr		mo yr and mo yr
Dates of extended absences from Colorado during the last two years.....	mo yr to mo yr		mo yr to mo yr
Date of Colorado Voter Registration.....	mo yr		mo yr

*Date of marriage (answer this question only if you will be under the age of 23 by the initial enrollment date)..... mo yr

*Response to these items is voluntary, and will be kept confidential. Marital status may be relevant to determine whether you are entitled to be declared a Colorado resident for tuition purposes.

Are you on active duty military or a dependent of an active duty military and assigned to a Permanent Change of Station in Colorado?
☐ Yes ☐ No If Yes, contact your Military Base Education Office.

All items are subject to change without notice.

STUDENTS WHO CLAIM A CHANGE IN TUITION CLASSIFICATION OR EMANCIPATION MUST FILE A PETITION FOR RESIDENCY PRIOR TO REGISTRATION.

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.

Signature _____ Parent Signature if applicant is under 18 _____ Date _____

Collegiate 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.