

COMMUNITY COLLEGE OF DENVER

CATALOG

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COMMUNITY COLLEGE OF DENVER

C A T A L O G

1999 - 2000



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Dr. Byron McClenney, President

CCD Auraria Main Campus

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Denver, CO 80217-3363
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Branch Campuses

CCD East

3532 Franklin St.
Denver, CO 80205
Phone 303-293-8737 / Fax 303-292-4315

CCD Lowry

Health Education Center
950 Yosemite St.
Aurora, CO 80010
Phone 303-365-8300

CCD North

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

CCD Parkway

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

CCD West

2420 W. 26th Ave., Suite 100D
Denver, CO 80211
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TELEPHONE DIRECTORY



- Admissions, Registration and Records303-556-2430
 Auraria Interfaith Center303-556-8591
 Book Center, Auraria303-556-3230
 Business and Industry Services303-620-4427, ext. 319
 Cashier303-556-2075
 Campus Closure303-556-2401
 Campus Operator303-556-2400
 Campus Recreation303-556-3210
 Career Development Services Center303-556-6202
 Center for Business
 & Corporate Development303-556-2487
*Accounting, Arts Management, Business & Industry
 Services, Business Administration, Business of Travel
 & Tourism, Business Technology Education, Computer
 Assisted Drafting, Computer Information Systems,
 Computer Training for Persons with Disabilities,
 Customized & Contract Training, Drafting for
 Industry, Economics, Electronics, Geography, Lucent
 Project, Machine Tool Operator, Refrigeration & Air
 Conditioning, Small Business Development Center,
 Welding & Fabrication, Work & Family Resource
 Center, Workplace Learning Initiatives*
- Center for Educational Advancement303-556-8455
*Academic Computer Lab, Academic Support Center,
 Dev. English, Dev. Math, Early Childhood Prof.,
 Education & Paraeducator, ESL, GED & Adult Basic
 Education, Personal Growth & Development, Reading,
 Testing Center*
- Center for Health, Math & Science303-556-2472
*Astronomy, Biology, Central Supply Tech., Chemistry,
 Dental Hygiene, Fitness, Health & Rec., Geology, Golf
 Course Management, Grief & Bereavement, Health &
 Wellness, Health Related Cert., Licensed Psych. Tech.,
 Massage Therapy, Math, Nursing, Nutrition,
 Operating Room Nurse, Physics, Political Science,
 Radiology, Recreational Asst., Science, Surgical Tech.,
 Pre-Engineering, Pre-Medical*
- Center for Language, Arts
 & Behavioral Sciences303-556-2473
*Anthropology, Arabic, Art, American Sign Language,
 Chinese, Communication, English, French,
 Gerontology, Graphic Arts, Graphic Design, History,
 Human Services, Humanities, Intergenerational
 Studies, Japanese, Journalism, Literature, Multimedia,
 Music, Paralegal, Philosophy, Photography,
 Psychology, Sociology, Spanish, Speech, Theater*

- Center for Learning Outreach
*Branch Campus Coordination, CCD/CCC Online,
 Link to Cooperative Education, Grant Development,
 Guided Independent Study, Perkins Management,
 Service Learning, Teaching/Learning Center,
 Weekend College*
- Branch Campuses
- East303-293-8737
 Lowry303-365-8300
 North303-289-2243
 Parkway303-620-4433
 West303-477-5864
- Guided Independent Study
 & Weekend College303-556-3598
 Teaching/Learning Center303-556-3598
- Center for Persons with Disabilities303-556-3300
 Child Development Center303-556-2439
 Computer Labs303-556-3628
 Computer Training for People
 with Disabilities303-556-3300
 Cooperative Education303-556-3607
 Dental Hygiene, CCD Lowry Campus303-364-4821
 Educational Opportunity Center303-629-9226
 Educational Planning and Advising303-556-2481
 Financial Aid303-556-2420
 Information303-556-2600
 International Student Services303-556-2481
 Learning Development Center303-556-2497
 Library, Auraria303-556-2741
 Office of Institutional Advancement303-556-2891
 Parking and Transportation, Auraria303-556-2000
 President of CCD303-556-2411
 Public Safety303-556-3271
- EMERGENCY911**
- Real Kids Center303-556-2439
 Recruitment and Outreach303-556-2600
 Refugee Student Services303-556-2600
 Student Life303-556-2597
 Student Assistance Center
 & Women's Services303-556-2343
 Student Support Services303-556-3609
 Testing Center303-556-3810
 Veteran's Office303-556-2430
 VP for Instruction303-556-2414
 VP for Student Services303-556-2413

CCD ON THE AURARIA CAMPUS



CCD Auraria Main Campus

1111 W. Colfax Ave.
 P. O. Box 173363
 Denver, CO 80217-3363
 303-556-2600

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 Tivoli Lot for prospective students who are being assessed and/or registering. Bring your ticket to South Classroom Building 134 for validation.

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



BRANCH CAMPUS SITES

Branch Campuses

CCD East

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

CCD Lowry Health Education Center

950 Yosemite St.
Aurora, CO 80010
303-365-8330

CCD Dental Hygiene Program

960 Xanthia, Bldg. 753
Denver, CO 80220
303-365-7771

CCD North

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

CCD Parkway

1391 N. Speer Blvd., Suite 200,
Denver, CO 80204-2552
303-620-4433

CCD West

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



Fall 1999

Registration	July 1-Aug. 28
Orientation, Advising and Registration	Aug. 17-Aug. 23
Classes begin	Aug. 23
Labor Day holiday	Sept. 6
	<i>Campus Closed</i>
Project Success Day	Oct. 6
Spring 2000 Advising and Priority Registration Week	Nov. 15-19
Faculty Advising Day	Nov. 16
Spring 2000 registration continues	Nov. 22-Dec. 23
Thanksgiving holiday	Nov. 25
	<i>Campus Closed</i>
	Nov. 26
	<i>Campus Open</i>
	<i>No Classes</i>
Spring 2000 Graduation application deadline	Dec. 1
Last day of classes	Dec. 11
MSCD/UCD final exams begin	Dec. 13
MSCD/UCD final exams end	Dec. 18

Spring 2000

Orientation, advising and registration	Jan. 10-14
Martin Luther King Jr. holiday	Jan. 17
	<i>Campus Open</i>
	<i>No Classes</i>
Classes begin	Jan. 18
Project Success Day	Feb. 29
Spring Break	March 20-25
	<i>Campus Open</i>
	<i>No Classes</i>
Summer and Fall 2000 Advising and Priority Registration Week	April 17-21
Faculty Advising Day	April 19
Summer and fall registration continues	April 24-May 30
Summer 2000 graduation application deadline	May 2
Last day of classes	May 10
MSCD/UCD final exams begin	May 8
MSCD/UCD final exams end	May 13

Summer 2000

Orientation, Advising and Registration	May 22-26
Memorial Day holiday	May 29
	<i>Campus Closed</i>
Classes begin	May 30
Independence Day holiday	July 4
	<i>Campus Closed</i>
Fall 2000 graduation application deadline	Aug. 1
Last day of classes	Aug. 5



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Health Information Specialist Emphasis	.90	Data Entry Clerk	.55
Health and Wellness Management Emphasis	.91	Executive Assistant	.60
Massage Therapy Emphasis	.92	General Clerical	.60
Medical Transcriber Emphasis	.93	General Office Clerk	.56
Medical Unit Coordinator Emphasis	.94	Medical Administrative Assistant	.57
Psychiatric Technician Emphasis	.94	Microsoft Office Specialist	.56
Radiology/Orthopedic Assistant Emphasis	.96	Stenographic	.60
Surgical Technology Emphasis	.96	Word Processor	.61
Human Services	.102	Computer Information Systems	.61
Human Services	.104	Business Applications Programmer	.63
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Teacher Education	.112	Web Page Developer	.68
Early Childhood Education	.115	Windows NT Network Administration	.70
Early Childhood Education/Violence Counseling	.115	Computer-Aided Drafting	.78
Trades	.117	Computer-Aided Drafting	.78
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Programming Technician I	.75
Programming Technician II	.75
Windows NT Technician	.71



DEGREE, CERTIFICATE & CERTIFICATE-OF-TRAINING PROGRAMS

by occupation or emphasis area

Accounting

Accounting	.AAS, C
Accounting Clerk	.C
Accounting with Computer Applications	.C
Billing Clerk	.C
Bookkeeper	.C
Computerized Accounting Technician	.C
Payroll Clerk	.C

Anthropology

Anthropology (see Behavioral Sciences)	.AA
--	-----

Art

Art Emphasis	.AA
--------------	-----

Arts Management

Arts Management Emphasis	.AA
--------------------------	-----

Behavioral Sciences

Anthropology Emphasis	.AA
Gerontology Emphasis	.AA
Psychology Emphasis	.AA
Sociology Emphasis	.AA

Biology

Biology Emphasis	.AS
------------------	-----

Business Administration

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

Business Technology

Administrative Assistant	.AAS, C
Data Entry Clerk	.C
General Office Clerk	.C
Microsoft Office Specialist	.C
Legal Administrative Assistant	.AAS
Medical Administrative Assistant	.AAS, C
Office Manager	.AAS
Secretarial/Computer Applications Emphasis	.AAS
Customer Service Representative	.C
Customer Service Specialist	.C
Executive Assistant	.C
General Clerical	.C
Stenographic	.C
Word Processor	.C

Chemistry

Chemistry Emphasis	.AS
--------------------	-----

Communications

Communications Emphasis	.AA
-------------------------	-----

Computer Information Systems

Business	.AAS
Business Applications Programmer	.AAS, C
(Computer Training for People with Disabilities)	
Cisco Networking Associate	.AAS
Computer Specialist	.AAS, C
Information Technology	.AAS
Internet Specialist	.AAS
Network Administration	.AAS
Oracle Applications Specialist	.AAS, C
PC Specialist/LAN Administrator	.AAS, C
(Computer Training for People with Disabilities)	
Programming and Applications	.AAS
Telecommunications	.AAS
Business Applications Specialist	.C
Cisco Associate Network Administrator	.C
Computer Programming	.C
Information Technology Specialist	.C
NT Network Specialist	.C
Novell 3x Network Administration	.C
Novell 4x Network Administration	.C
PC Help Desk Specialist	.C
PC Repair Specialist	.C
Telecommunication Specialist	.C
Web Page Developer	.C
Windows NT Network Administration	.C
Cisco Network Technician	.COT
Internet Technician I	.COT
Internet Technician II	.COT
Microcomputer Technician I	.COT
Microcomputer Technician II	.COT

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
- COT • Certificate of Training



Computer Information Systems continued

Microsoft Office Technician ICOT
 Microsoft Office Technician IICOT
 Novell Network TechnicianCOT
 Programming Technician ICOT
 Programming Technician IICOT
 Windows NT TechnicianCOT

Computer Science

Computer Science EmphasisAS

Drafting

Computer-Aided Drafting (CAD)C
 Drafting for IndustryAAS, C
 Electrical EmphasisAAS
 Mechanical EmphasisAAS
 Process Piping EmphasisAAS
 Structural EmphasisAAS

Early Childhood Education (see Teacher Education)

Earth Science

Earth Science EmphasisAS

Economics

Economics EmphasisAA

Electronics Technology

Broadcast TechnologistC
 Electronics TechnologyAAS, C
 Principles of ElectronicsC

Engineering

Pre-Engineering General EmphasisAS

English

English/Literature EmphasisAA

Environmental and Refrigeration Technology

Commercial/Industrial Refrigeration, Heating
 and Air ConditioningAAS
 Refrigeration and Air ConditioningC

Essential SkillsC

General Studies

General Studies — GeneralistAGS

Gerontology

Gerontology (See Behavioral Sciences)AA, C

Golf Course Management

Golf Course ManagementAAS

Graphics

Graphic Arts (Printing)AAS, C
 Graphic DesignAGS-GRD (MSCD/CU-Denver), AAS, C
 Computer GraphicsC
 Prepress (Printing)C
 Service BureauC

Grief and Bereavement Specialist

Grief and Bereavement SpecialistC

Health Related

Dental HygieneAAS

Health and Wellness

Clinical Medical AssistantAAS, C
 Nurse AideC
 Comprehensive Medical AssistantAAS, C
 Health Information SpecialistAAS, C
 Medical ClerkC
 Health and Wellness ManagementAAS
 Massage TherapyAAS, C
 Medical TranscriberAAS, C
 Medical Unit CoordinatorAAS, C
 Psychiatric TechnicianAAS, C
 Psychiatric Technician: Adv. PlacementC
 Radiology/Orthopedic AssistantAAS, C
 Surgical TechnologyAAS, C

Medical ClusterAS

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

NursingAAS

Nursing: Advanced PlacementAAS
 Practical NursingC
 Perioperative NursingC

RadiographyAAS

Limited Scope RadiographyC

History

History EmphasisAA

Humanities

Humanities/Philosophy EmphasisAA

Human Services

- Case Management/Residential Service AideC
- Human ServicesAGS-HSE (MSCD), AAS
- Special Education ParaprofessionalAAS, C
- Special Education AideC

Intergenerational Studies

- Intergenerational Studies EmphasisAAS

Law

- ParalegalAGS-PAR (CU-Denver), AAS
- Paralegal: GeneralC

Mathematics

- Mathematics EmphasisAS

Multimedia Design

- Computer Graphics EmphasisAAS
- Graphic Arts EmphasisAAS
- Graphic Design EmphasisAAS
- Music EmphasisAAS
- Photography EmphasisAAS
- Video Production/Communications EmphasisAAS
- Multimedia DesignC

Music

- Music EmphasisAA

Photography

- Photography EmphasisAA
- PhotographyAGS-PHO (MSCD/CU-Denver), AAS, C

Physics

- Physics EmphasisAS

Political Science

- Political Science EmphasisAA

Printing

- Graphic Arts (see Graphics)AS, C
- Prepress (see Graphics)C

Psychology

- Psychology (see Behavioral Sciences)AA

Recreational Assistant

- Recreational Assistant EmphasisAAS, C

Sociology

- Sociology (See Behavioral Sciences)AA

Speech

- Speech EmphasisAA

Teacher Education

- Early Childhood EducationAAS-ECE, AGS-ECE
- Early Childhood Education DirectorC
- Early Childhood Education Group LeaderC
- Early Childhood Education Group Leader/
Child Development AssociateC
- Early Childhood Education/
Violence CounselingAAS-ECE/VC, AGS-ECE/VC
- Elementary EducationAGS-EE

Theatre

- Theatre EmphasisAA

Trades and Industry

- Arc WelderC
- CNC Machine Tool OperatorAAS, C
- Fabrication WelderAAS, C
- Lathe OperatorC
- Machine Tool OperatorC
- Mill OperatorC
- TradesAAS
- Basic WelderC



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
- COT • Certificate of Training

Guarantee for Job Competency

To graduates of Certificate programs and Associate of Applied Science (AAS) degrees, Community College of Denver (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 skill deficiencies.

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

Guarantee for Transfer

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

To graduates of articulated Associate of General Studies (AGS) degrees and articulated Associate of Applied Science (AAS) degrees, CCD guarantees that the articulated AGS and articulated AAS 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 any given four-year school.



Excellence Through Accountability

- Between 1987 and 1998, CCD increased total graduates by 81 percent.
- Between 1987 and 1998, people of color as a percent of total graduates increased from 20 percent to 45.6 percent.
- Between 1987 and 1998, CCD increased graduates of color by 383 percent (from 83 to 318 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 4.0 scale.
- 95 percent of 1996-97 graduates are satisfied with their CCD educational program.
- 98 percent of 1998 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 1996-97:

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

Of CCD students who transferred to Colorado public colleges or universities in 1998:

- 51.3 percent transferred to The Metropolitan State College of Denver.
- 36 percent transferred to the University of Colorado at Denver.
- 12.7 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.





General Information

Welcome to Community College of Denver (CCD). You have taken a step in the right direction to prepare for the future - your future.

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

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

CCD Auraria is in the heart of the city and within walking distance of downtown, Larimer Square, the 16th Street Mall, LoDo, the Denver Pavilions, Colorado Convention Center and the Denver Center for the Performing Arts complex. At Auraria, you're also close by Mile High Stadium, home of the Denver Broncos; Coors Stadium, home of the Colorado Rockies baseball team; the new Pepsi Center, home of the NHL Colorado Avalanche and NBA Nuggets; Six Flags Elitch Gardens; and the new Ocean Journey.

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

CCD's History

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

In 1975, CCD moved to the 171-acre Auraria Higher Education Center Campus in downtown Denver. It sits on the west bank of Cherry Creek, originally the site of the 1858 frontier town of Auraria. We even have the oldest-standing structure in Denver on our campus, the for-

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mer Temple Emmanuel. Today, the Emmanuel Gallery is used as exhibition space for student and faculty artwork.

CCD is one of 15 institutions in the Colorado Community College and Occupational Education System. It is the fourth largest with more than 4,000 full-time equivalent students enrolled in its programs. CCD is the only community college in the city and county of Denver and the only truly urban community college in the

state. It also is the only community college in the nation to share a campus with a four-year college and a university - The Metropolitan State College of Denver and the University of Colorado at Denver. They share classroom buildings, a regional library, recreational facilities and a student union. At Auraria, CCD offers all two-year programs, awards all two-year degrees and occupational certificates, and provides remedial instruction, adult basic education and GED preparation.

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

Our newest branch campus is CCD Lowry at the Higher Education and Advanced Technology (HEAT) Center on the former Lowry Air Force Base bordering east Denver and west Aurora. CCD Lowry is home to the CCD's Health Education Center, the Dental Hygiene Clinic and all Health and Wellness programs. The CCD Parkway Campus is the site of CCD's Business and Industry Services, Corporate Training Center, Customized and Contract Training programs, Small Business Development Center, Work and Family Resource Center and Workplace Learning Initiatives.

CCD has the most diverse student population of all Colorado higher education institutions with a minority student body of more than 54 percent. The college no longer has an ethnic majority and its diverse faculty, staff and student populations reflect the city.

At CCD, learners can choose from more than 150 programs that will prepare them for a new career, allow them to earn a certificate-of-training, certificate or associate degree, or enable them to transfer to four-year colleges and universities.

Our Philosophy

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

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

CCD's Mission Statement

Community College of Denver pledges responsibility for 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 learners are entitled to a quality education. This education must provide the learner with an understanding and appreciation of our interdependence as individuals and nations.

The education must be meaningful to multi-ethnic students. In addition, it must provide the student body, faculty and staff with an understanding of cultural pluralism. To that end, CCD provides an educational environment that fosters cultural diversity, international understanding and global awareness.

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

Statement of Values for Teaching and Learning

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

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

Campus Choices

We offer traditional semester courses, English as a Second Language, GED preparation and a number of "enroll-any-time" courses on the main Auraria Campus. CCD's administrative offices also are located at Auraria. CCD provides fast-track job training, English as a Second Language, GED preparation, adult basic education and general education courses at its branch campuses. In addition, the college offers adult basic education, GED preparation and English as a Second Language at more than 10 community sites around the city. The college's Center for Business and Corporate Development offers homestudy, television courses, online 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 CCD. The Metropolitan State College of Denver and the University of Colorado at Denver.

Reported criminal offenses on the Auraria campus:

Offense	1998	1997	1996
Murder	0	0	0
Sex Offenses: Forcible	1*	0	0
Sex Offenses:			
Non-Forcible:	0	0	0
Robbery	0	4	1
Aggravated Assault	7	3	7
Burglary	6	13	23
Vehicle Theft	16	16	11
Hate Crimes	2**	0	0
Arson	2	1	1

* Forcible fondling

** One offense, two victims, ethnic intimidation

Reported criminal offenses at satellite locations (contiguous to the Auraria campus):

Offense	1998	1997	1996
Burglary	3	2	14
Auto Theft	1	0	1
Arson	0	1	0

Arrests for the following crimes at Auraria:

Offense	1998	1997	1996
Liquor Law Violations*	0**	12	10
Drug Abuse Violations	41	36	40
Weapons possession	6***	14	4

* Excluded DUI arrests

** Zero reported for 1998 to avoid double reporting in conjunction with drug abuse violation arrests

*** Includes arrests made for more serious offenses that involved use of a weapon.

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

Notice of Nondiscrimination

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

Americans with Disabilities Act

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

Questions, complaints and requests for additional information may be directed to 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. Other accreditations include:

Comprehensive Medical Assistant/CCD 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

CCD 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 Genevieve Martinez, 303-556-2420.





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 choose a major field of study, be assigned a faculty advisor and complete 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. The International Student Advisor assists 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 and wish to attend one of the CCD branch campuses, make an appointment with a case manager at CCD East, 303-293-8737; CCD North, 303-289-2243; CCD West, 303-477-5864 or CCD Parkway, 303-620-4433.

Your case manager will assist you in all the registration and enrollment processes.

2. If you are a new student and plan to attend CCD at Auraria or Lowry, submit an Application for Admission (form at end of the catalog) to the Office of Admissions, Registration and Records. You will receive a permit to take the Basic Skills Assessment Test. You also will receive official notification by mail of your acceptance to CCD.

3. Next, make an appointment to take the Basic Skills Assessment Test. You must have a permit from the Office of Admissions, Registration and Records. 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, room 134, to attend an orientation.

4. 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.
5. 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.
6. 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.

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

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.

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

International Student Information

This school is authorized under federal law to enroll non-immigrant, alien students. **(We are not authorized to accept students without English proficiency.)**

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

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

OR

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

4. Evidence of proficiency in the English language:

A minimum score of 475 on the Test of English as a Foreign Language (TOEFL). Students will still be required to take the English Writing Test at CCD. If CCD Assessment Test scores are below English Composition level, mandatory placement in lower English classes must be pursued.

OR

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

OR

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

OR

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

International students on F-1 visas **Do Not** qualify for financial aid or scholarships. The college will not issue the I-20 until all the above documents are on file at the office of the International Student Advisor (room 134 in the South Classroom Building) and the student has been officially admitted. Please submit all the necessary documents to the above address by the deadline date of the semester you plan to enroll. All International Students on F-1, M-1 Visas must register and complete a full course of study (minimum of 12 semester hours per semester or 24 per year) and complete their educational objectives within a reasonable period of time (usually two to three years).

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.

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

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

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

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

Please call, e-mail or write if you need more information:

Christine Yamasaki, MA
International Student Advisor
303-556-3605
cd_christine@CCCS.CCCOES.EDU
Campus Box 203
P.O. Box 173363
Denver, CO 80217-3363
Auraria Campus
Location: South Classroom Building, room 134L

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 fifth day of classes each semester.

CCD complies fully with the Family Educational Rights and Privacy Act (FERPA), which protects 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 to release.

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

Transcripts Requests

Students 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 on 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 CCOES-approved institutions with which CCD has current articulation agreements.
4. Credits earned by a student enrolled in another state system community college that are applicable to the AA, AS or AAS degrees or a certificate program 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 that 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

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

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

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 is 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, as published in *The National Guide to Educational Credit for Training Programs*, to evaluate industrial and corporate training programs.

4. Portfolio of Learning Outcomes

Currently enrolled students may petition for credit by developing a portfolio that describes and documents pertinent learning comparable to that available in CCD courses. A faculty member in the appropriate program area evaluates the portfolio and determines commensurate credit. Only one portfolio evaluation for a particular course will be arranged during any one semester. (\$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 Center 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 the Metropolitan State College of Denver or to the University of Colorado at Denver. Consult the Degree, Certificate and Certificate-of-Training 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 visitations in the Transfer Center or call 303-556-2481.

A transfer bulletin board by South Classroom 125 has postings of visits from four-year college representatives and other pertinent information.

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

Veterans' Academic Standards of Progress

The following policy applies to all students who are veterans and other eligible persons receiving Veterans Affairs (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, the veteran 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 VA. Veterans in this status may still attend CCD; however, they will be subject to the provisions of the Academic Standards of Progress Policy requirements for continuation of enrollment.

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 who 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 non-punitive grade upon completion of a course due to unsatisfactory work may be considered mitigating circumstances if the student can demonstrate good faith pursuit of the course up to the point of withdrawal or completion. You must submit evidence that you applied for tutorial aid, consulted a VA counselor or consulted a CCD academic counselor or 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 VA.

Extra Services Available

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

Good luck!





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 1999-2000 is set at \$56.30 per credit hour for resident students and \$266.80 per credit hour for non-resident students. In addition, fees are set at \$4.75 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

Veterans seeking 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.

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

Fees

All students at CCD Auraria 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 in the Office of Financial Aid, South Classroom Building, room 135, 303-556-2420, and at all branch campuses (see listing/addresses on page vii).

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 assistance from Social Services, Social Security, vocational rehabilitation benefits, unemployment, etc.

Priority in awarding financial aid goes to students who apply early. To be on time, 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.

Student Budget

The cost of a CCD education includes tuition, fees, books and supplies. Additional expenses include room and board, transportation, medical and personal items. We base our standard student budget on current estimated living costs. Budgets are adjusted for living arrangements (such as living with parents) and the length of enrollment. Standard monthly living allowances:

Living with parents	\$ 670
Living away from parents	\$1,060

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 are no longer eligible 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. (See individual program information.) 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 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 online degree program.

Financial Aid Programs

Grants and Work-Study

- **Federal Pell Grant** — Federally funded Pell Grants assist with educational expenses. Award amounts range up to \$3,125 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 needs basis. The maximum award is \$5,000 per year. Colorado and the federal government contribute to the award.
- **Colorado Part Time Grant (CPTG)** — Available to Colorado residents who attend school less than full-time and have established financial need. The award is limited to a maximum of tuition, fees, books and transportation costs.
- **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 \$5,000 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 through the undergraduate merit programs to Colorado residents who have completed a minimum of 12 credit hours at CCD with at least a 3.0 grade point average in all courses attempted. Apply using the Free

Application for Federal Student Aid (FAFSA).

Scholarship awards depend on the availability of funds. Award amounts range up to resident tuition and fees.

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

Institutional and community scholarships are posted on the 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 and fastweb.com on the Internet.

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 \$12,000, 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 census 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.

If any portion of 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. An administrative fee, not to exceed the lesser of 5 percent of the institutional charges or \$100, will be charged.

A new refund and repayment policy is being developed for the 1999-2000 academic year. The complete new policy will be available at the Office of Financial Aid, South Classroom Building, room 135 and will be included with every financial aid award mailed to students.

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.





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 (Co-op) education;
- job search skills: resume writing and interviewing;
- Career Resource Library;
- Colorado Career Information System;
- career planning;
- Career Laboratory; and
- DISCOVER.

For an appointment, call 303-556-6202.

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 disabilities, 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 complies with and fully supports Section 504 of the Rehabilitation Act of 1973, with amendments of 1974, regarding nondiscrimination on the basis of disability. Inquiries concerning Title VI, TITLE IX and Section 504 may be referred to the Michael Poindexter, CCD Campus Box 200, P.O. Box 173363, Denver, CO 80217-3363, South Classroom Building, Room 305, 303-556-2413, or to the Office for Civil Rights, U.S. Department of Education, 1961 Stout St., Denver, CO 80294.

Child Care Services

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

The Auraria Campus 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.

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

Educational Opportunity Center

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

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

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

Educational Planning and Advising Center

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

EPAC helps new students with the admissions process, conducts orientation sessions, provides information on and interpretation of assessment programs and advises students who have not been chosen or accepted into a major. 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 — CCD Auraria

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

GED Branch Campuses

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

Health Services

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

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

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

Health Insurance

Students may purchase an accident and sickness insurance plan after registering. Brochures are available at the Student Health Center, the Student Life 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 Advising Office is responsible for processing applications, admitting, academic advising and enrolling nonimmigrant (F-1, F-2, M-1, M-2, B-1, B-2, H-1, etc.) students. In addition, this office offers personal, culturally sensitive counseling and referrals. The office is the liaison with government agencies and advises students on employment opportunities or transfers to or from CCD.

International applications from more than 50 nations are received by CCD each semester. There are four basic requirements for acceptance to CCD:

1. completion of the International Student Application form;
2. official high school or college transcripts (English translation);
3. proof of English proficiency; and
4. official financial guarantee (\$18,000 for 10 months).

For answers to specific questions or to receive an application packet, students and applicants must contact the International Student advisor in South Classroom, room 134-L, or make an appointment by calling 303-556-3605 or 303-556-2481.

PLACE — Program for Licensing Assessments for Colorado Educators

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

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 interinstitutional registration in the ROTC program. Contact the Department of Military Science, The Metropolitan State College of Denver, Campus Box 93, P.O. Box 173362, Denver, CO 80217-3362, 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 nontraditional 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 nontraditional/vocational fields. The center offers academic and crisis counseling and traditional counseling for students who are making a change from home to the workforce and provides 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 and housing and employment resources, and 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

The Student Life 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 Student Life include: Student Government and student organizations, intramural and recreational activities, social and cultural activities, health services, student leadership training programs and student publications and the student newspaper. These activities provide constructive experiences to stimulate personal growth and social development and add to students' enjoyment of life. Student Life 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 about 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 page 6, Credit for Prior Learning.)

Official GED Test Center

CCD 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. CCD West is a satellite test center, with testing on Fridays from 8:30 a.m. to 4:30 p.m. CCD East is also a satellite test center, with testing on Tuesdays 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 CCD North GED test center at 303-289-2243.

Nursing Mobility Profile

Required of students designated by the Nursing program. 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

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

Veterans Affairs Office

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

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.





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 centers for tutoring. Numerous tutoring services are available on a drop-in or appointment basis. In addition to finding help with individual courses, you are invited to use services provided in the following specialized labs.

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, room 142M.)

Colorado High School Equivalency Diploma (CHSED, formerly GED)

You can prepare to pass the CHSED test battery and earn a CHSED diploma. (South Classroom Building, room 142J)

Reading and Study Skills

Tutors and computerized assistance help you strengthen your abilities in reading, note taking, organizational skills, test taking and other techniques designed to enhance your success in college. (Open area and South Classroom Building, room 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, room 142Q, R & S.)

Special Learning Support

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

Vocational Tutoring Services (VTS)

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.

Student Support Services (SSS)

Student Support Services (SSS) at CCD 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 help students on an individual basis with personal and academic concerns. Peer support also is provided by carefully selected and trained peer mentors and tutors who can 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; and
- 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.



Academia de Computación

The Academia de Computación provides computer training to students in both English and Spanish from the Microsoft suite of programs, including Windows, Word, Excel, Access, PowerPoint and Office. Upon completing this 19-credit semester hour program, the student will be

*CCD is a
comprehensive,
learner
centered
urban college,
providing
open access
to a diverse
population.*

awarded a certificate-of-training from CCD. The demand for computer support specialists in Colorado will number more than 8,000 new positions in 1999 and beyond, with an average wage of \$16.55 per hour, according to the Occupational Outlook Handbook, published by the Federal Bureau of Labor Statistics. Mostly Spanish-speaking persons now have the

opportunity to enter this growing and dynamic technical field by pursuing computer training that can lead to gainful employment and new career options.

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

Challenge Program

The Challenge program is an employment and educational support program for young adult and adult ex-offenders released from the Colorado Department of Corrections. Challenge provides these services to help ex-offenders successfully reenter society as law-abiding citizens.

Challenge staff coordinates with parole officers, community corrections officers and correctional facilities. Services may include pre-employment and job placement assistance, basic skills development, GED preparation and testing, academic advising and vocational training. Program services are designed to meet the needs of the ex-offender. The goal of Challenge is to reduce recidivism in Colorado.

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

Computer Training for People with Disabilities

The Computer Training for People with Disabilities (CTPD) program is a nationally recognized and 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 program admission requirements include:

1. successful completion of a computer aptitude test battery, and
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 Center for Business and Corporate Development, 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.

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.

Developmental Studies Program

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

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 Center for Educational Advancement, 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 résumé.

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

International Study Programs

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

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 works 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. For more information, call 303-556-4964.

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 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.

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, Center for Educational Advancement, South Classroom Building, room 313, 303-556-8455.



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 provides 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 Services and accredited by the National Academy for the Education of Young Children (NAEYC). Hours are

Monday through Friday, 7:30 a.m. to 5:30 p.m. The center accepts children between the ages of 2 1/2 and 6 years old. Call 303-556-2439 for current information.

Interfaith Ministry

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

Parking and Transportation Services

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

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

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

The Parking Office is open Monday through Friday, 7:30 a.m. to 5:30 p.m. For more information about Parking 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, dial 911.



So you'll know what you can expect of us at the 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 center 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 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 grade of C 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 grade of C 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.

CCD's 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.

For information on substance abuse, contact:

MSCD Student Health Clinic
Plaza Building, room 150, 303-556-2525
Bethesda PsychHealth 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 instructional center. Each term, CCD will specify courses that fall into this category in the class schedule. Programs may require majors to obtain letter grades in that program's major subjects.

Grade SP — Satisfactory progress

Some courses, designated as open-entry/open-exit, may extend beyond the normal end of a semester. 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 be changed to NC (no credit) after the end of the next consecutive 15-week term.
5. Home study and online courses are open-entry/open-exit and must comply with the above regulations. If you receive financial aid, you must complete the class in the semester in which you enroll for the class.

Grade I — Incomplete

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 becomes 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 member who administered the grade. In cases where the faculty is not available to consider a grade change, such change may be made by the instructional dean in consultation with the

vice president for 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 (GPA), multiply the number of grade points by the number of credits for each course. Total the credits and points, then divide the grade points by the total number of credits.

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

Note: All other grades (Credit/No Credit, SP, I, W, AU, AW) are not calculated into the CCD GPA.

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

Course	Credits	Grade	Points
ANT 111			
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 center.

Repeating Courses

- A. You may repeat a course only once if you receive a "D" or "F" grade.
- B. You must request a "Petition to Repeat a Course Form" from the Office of Admissions, Registration and Records, South Classroom Building, room 133, com-

plete 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 the Metropolitan State College of Denver or the 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 instructional center responsible for offering a course for permission to retake a course and/or adjust a grade more than once.

Student Code of Conduct

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 entryways to buildings, rooms, sections of buildings, hallways or stairways in such a way that people find it difficult or impossible to pass.
 - d. blocking vehicular traffic.
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 immediately to the proper authorities.)
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.

Electronic Communications Policy

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

I. Ownership of Electronic Communication and Permissible Uses

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

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

II. Prohibited Uses

Prohibited uses include, but are not limited to:

- use of electronic communication for commercial purposes.
- use of electronic communication to send copies of documents in violation of copyright laws.
- transmission of information, access to which is restricted by laws or regulations.
- use of electronic communication to intimidate, threaten, or harass other individuals, or to interfere with the ability of others to conduct CCD business.
- forging of communication so it appears to be from someone else.
- obtaining or attempting to obtain unauthorized access to data, files, other electronic communication, etc. Any unauthorized attempt to breach security measures to access or acquire electronically stored information is prohibited. These acts are prohibited regardless of the methods utilized. The term "access" includes reading, deleting, moving, changing access privileges, or affecting files, data, etc., in any unauthorized manner.
- use of chain letters.

III. CCD Access and Disclosure

The contents of e-mail messages, backups and archives may be required to be disclosed as a result of legal discovery, writ, warrant or subpoena, or as a result of a request under the Colorado Open Records Law. CCD will not

monitor electronic communication as a routine matter. E-mail will not be backed up. Message contents will be inspected as needed to protect health, safety or security.

IV. Disciplinary Action

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

V. E-mail Ethics and Good Practices

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

- Before sending to any list or replying to any message from a list, make sure you know the guidelines and policies of that list and you are aware of where your message is going (to the whole list, or just the person that sent the original message).

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

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 28 of this catalog. Additional copies are available in the Student Life 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 President's Honors List is printed on your permanent academic transcript.

Vice President's Honors List

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

Dean's Honors List

Each semester, students who take six or more credits may be 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 1999, Alpha Mu Mu once again was named a five-star Distinguished Chapter, and it received the international "Fellowship Hallmark Award." In addition, its 1999 president was tapped the Distinguished Chapter President and the immediate past president received the Distinguished Regional Officer Award. CCD's PTK chapter is ranked number eight among the top 100 U.S. chapters.

For more information, interested and eligible students should contact any current executive board member or the faculty sponsors by calling 303-556-3845, or 303-365-8300.

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 28 of this catalog.

A detailed copy of "Students' Rights and Responsibilities" is available in the Student Life 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, 30.5 percent either had graduated or transferred to a Colorado public four-year institution at the end of three academic years (by the end of summer 1997). Another 9.0 percent were enrolled still at CCD in fall 1997. The overall completion, transfer and persistence rate of 39.6 percent (30.6 percent plus 9.0 percent) is comparable to the statewide community college average of 40.4 percent during the same time period. When transfers to other Colorado community colleges are considered the overall rate is 44.6 percent.

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: any matter over which the college is without authority to act; grades and other academic decisions unless there is an allegation that the decision was motivated by illegal discrimination; and disciplinary actions taken pursuant to BP 4-30.

Step 1 - Informal Grievance Procedure

Grievant is encouraged to resolve the issue with the respondent or his/her supervisor. In the case of grievances based on race, color, creed, national origin or ancestry, disability, age or gender, the grievant may first contact the college employee responsible for affirmative action to seek informal resolution of the issues. If the complaint alleges facts that might constitute a violation of 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 - 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 is a grievable offense. The matter will be closed if the situation is determined not grievable and the grievant will be notified of the reasons.
- B. If the matter is determined to be grievable, the vice president for Student 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 hear-

ing. 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 for Instruction or other person designated by the president shall perform the duties of the vice president for Student Services.





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 center 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 satisfies the general education portion of the requirements for an AA, an AS, or an Associate of General Studies (AGS) degree. All courses in the core curriculum are designed to transfer to baccalaureate, 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 mainstems 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 center 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's graduating class.

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

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

Other Graduation Policies

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

Catalog Requirements for Graduation

You may graduate under the catalog requirements listed for the academic year in which you were first enrolled. If you interrupt attendance for one year or more and then return, the catalog of the 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 center or program will determine the extent to which semester credit hours previously earned will apply to degree requirements listed in the most current college catalog.

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

Petitioning for Waivers and/or Program Substitutions

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

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

Please complete the request and have it approved by the program coordinator, the center 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 center in your area of study (major) and complete a program plan with your instructor or faculty advisor in the center.
3. Have all official transcripts from other college(s) evaluated.
4. Check with the Office of Admissions, Registration and Records to verify correct name changes to be printed on certificate or applied for degrees.
5. Students applying for Credit for Prior Learning must have all paperwork completed.
6. Students with a grade of "I" or "SP" on the unofficial transcripts must have grade changes into the Office of Admissions, Registration and Records two weeks after the semester ends.
7. Degree-seeking students must take the Academic Profile (AP) in the Testing Center, South Classroom Building, room 232.
8. All financial obligations to the college must be cleared before a diploma, certificate or a transcript will be released.



Non-Traditional Learning Programs

College-level courses are offered at times, days and locations convenient for people who cannot enroll in weekday 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 (approximately six to 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 CCD's 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 Center for Learning Outreach, South Classroom Building, room 305, 303-556-3598, or visit our web site at ccd.rightchoice.org.

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: Online 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 Online Courses section for complete listings.

Guided Independent Study: Telecourses

Televised credit classes (telecourses) offered through Channel 6 and/or 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 Telecourse 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.

CCC Online

CCD is part of a consortial group of community colleges in Colorado offering an Associate of Applied Science (AAS) degree in Business as well as other courses. All classes are offered online. Tuition is \$115 per credit hour for in-state and out-of-state students. Access information is available at: www.ccconline.org.

Business and Industry Services

Business and Industry Services meets our business community's training needs through credit and non-credit offerings at the work site or at CCD's Corporate 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 also is available for rental at extremely competitive rates. Call the Computer Information System 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, small business computerized databases and information networking. The SBDC is at 1445 Market St., Denver, CO 80202, 303-620-8076.

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, & CERTIFICATE-OF-TRAINING PROGRAMS

Definitions

Area of Emphasis

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

Capstone Courses

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

Core Curriculum

These 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 Hours in Parentheses

These are course options from which you may choose. These options are not individually included in the total credit hours listed below the inparenthese 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	Humanities	.HUM
Administrative Health Assistant	.AHA	Intergenerational Studies	.IGS
American Sign Language	.ASL	Japanese	.JPN
Anthropology	.ANT	Journalism	.JOU
Arabic	.ARB	Literature	.LIT
Art	.ART	Machine and CNC Tool Operator	.MTO
Astronomy	.AST	Magnetic Resonance Imaging	.MRI
Biology	.BIO	Massage Therapy	.MST
Business Administration	.BUS	Mathematics	.MAT
Business Technology	.BTE	Multimedia Design	.MUM
Business of Travel and Tourism	.BTT	Music	.MUS
Central Service Technician	.CST	Nursing	.NUR
Chemistry	.CHE	Nutrition	.NUT
Chinese	.CHN	Operating Room Nurse	.ORN
Communications	.COM	Paralegal	.PAR
Computer-aided Drafting	.CAD	Personal Growth and Development	.PGD
Computer Information Systems	.CIS	Philosophy	.PHI
Computer Science	.CSC	Photography	.PHO
Dental Hygiene	.DEH	Physics	.PHY
Drafting for Industry	.DRI	Political Science	.POS
Early Childhood Professions	.ECP	Postal Service	.PST
Economics	.ECO	Psychiatric Technician	.LPT
Education	.EDU	Psychology	.PSY
Electronics Technology	.ELT	Radiography	.RTR
English	.ENG	Reading	.REA
English as a Second Language	.ESL	Real Estate (Emily Griffith Opportunity School)	.REE
Fitness, Health and Recreation	.FHR	Recreational Assistant	.RAE
French	.FRE	Refrigeration, Heating and Air Conditioning (Commercial-Industrial)	.RAC
General Education Development	.GED	Science	.SCI
Geography	.GEO	Sociology	.SOC
Geology	.GEY	Spanish	.SPA
Gerontology	.GNT	Special Learning Support Program	.SLS
Golf Course Management	.GCM	Speech	.SPE
Graphic Arts	.GRA	Surgical Technology	.STE
Graphic Design	.GRD	Technical Health Assistant	.THA
Grief and Bereavement Specialist	.GBS	Theatre	.THE
Health and Wellness	.HWE	Welding and Fabrication	.WEF
Health and Wellness Management	.HWM		
Health Occupations	.HOC		
History	.HIS		
Human Services	.HSE		



ASSOCIATE OF ARTS DEGREE

University Parallel, Transfer Program

An Associate of Arts (AA) degree provides a learning foundation in communications, business, social sciences, 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 missing information, and interpreting graphic data and assessing the importance of the portrayed trends.

AA Degree Program Entry

Students must apply for entry to the AA degree program. Students are encouraged to apply to a program by the time they have completed 12 credits of 100-level 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 center 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 follow:
 - 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 14 areas of emphasis: Art, Arts Management, Behavioral Sciences, Business Administration, 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 AA Core	Credit Hours
I. English ENG 121, 122	6
II. Speech SPE 115	3
III. Mathematics (Select any 1 of the following) MAT 121, 125, 135, 201, 202	3-5

<p>IV. Physical & Biological Sciences (Select any 1 of the following) AST 101, 102 BIO 105, 111, 112 CHE 101, 102, 111, 112 GEY 111 PHY 105, 111, 112, 211, 212</p> <p>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</p> <p>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</p>	<p>4-5</p> <p>9</p> <p>9</p>	<p>GNT - all courses HIS - all courses HPL - all courses (limit to 4 credits) HUM - all courses JOU - all courses LIT - all courses MAT - 121 and higher MUS - 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</p>
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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 (Required in all emphases) HUM 285 Seminar in Critical Thinking or SCI 285 Critical Thinking	3
Total Hours	

Approved Electives for the AA Degree

ANT	-	all courses
ART	-	all courses
ASL	-	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

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 Hours

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

AA Degree Areas of Emphasis

ART EMPHASIS	Credit Hours
ART 122 Drawing II/Mixed Media (Prerequisite ART 121, Drawing I)	3
ART 131 Design I	3
ART 211 Painting I	3
ART 212 Painting II	3
Total	12

The following may be taken as Art electives:

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

ARTS MANAGEMENT EMPHASIS*		Credit Hours
ACC 121	Accounting Principles I	4
BUS 227	Human Resources Management	3
BUS 236	Principles of Marketing	3
BUS 290	Intro. to Arts Management	3
CIS 118	Intro. to PC Applications	4
ENG 290	Fund Raising & Grant Writing	3
BUS 297	Cooperative Education	3
Total		23

*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 EMPHASIS

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

Anthropology Emphasis		Credit Hours
ANT 101	Cultural Anthropology	(3)
ANT 107	Introduction to Archaeology	(3)
ANT 111	Physical Anthropology	(3)
ANT 203	Urban Socio-Anthropology	(3)
ANT 265	Violence & Culture	(3)

Gerontology Emphasis

GNT 201	Intro. to Gerontology	(3)
GNT 213	Psychology of Aging	(3)
GNT 214	Social Issues & Aging	(3)
GNT 215	Aging in a Diverse Society	(3)
GNT 221	Overview of Programs & Services	(3)
GNT 237	Death & Dying	(3)
GNT 295	Leadership Development	(3)

Psychology Emphasis

PSY 101	General Psychology I	(3)
PSY 102	General Psychology II	(3)
PSY 227	Psychology of Death & Dying	(3)
PSY 235	Psychology of Human Growth & Development	(3)
PSY 249	Abnormal Psychology	(3)
PSY 260	Psychology of Aging	(3)
PSY 265	Violence & Culture	(3)
PSY 295	Leadership Development	(3)

Sociology Emphasis

SOC 101	Intro. to Sociology	(3)
SOC 102	Intro. to Sociology II	(3)
SOC 103	Sociology of Health Care	(3)
SOC 203	Urban Socio-Anthropology	(3)

SOC 205	Sociology of Marriage & Family	(3)
SOC 215	Contemporary Social Problems	(3)
SOC 220	Race, Gender, Class, Culture	(3)
SOC 237	Death & Dying	(3)
SOC 260	Sociology of Deviance	(3)
SOC 265	Violence & Culture	(3)
Total		12

BUSINESS ADMINISTRATION EMPHASIS

This is an educational transfer agreement in Business Administration between Colorado public community colleges and Colorado public postsecondary education institutions. In accordance with Colorado Revised Statutes 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.

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

	Credit Hours	
ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 221	Legal Environment of Business	3
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3
BUS 226	Business Statistics	3
CIS 118	Intro. to PC Applications	4
*BUS 228	Principles of Management	3
*BUS 236	Principles of Marketing	3
Total		30

*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.

COMMUNICATIONS EMPHASIS		Credit Hours
COM 126	Intro. to Mass Media	3
	or	
JOU 106	Fundamentals of Reporting	
COM 251	Intro. to Television Production	3
COM 252	Videography/Editing	3
COM 255	Survey of Film	3
	Total	12

ECONOMICS EMPHASIS		Credit Hours
ECO 201	Principles of Macro Economics	3
ECO 202	Principles of Micro Economics	3
	Total	6

ENGLISH/LITERATURE EMPHASIS		Credit Hours
Select 4 courses, at least 2 of which are ENG:		12
ENG 131	Technical Writing I	(3)
ENG 221	Creative Writing I	(3)
ENG 222	Creative Writing II	(3)
LIT 115	Intro. to Literature	(3)
LIT 201	Masterpieces of Literature I	(3)
LIT 202	Masterpieces of Literature II	(3)
	Total	12

HISTORY EMPHASIS		Credit Hours
Select 4 courses from the following:		12
HIS 101	Western Civilization I	(3)
HIS 102	Western Civilization II	(3)
HIS 201	United States History I	(3)
HIS 202	United States History II	(3)
HIS 225	Colorado History	(3)
	Total	12

HUMANITIES/PHILOSOPHY EMPHASIS		Credit Hours
PHI 111	Intro. to Philosophy	3
*Select 1 course from the following:		3
HUM 121	Survey of Humanities I	(3)
HUM 122	Survey of Humanities II	(3)
HUM 123	Survey of Humanities III	(3)

Select 2 courses from the following:		6
PHI 112	Ethics	(3)
PHI 113	Logic	(3)
PHI 115	Myth & Religion	(3)
PHI 290	Topics in Philosophy	(3)
HUM 116	Intro. to African-American Studies	(3)
HUM 121	Survey of Humanities I	(3)
HUM 122	Survey of Humanities II	(3)
HUM 123	Survey of Humanities III	(3)
HUM 185	Cultural Diversity in the Humanities	(3)
HUM 225	Contemporary Chicano Culture	(3)
HUM 290	Topics in Humanities	(3)
	Total	12

MUSIC EMPHASIS		Credit Hours
MUS 101	Music Theory I	3
MUS 102	Music Theory II	3
MUS 142	Private Instruction (Voice)	1
Select 1 course from the following:		3
MUS 120	Music Appreciation	(3)
MUS 121	Survey of Music History I	(3)
MUS 122	Survey of Music History II	(3)
	Total	12

PHOTOGRAPHY EMPHASIS		Credit Hours
ART 151	Fundamentals of Photography	3
ART 153	Fundamentals of Color Photography	3
Select a total of 6 credits from the following:		6
ART 157	History of Photography	(3)
ART 154	Intermediate Color Photography	(3)
ART 152	Intermediate Black & White Photography	(3)
ART 253	View Camera Technique	(3)
ART 255	Points of View (Special Topics) (Workshop at selected locations)	(3)
	Total	12

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

SPEECH EMPHASIS		Credit Hours
SPE 125	Interpersonal Communication	3
SPE 205	Voice & Diction	3
SPE 216	Principles of Speech Communication II	3
SPE 219	Group Dynamics	3
	Total	12

THEATRE EMPHASIS		Credit Hours
THE 111	Acting I	3
THE 112	Acting II	3
Select 2 courses from the following:		6
THE 105	Intro. to Theatre Arts	(3)
THE 211	Development of the Theatre I	(3)
THE 212	Development of the Theatre II	(3)
	Total	12

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

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, mathematics, 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 missing information, and interpreting graphic data and assessing the importance of the portrayed trends.

AS Degree Program Entry

Students must apply for entry into the AS degree program. Students are encouraged to apply to a program by the time they have completed 12 credits of 100-level 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 follow:
 - 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 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 AS Core	Credit Hours
I. English ENG 121, 122	6
II. Speech SPE 115	3
III. Mathematics (Select any 1 of the following) MAT 121, 125, 201, 202	4-5
IV. Physical & Biological Sciences (Select any 2 of the following) AST 101, 102 BIO 111, 112 CHE 111, 112 GEY 111 PHY 111, 112, 211, 212	8-10
V. Social & Behavioral Sciences (Select 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
(Select 6 credit hours from 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	

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 Hours

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

AS Degree Areas of Emphasis

Students should complete the courses listed under the emphasis area if they plan to transfer to a four-year degree program in one of these emphasis areas, or plan to enter a professional school in an area listed. An associate degree can be earned without completing an emphasis area, and associate degree requirements may be fulfilled before all the courses listed under an area of emphasis have been completed. Any courses completed beyond those required for an associate degree can be applied to a four-year degree program. *Courses shown in italics 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 recommend that students speak frequently with the appropriate advisor in the Center for Health, Math and Science, South Classroom Building, room 306, while completing degree requirements.

BIOLOGY EMPHASIS		Credit Hours
BIO 111	<i>General College Biology I</i>	5
BIO 112	<i>General College Biology II</i>	5
CHE 111	<i>General College Chemistry I</i>	5
CHE 112	<i>General College Chemistry II</i>	5
MAT 121	<i>College Algebra</i>	4
MAT 122	<i>Trigonometry</i>	3
PHY 111	<i>Physics: Algebra-Based I</i>	5
PHY 112	<i>Physics: Algebra-Based II</i>	5
Total		37

CHEMISTRY EMPHASIS		Credit Hours
CHE 111	<i>General College Chemistry I</i>	5
CHE 112	<i>General College Chemistry II</i>	5
MAT 121	<i>College Algebra</i>	4
MAT 122	<i>Trigonometry</i>	3
MAT 201	<i>Calculus I</i>	5
MAT 202	<i>Calculus II</i>	5
PHY 111	<i>Physics: Algebra-Based I</i>	5
PHY 112	<i>Physics: Algebra-Based II</i>	5
Total		37

COMPUTER SCIENCE EMPHASIS

	Credit Hours
CIS 118 Intro. to PC Applications	4
CSC 160 C++ Programming I	3
MAT 121 College Algebra	4
MAT 122 Trigonometry	3
MAT 135 Intro. to Statistics	3
MAT 201 Calculus I	5
MAT 202 Calculus II	5
PHY 211 Physics: Calculus-Based I	5
PHY 212 Physics: Calculus-Based II	5
Total	37

Recommended

CHE 111 General College Chemistry I	5
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EARTH SCIENCE EMPHASIS

	Credit Hours
BIO 112 General College Biology II	5
GEY 111 Physical Geology	4
GEO 105 Geography	3
Select 1 course from the following:	3
BIO 118 Human Ecology & the Environment	(3)
GEO 200 Human Ecology	(3)
GEY 225 Planet Earth	(3)
Total	15

PRE-ENGINEERING EMPHASIS

	Credit Hours
MAT 201 Calculus I	5
MAT 202 Calculus II	5
MAT 203 Calculus III	4
CHE 111 General College Chemistry I	5
PHY 211 Physics: Calculus-Based I	5
PHY 212 Physics: Calculus-Based II	5
CSC 230 C++ Programming I	3
Total	32

MATHEMATICS EMPHASIS

	Credit Hours
MAT 121 College Algebra	4
MAT 122 Trigonometry	3
MAT 135 Intro. to Statistics	3
MAT 201 Calculus I	5
MAT 202 Calculus II	5
MAT 203 Calculus III	4
MAT 265 Ordinary Differential Equations	3
Total	27

MEDICAL CLUSTER

Pre-Dental Emphasis

	Credit Hours
BIO 111 General College Biology I	5
BIO 112 General College Biology II	5
CHE 111 General College Chemistry I	5
CHE 112 General College Chemistry II	5
MAT 121 College Algebra	4
MAT 122 Trigonometry	3
PHY 111 Physics: Algebra-Based I	5
PHY 112 Physics: Algebra-Based II	5
Total	37

Pre-Medical Emphasis

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

Select 2 courses from the following:

LIT 115 Intro. to Literature	(3)
LIT 201 Masterpieces of Literature I	(3)
LIT 202 Masterpieces of Literature II	(3)

Total	43
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Pre-Medical Technology Emphasis

	Credit Hours
BIO 201 Anatomy & Physiology I	4
BIO 205 Microbiology	4
CHE 111 General College Chemistry I	5
CHE 112 General College Chemistry II	5
MAT 121 College Algebra	4
MAT 122 Trigonometry	3
MAT 135 Intro. to Statistics	3
PHY 111 Physics: Algebra-Based I	5
PHY 112 Physics: Algebra-Based II	5

Total	38
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Pre-Pharmacy Emphasis

	Credit Hours
BIO 111 General College Biology I	5
BIO 112 General College Biology II	5
BIO 205 Microbiology	4
CHE 111 General College Chemistry I	5
CHE 112 General College Chemistry II	5
MAT 121 College Algebra	4
MAT 122 Trigonometry	3
MAT 201 Calculus I	5

Select 2 courses from the following:

ANT 101 Cultural Anthropology	(3)
HIS 101 Western Civilization I	(3)
HIS 102 Western Civilization II	(3)
HIS 201 United States History I	(3)
HIS 202 United States History II	(3)
PSY 101 General Psychology I	(3)
PSY 102 General Psychology II	(3)
SOC 101 Intro. to Sociology I	(3)
SOC 102 Intro. to Sociology II	(3)

Total	42
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Pre-Physical Therapy Emphasis

	Credit Hours
BIO 111 General College Biology I	5
BIO 112 General College Biology II	5
BIO 201 Anatomy & Physiology I	4
CHE 111 General College Chemistry I	5
CHE 112 General College Chemistry II	5
MAT 121 College Algebra	4
MAT 122 Trigonometry	3

MAT 135	Intro. to Statistics	3
PHY 111	Physics: Algebra-Based I	5
PHY 112	Physics: Algebra-Based II	5

Select 2 courses from the following:		6
PSY 101	General Psychology I	(3)
PSY 102	General Psychology II	(3)
PSY 235	Psychology of Human Growth & Development	(3)
PSY 249	Abnormal Psychology	(3)
Total		50

Pre-Physician Assistant Emphasis		Credit Hours
BIO 111	General College Biology I	5
BIO 112	General College Biology II	5
CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
MAT 121	College Algebra	4
MAT 135	Intro. to Statistics	3
PSY 101	General Psychology I	3
PSY 102	General Psychology II	3
Total		33

Pre-Veterinary Science Emphasis		Credit Hours
BIO 111	General College Biology I	5
BIO 112	General College Biology II	5
CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
MAT 121	College Algebra	4
MAT 122	Trigonometry	3
MAT 135	Intro. to Statistics	3
PHY 111	Physics: Algebra-Based I	5
Total		35

PHYSICS EMPHASIS		Credit Hours
MAT 121	College Algebra	4
MAT 122	Trigonometry	3
MAT 201	Calculus I	5
MAT 202	Calculus II	5
PHY 211	Physics: Calculus-Based I	5
PHY 212	Physics: Calculus-Based II	5
Total		20

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 center offices. Entry requirements are the same as for the matching AAS degree.

Program Admission Requirements

See individual articulated degree options.



Credit Hours

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

AGS Degree Program Requirements

All AGS degrees require the following:

	Credit Hours
General Education Core Courses	34-37
Electives or Courses Prescribed 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, 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 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, 102 SOC 101, 102	9
VI. Humanities (Select 9 credit hours from a minimum of 2 disciplines. Many four-year schools prefer a concentration of 2 classes in same prefix) ART 110, 111, 112 HUM 121, 122, 123 Any foreign language 111 or higher LIT 115, 201, 202 MUS 120, 121, 122 PHI 111, 112, 113 THE 105, 211, 212	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

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

ASSOCIATE OF APPLIED SCIENCE DEGREE

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

While not intended for transfer to a baccalaureate degree program, all AAS degrees have limited transferability. In each AAS program, some of the courses are articulated with and accepted by at least one specific baccalaureate program. Talk with an 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 objectives. These performance objectives are given to students during the advising process.

Performance objectives are collectively bound and published for general distribution and constitute the college's guarantee to the employer. Copies are available in center and counseling offices.

AAS Degree Program Entry

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 program offices.

AAS Degree Program Requirements

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

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	
PHY 105, 111, 112, 211, 212	
*Nursing requires BIO 201, 202 and 205.	
*Health Related programs 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	
Total	60-66

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

Credit Hours

Credits are the hours of credit awarded to the course. An associate degree requires a minimum of 60 credits. Credit hours in parenthesis, for example (3), are options from which students may choose and are not individually included in the total credit hours listed below the numbers in parentheses. An average 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.
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.

Performance objectives are collectively bound and published for general distribution and constitute the college's guarantee to the employer. Copies are available in program and counseling offices.

Certificate Program Entry Requirements

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

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 follow:
 - 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 an Accounting certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics (or MAT 121 or 124 or 125)	3-4
SPE 115	Principles of Speech	3

Major Requirements

ACC 121	Accounting Principles I (Corequisite ACC 110 or Level 3 math placement)	4
ACC 122	Accounting Principles II	4
ACC 110	Business Math	3
ACC 111	Individual Income Tax	3
ACC 113	Computerized Accounting	4
ACC 115	Computerized Payroll	2
CIS 155	Spreadsheet Concepts or	3
CIS 150	Intro. to PC Spreadsheets	(3)
ACC 211	Intermediate Accounting (Capstone)	3
ACC 226	Cost Accounting	3
BTE	Keyboarding Elective	1-5
BUS 217	Business Communications	3

Select 11 credits with advisor approval:		11
ACC 101	Fundamentals of Accounting (Must be taken prior to ACC 121 to be counted for graduation.)	(3)
ACC 215	Accounting Systems	(3)
ACC 297	Cooperative Education (Prerequisite ACC 122)	(3)
CIS 126	Microsoft Word	(3)
BUS 115	Intro. to Business	(3)
BUS 221	Legal Environment of Business	(3)
BUS 228	Principles of Management	(3)
CIS 130	Intro. to the Internet	(3)
CIS 135	Graphics Technology	(2)
CIS 140	Intro. to PC Databases	(2)
CIS 156	Advanced Spreadsheet Concepts	(3)
PSY 115	Psychology of Adjustment	(2)
Total		60-65

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 follow:
 - 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.

		Credit Hours
ACC 110	Business Math	3
ACC 101	Fundamentals of Accounting or	3-4
ACC 121	Accounting Principles I	
ACC 121	Accounting Principles I or	4
ACC 122	Accounting Principles II	
ACC 113	Computerized Accounting	4
ACC 115	Computerized Payroll	2
CIS 118	Intro. to PC Applications	4
CIS 150	Intro. to PC Spreadsheets or	2-3
CIS 155	Spreadsheet Concepts	
BUS 217	Business Communications	3
BTE	Keyboarding Elective	1-5
BTE 120	Records Management	4
Total		30-36

Certificate in Accounting

Accounting Clerk

This certificate is a 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.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

		Credit Hours
ACC 110	Business Math	3
ACC 101	Fundamentals of Accounting or	3-4
ACC 121	Accounting Principles I	
CIS 118	Intro. to PC Applications	4
BUS 115	Intro. to Business	3
BTE 100	Intro. to Keyboarding	3
Total		16-17

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 follow:
 - 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.

		Credit Hours
ACC 110	Business Math	3
ACC 113	Computerized Accounting	3
ACC 115	Computerized Payroll	2
ACC 121	Accounting Principles I (Corequisite ACC 110 or Level 3 math placement)	4
ACC 122	Accounting Principles II	4
CIS 118	Intro. to PC Applications	4
CIS 155	Spreadsheet Concepts	3

Select 2 courses with advisor approval:	6	ACC 121	Accounting Principles I (Capstone)	4	
CIS 126	Microsoft Word	(3)	BTE 102	Basic Keyboarding Applications	3
BUS 115	Intro. to Business	(3)	CIS 130	Intro. to the Internet	3
CIS 145	Database Concepts	(3)	CIS 155	Spreadsheet Concepts	3
CIS 156	Advanced Spreadsheet Concepts	(3)	PSY 115	Psychology of Adjustment	2
Total		29	Total		26

Certificate in Accounting**Billing Clerk****CCD WEST**

Billing Clerk is a program designed for completion in one, 15-week semester. It prepares students with the job-entry skills necessary to perform annual and computerized billing activities. Students gain skills in computerized billing applications, and database and spreadsheet applications. Graduates are prepared for jobs as billing clerks and general office clerks.

All Billing Clerk certificate program credits apply toward the Bookkeeper 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.

ACC 101	Fundamentals of Accounting	3
ACC 110	Business Math	3
ACC 116	Computerized Billing (Capstone)	3
BTE 102	Basic Keyboarding Applications	3
CIS 130	Intro. to the Internet	3
CIS 155	Spreadsheet Concepts	3
Total		18

Certificate in Accounting**Bookkeeper****CCD NORTH, CCD EAST, CCD WEST**

Bookkeeper is a 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, billing applications and spreadsheet applications, and use of e-mail, the Internet and the World Wide Web. Graduates are prepared for jobs as bookkeepers, accounts payable and/or receivable clerks, payroll clerks and billing clerks.

All Bookkeeper certificate program credits apply toward the 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.

		Credit Hours
ACC 101	Fundamentals of Accounting	3
ACC 110	Business Math	3
ACC 115	Computerized Payroll	2
ACC 116	Computerized Billing	3

Certificate in Accounting**Computerized Accounting Technician****CCD NORTH, CCD EAST, CCD WEST**

Computerized Accounting Technician is a 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, payroll and billing; database and spreadsheet applications for personal computers; and use of e-mail, the Internet and the World Wide Web. Graduates are prepared for jobs as full-charge bookkeepers, computerized accounting clerks, computerized payroll clerks and general office clerks.

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

		Credit Hours
ACC 101	Fundamentals of Accounting	3
ACC 110	Business Math	3
ACC 113	Computerized Accounting (Capstone)	4
ACC 115	Computerized Payroll	2
ACC 116	Computerized Billing	3
ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BTE 102	Basic Keyboarding Applications	3
CIS 118	Intro. to PC Applications	4
CIS 130	Intro. to the Internet, or	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
PSY 115	Psychology of Adjustment	2
Total		41

Certificate in Accounting**Payroll Clerk****CCD NORTH, CCD EAST, CCD WEST**

Payroll Clerk is a 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, spreadsheet applications, and use of e-mail, the Internet and the World Wide Web.

Graduates are prepared for jobs as payroll clerks and general office clerks.

All Payroll Clerk certificate program credits apply toward the 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.

		Credit Hours
ACC 101	Fundamentals of Accounting	3
ACC 110	Business Math	3
ACC 115	Computerized Payroll (Capstone)	2
BTE 102	Basic Keyboarding Applications	3
CIS 130	Intro. to the Internet	3
CIS 155	Spreadsheet Concepts	3
	Total	17

Anthropology

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

(See AA Degree, page 36)

Art

Associate of Arts Degree with an Art Emphasis

(See AA Degree, page 36)

Arts Management

Associate of Arts Degree with an Arts Management Emphasis

(See AA Degree, page 36)

Behavioral Sciences

Associate of Arts Degree with a Behavioral Sciences Emphasis

- Anthropology Emphasis
- Gerontology Emphasis
- Psychology Emphasis
- Sociology Emphasis

(See AA Degree, page 38)

Biology

Associate of Science Degree with a Biology Emphasis

(See AS Degree, page 40)

Business Administration

Associate of Arts Degree with a Business Administration Emphasis

(See AA Degree, page 36)

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 and Capstone course.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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	Credit Hours
CIS 118 Intro. to PC Applications	4
ECO 201 Principles of Macro Economics	3
ENG 121 English Composition I	3
MAT 103, 121, 124 or 125	3-4
SPE 115 Principles of Speech	3

Core Requirements

ACC 121 Accounting Principles I	4
ACC 122 Accounting Principles II	4
BUS 115 Intro. to Business	3
BUS 217 Business Communications	3
BUS 221 Legal Environment of Business	3
BUS 226 Business Statistics	3
BUS 227 Human Resources Management	3
BUS 228 Principles of Management	3
BUS 230 Principles of Finance	3
BUS 236 Principles of Marketing	3
BUS 285 Business Policy and Ethics (Capstone)	3

General Electives (with advisor approval)

BUS 297 Cooperative Education	3
CIS 125 WordPerfect	3
or	
CIS 126 Microsoft Word	
CIS 155 Spreadsheet Concepts	3
ECO 202 Principles of Micro Economics	3
Elective	3

Total 66-67

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 Center for Business and Corporate Development, 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 follow:
 - 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.

	Credit Hours
ACC 101 Fundamentals of Accounting	3
BUS 115 Intro. to Business	3
BUS 205 Small Business Management	3
BUS 217 Business Communications	3
BUS 221 Legal Environment of Business	3
BUS 227 Human Resources Management	3
BUS 230 Principles of Finance	3
BUS 231 Principles of Sales	3
CIS 118 Intro. to PC Applications	4
ECO 202 Principles of Micro Economics	3
BUS 185 Business Certificate (Capstone)	1
Total	32

**Associate of Applied Science Degree in
Business Administration
Finance Emphasis**

	Credit Hours
General Education Requirements	
CIS 118 Intro. to PC Applications	4
ECO 201 Principles of Macro Economics	3
ENG 121 English Composition I	3
MAT 103, 121, 124 or 125	3-4
SPE 115 Principles of Speech	3

Core Requirements

ACC 121 Accounting Principles I	4
ACC 122 Accounting Principles II	4
BUS 115 Intro. to Business	3
BUS 217 Business Communications	3
BUS 221 Legal Environment of Business	3
BUS 226 Business Statistics	3
BUS 227 Human Resources Management	3
BUS 228 Principles of Management	3
BUS 230 Principles of Finance	3
BUS 236 Principles of Marketing	3
BUS 285 Business Policy and Ethics (Capstone)	3

Choose one of the following two options:

GENERAL FINANCE

ACC 215 Accounting Systems	3
BUS 297 Cooperative Education	3
CIS 155 Spreadsheet Concepts	3
CIS 156 Advanced Spreadsheet Concepts	3
ECO 202 Principles of Micro Economics	3
Total	66-67

COMMERCIAL CREDIT

BUS 250 Business of Credit Principles	3
BUS 297 Cooperative Education	3
CIS 155 Spreadsheet Concepts	3
ECO 202 Principles of Micro Economics	3
Elective approved by business advisor	3
Total	66-67

**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 follow:
 - 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.

	Credit Hours
ACC 121 Accounting Principles I	4
BUS 115 Intro. to Business	3
BUS 217 Business Communications	3
BUS 221 Legal Environment of Business	3
BUS 226 Business Statistics	3
BUS 227 Human Resources Management	3
BUS 230 Principles of Finance	3
BUS 250 Business of Credit Principles	3

CIS 155	Spreadsheet Concepts	3
BUS 185	Business Certificate (Capstone)	1
	Total	29

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 Center for Business and Corporate Development, 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		Credit Hours
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
MAT 103, 121, 124 or 125		3-4
SPE 115	Principles of Speech	3

Core Requirements

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3
BUS 221	Legal Environment of Business	3
BUS 226	Business Statistics	3
BUS 227	Human Resources Management	3
BUS 228	Principles of Management	3
BUS 230	Principles of Finance	3
BUS 236	Principles of Marketing	3
BUS 285	Business Policy and Ethics (Capstone)	3

Choose one of the following four options:	15
General Insurance	
Chartered Property Casualty Underwriter (CPCU)	
Chartered Life Underwriter (CLU)	
Life Office Management Associate (LOMA)	
Total	66-67

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 Center for Business and Corporate Development, 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		Credit Hours
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
MAT 103, 121, 124 or 125		3-4
SPE 115	Principles of Speech	3

Core Requirements

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3
BUS 221	Legal Environment of Business	3
BUS 226	Business Statistics	3
BUS 227	Human Resources Management	3
BUS 228	Principles of Management	3
BUS 230	Principles of Finance	3
BUS 236	Principles of Marketing	3
BUS 285	Business Policy and Ethics (Capstone)	3

Major Requirements

BUS 210	International Business	3
BUS 211	International Marketing	3
BUS 215	International Business Environments	3
POS 205	International Relations	3
Emily Griffith courses or approved elective		3
Total		66-67

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 follow:
 - 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.

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

Associate of Applied Science Degree in Business Administration Management Emphasis

		Credit Hours
General Education Requirements		
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
MAT 103, 121, 124 or 125		3-4
SPE 115	Principles of Speech	3

Core Requirements

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3
BUS 221	Legal Environment of Business	3
BUS 226	Business Statistics	3
BUS 227	Human Resources Management	3
BUS 228	Principles of Management	3
BUS 230	Principles of Finance	3
BUS 236	Principles of Marketing	3
BUS 285	Business Policy and Ethics (Capstone)	3

Choose one of the following two options:

GENERAL MANAGEMENT

BUS 205	Small Business Management	3
BUS 229	Motivation and Management	3
BUS 297	Cooperative Education	3
	Emily Griffith courses or approved elective	3

Total 63-64

SUPERMARKET MANAGEMENT

BUS 170	Supermarket Loss Prevention	3
BUS 229	Motivation & Management	3
BUS 235	Retail Marketing and Management (Capstone)	3
BUS 270	Business Ethics	3
ECO 118	Labor Economics	3

Total 66-67

Associate of Applied Science Degree in Business Administration Marketing Emphasis

		Credit Hours
General Education Requirements		
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
MAT 103, 121, 124 or 125		3-4
SPE 115	Principles of Speech	3

Core Requirements

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3
BUS 221	Legal Environment of Business	3
BUS 226	Business Statistics	3
BUS 227	Human Resources Management	3
BUS 228	Principles of Management	3
BUS 230	Principles of Finance	3
BUS 236	Principles of Marketing	3
BUS 285	Business Policy and Ethics (Capstone)	3

Choose one of the following two options:

CUSTOMER SERVICE

BUS 237	Customer Service	3
BUS 238	Customer Service II	3
BUS 297	Cooperative Education	3

Select an additional 6 credit hours of BUS electives with BUS advisor approval.

Total 66-67

SALES AND PROMOTION

BUS 211	International Marketing	3
BUS 231	Principles of Sales	3
BUS 235	Retail Marketing and Management	3
BUS 239	Advertising and Promotion	3
BUS 297	Cooperative Education	3

Total 66-67



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 follow:
 - 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.

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

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 Center for Business and Corporate Development, 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.

General Education Requirements	Credit Hours
CIS 118 Intro. to PC Applications	4
ECO 201 Principles of Macro Economics	3
ENG 121 English Composition I	3
MAT 103, 121, 124 or 125	3-4
SPE 115 Principles of Speech	3

Core Requirements

ACC 121 Accounting Principles I	4
ACC 122 Accounting Principles II	4
BUS 115 Intro. to Business	3
BUS 217 Business Communications	3
BUS 221 Legal Environment of Business	3
BUS 226 Business Statistics	3
BUS 227 Human Resources Management	3
BUS 228 Principles of Management	3
BUS 230 Principles of Finance	3
BUS 236 Principles of Marketing	3
BUS 285 Business Policy and Ethics (Capstone)	3

Choose one of the following two options:

REAL ESTATE APPRAISER

BUS Elective	3
BUS 297 Cooperative Education	3
Total	57-58

REAL ESTATE BROKER

BUS 297 Cooperative Education	3
Total	54-55

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 follow:
 - 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.

	Credit Hours
ACC 121 Accounting Principles I	4
BUS 115 Intro. to Business	3
BUS 170 Supermarket Loss Prevention	3
BUS 221 Legal Environment of Business Law	3
BUS 227 Human Resources Management	3
BUS 228 Principles of Management	3
BUS 229 Motivation & Management	3
BUS 235 Retail Marketing and Management (Capstone)	3
BUS 236 Principles of Marketing	3
BUS 270 Business Ethics	3
ECO 118 Labor Economics	3
BUS 185 Business Certificate (Capstone)	1
Total	35

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 follow:
 - 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		Credit Hours
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
MAT 103, 121, 124 or 125		3-4
SPE 115	Principles of Speech	3

Major Requirements

BTT 110	Intro. to Travel	3
BTT 111	Travel Geography I	3
BTT 112	Travel Geography II	3
BTT 113	Selecting & Selling Cruises	3
BTT 210	Domestic Ticketing	3
BTT 211	International Travel	3
BTT 212	Computer Reservations I	3
BTT 213	Computer Reservations II	3

Business Requirements:

ACC 121	Accounting Principles I	4
BUS 115	Intro. to Business	3
BUS 215	International Business Environments	3
BUS 231	Principles of Sales	3
BUS 236	Principles of Marketing	3

Foreign Language Requirements:

Elective	Foreign Language 111 or 112	5
Elective	Foreign Language 112 or 211	3-5
	Total	64-67

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 follow:
 - 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.

		Credit Hours
BTT 110	Principles of Travel Administration	3
BTT 111	Travel Geography I	3
BTT 112	Travel Geography II	3
BTT 113	Selecting & Selling Cruises	3
BTT 210	Domestic Ticketing	3
BTT 211	International Travel	3
BTT 212	Computer Reservations I	3
BTT 213	Computer Reservations II (Capstone)	3
	Total	

Business Technology

Associate of Applied Science Degree in Business Technology

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
Administrative Assistant Emphasis
CCD WEST

Administrative Assistant is a program designed to prepare students to use and understand personal computers; use e-mail, the Internet and the World Wide Web; use office software that includes word processing, database, spreadsheet, graphic presentation and Web page development applications; write business letters; and input data. Graduates are prepared to enter positions as word processors, office assistants, office specialists, administrative assistants, receptionists and data entry clerks.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 2a or completion of MAT 056 with a C or better.
2. Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3
Select either SPE 115, or both BTE 139 and BUS 217:		0-3
SPE 115	Principles of Speech or both	(3)
BTE 139	Professional Development (Speech Intensive) and	(0)
BUS 217	Business Communications (Speech Intensive)	(0)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
Core Requirements		
BTE 101	Keyboarding I	4-5
BTE 104	Keyboarding SpeedBuilding	3-4
BTE 288	Model Office	3
BUS 217	Business Communications (Speech Intensive)	3
CIS 125	WordPerfect or	3
CIS 126	Microsoft Word	
CIS 139	Integration Software	3
CIS 155	Spreadsheet Concepts	3
Major Requirements		
BTE 160	Data Entry I	3
CIS 130	Intro. to the Internet	3
CIS 132	Intermediate Web Authoring	3

CIS 135	Graphics Technology	2
CIS 145	Database Concepts	3
Select an additional 12 or more credit hours of courses with BTE advisor approval.		12
Total		60-65

Certificate in Business Technology
Administrative Assistant

CCD WEST

Administrative Assistant is a program designed for completion in two, 17-week semesters. Students are prepared to use and understand personal computers; use e-mail, the Internet and the World Wide Web; use office software that includes word processing, database, spreadsheet, graphic presentation and Web page development applications; write business letters; and input data. Graduates are prepared to enter positions as word processors, office assistants, office specialists, administrative assistants, receptionists and data entry clerks.

All Administrative Assistant certificate program credits apply toward the requirements of the AAS degree in Business Technology, Administrative Assistant.

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

		Credit Hours
BTE 101	Keyboarding I	4
BTE 104	Keyboarding SpeedBuilding	3
BTE 160	Data Entry I	3
BTE 288	Model Office	3
BUS 217	Business Communications	3
CIS 118	Intro. to PC Applications	4
CIS 126	Microsoft Word	3
CIS 130	Intro. to the Internet	3
CIS 132	Intro. to Web Authoring	3
CIS 135	Graphics Technology	2
CIS 139	Integration Software (Capstone)	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
PSY 115	Psychology of Adjustment	2
Total		42

Certificate in Business Technology
Data Entry Clerk

CCD NORTH, CCD EAST, CCD WEST

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

All Data Entry Clerk certificate program credits apply toward the Administrative Assistant certificate program requirements.

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

		Credit Hours
BTE 101	Keyboarding I	4
BTE 104	Keyboarding SpeedBuilding	3
BTE 160	Data Entry I (Capstone)	3
BTE 288	Model Office	3
CIS 126	Microsoft Word	3
Total		16

Certificate in Business Technology General Office Clerk

CCD NORTH, CCD EAST, CCD WEST

General Office Clerk is a program designed for completion in one, 15-week semester. It prepares students to perform general office functions; use and understand personal computers; use word processing applications; and use e-mail, the Internet and the World Wide Web. Graduates are prepared to enter positions as receptionists and office clerks.

All General Office Clerk certificate program credits apply toward the Administrative Assistant certificate program requirements.

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

		Credit Hours
BTE 101	Keyboarding I	4
BTE 288	Model Office	3
CIS 118	Intro. to PC Applications	4
CIS 126	Microsoft Word	3
CIS 130	Intro. to the Internet	3
Total		17

Certificate in Business Technology Microsoft Office Specialist

CCD NORTH, CCD EAST, CCD WEST

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

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

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

		Credit Hours
BTE 101	Keyboarding I	4
CIS 118	Intro. to PC Applications	4
CIS 126	Microsoft Word	3
CIS 130	Intro. to the Internet	3
CIS 131	Intro. to Web Authoring	3
CIS 135	Graphics Technology	2
CIS 139	Integration Software (Capstone)	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
PSY 115	Psychology of Adjustment	2
Total		

Associate of Applied Science Degree in Business Technology Legal Administrative Assistant CCD AURARIA

The Legal Administrative Assistant emphasis is a program designed to prepare students for entry-level positions in an attorney's office, law firm, or legal aid organization. The student will be trained to understand and use legal terminology, gain knowledge of business law, write business letters, maintain a filing system of law cases and legal records, use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web, and use office software that includes word processing, spreadsheets, and software integration applications. Graduates are prepared to enter positions as legal administrative assistants with both private-sector and public sector law offices, and nonprofit legal aid organizations.

Program Admission Requirements

- I. Assessment scores or course equivalents as follow:
 - 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 2a or completion of MAT 056 with a C or better.

		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3
Select either	SPE 115, or both BTE 139 and BUS 217:	0-3
SPE 115	Principles of Speech or both	(3)
BTE 139	Professional Development (Speech Intensive) and	(0)
BUS 217	Business Communications (Speech Intensive)	(0)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)

Core Requirements			General Education Requirements		Credit Hours
BTE 101	Keyboarding I	4-5	CIS 118	Intro. to PC Applications	4
BTE 104	Keyboarding SpeedBuilding	3-4	ENG 121	English Composition I	3
BTE 288	Model Office	3	MAT 103	Contemporary College Mathematics	3
BUS 217	Business Communications (Speech Intensive)	3	Select either SPE 115, or both BTE 139 and BUS 217:		0-3
CIS 125	WordPerfect or	3	SPE 115	Principles of Speech or both	(3)
CIS 126	Microsoft Word	(3)	BTE 139	Professional Development (Speech Intensive)	(0)
CIS 139	Integration Software	3	and		
CIS 155	Spreadsheet Concepts	3	BUS 217	Business Communications (Speech Intensive)	(0)
Major Requirements			Select 1 course from the following:		2-3
BTE 120	Records Management	4	ECO 201	Principles of Macro Economics	(3)
BTE 121	Alpha Speedwriting I	4	POS 105	Intro. to Political Science	(3)
BTE 133	Word Processing Communications & Applications	3	PSY 115	Psychology of Adjustment	(2)
BTE 139	Professional Development (Speech Intensive)	3	Core Requirements		
BTE 209	Legal Terminology	2	BTE 101	Keyboarding I	4-5
BTE 230	Machine Transcription	5	BTE 104	Keyboarding SpeedBuilding	3-4
BTE 297	Cooperative Education	3	BTE 288	Model Office	3
BUS 221	Legal Environment of Business	3	BUS 217	Business Communications (Speech Intensive)	3
PAR 124	Legal Research	3	CIS 125	WordPerfect or	3
Total		64-70	CIS 126	Microsoft Word	(3)
			CIS 139	Integration Software	3
			CIS 155	Spreadsheet Concepts	3

**Associate of Applied Science Degree in
Business Technology
Medical Administrative Assistant Emphasis
CCD AURARIA**

The Medical Administrative Assistant emphasis is a program designed to prepare students for entry-level positions in a doctor's office, medical clinic, or hospital. The student will be trained to understand and use medical terminology, write business letters, maintain medical records, code and submit medical insurance claims, use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web, and use office software that includes word processing, spreadsheets, and software integration applications. Graduates are prepared to enter positions as medical administrative assistants with private and public medical offices, clinics and hospitals.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.
2. Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

Major Requirements			Total
ACC 101	Fundamentals of Accounting	3	69-75
AHA 155	The Medical Manager	3	
AHA 156	Basic Coding	2	
BTE 120	Records Management	4	
BTE 121	Alpha Speedwriting I	4	
BTE 133	Word Processing Communications & Applications	3	
BTE 139	Professional Development (Speech Intensive)	3	
BTE 230	Machine Transcription	5	
BTE 297	Cooperative Education	3	
CIS 130	Intro. to the Internet	3	
HWE 100	Medical Terminology I	2	

**Certificate in Business Technology
Medical Administrative Assistant
CCD AURARIA**

Designed to prepare students for jobs such as medical records clerks, medical secretaries, etc.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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		Credit Hours
ACC 101	Fundamentals of Accounting	3-4
	or	
ACC 121	Accounting Principles I	
BTE 101	Keyboarding I	5
	or	
BTE 202	Keyboarding II	
BTE 104	Keyboarding SpeedBuilding	4
BTE 108	Business Machines: Ten Key by Touch	2
BTE 120	Records Management	4
BTE 133	Word Processing Communications & Applications	3
BTE 139	Professional Development	3
CIS 125	WordPerfect	3
	or	
CIS 126	Microsoft Word	
BTE 230	Machine Transcription	5
BTE 288	Model Office	3
AHA 155	The Medical Manager	3
HWE 100	Medical Terminology I	2
BTE 297	Cooperative Education (Capstone)	3
	Total	43-44

Associate of Applied Science Degree in Business Technology

Office Manager Emphasis

CCD AURARIA

The Office Manager emphasis is a program designed to prepare students for entry-level to mid-level office administrative and supervisory positions. The student will be trained to write business letters, maintain records, manage projects, administer bookkeeping data, supervise a clerical staff, coordinate events, use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web, and use office software that includes word processing, spreadsheets, and software integration applications. Graduates are prepared to enter positions as office managers or program assistants with business/industry, government agencies and nonprofit organizations.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 2a or completion of MAT 056 with a C or better.
2. Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3

Select either	SPE 115, or both BTE 139 and BUS 217:	0-3
SPE 115	Principles of Speech	(3)
	or both	
BTE 139	Professional Development (Speech Intensive)	(0)
	and	
BUS 217	Business Communications (Speech Intensive)	(0)
	Select 1 course from the following:	2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)

Core Requirements

BTE 101	Keyboarding I	4-5
BTE 104	Keyboarding SpeedBuilding	3-4
BTE 288	Model Office	3
BUS 217	Business Communications (Speech Intensive)	3
CIS 125	WordPerfect	3
	or	
CIS 126	Microsoft Word	
CIS 139	Integration Software	3
CIS 155	Spreadsheet Concepts	3

Major Requirements

ACC 101	Fundamentals of Accounting	3
BTE 108	Business Machines: Ten Key by Touch	2
BTE 120	Records Management	4
BTE 133	Word Processing Communications & Applications	3
BTE 139	Professional Development (Speech Intensive)	3
BTE 297	Cooperative Education (Capstone)	3
BUS 115	Intro. to Business	3
BUS 228	Principles of Management	3
CIS 130	Intro. to the Internet	3
	Total	61-67

Associate of Applied Science Degree in Business Technology

Secretarial/Computer Applications Emphasis

CCD AURARIA

The Secretarial/Computer Applications emphasis is a program designed to prepare students for entry-level positions in a general office environment characterized by technological change. The student will be trained to administer office records, write business letters, take dictation, use and understand personal computers, use e-mail, conduct basic searches on the Internet and the World Wide Web, and use office software that includes word processing, spreadsheets, database management, and software integration applications. Graduates are pre-

pared to enter positions as secretarial/computer applications assistants with business/industry public-sector agencies, and nonprofit organizations.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 2a or completion of MAT 056 with a C or better.
2. Or, in place of the above requirements, have completed the Administrative Assistant certificate program.

General Education Requirements Credit Hours

CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3

Select either SPE 115, or both BTE 139 and BUS 217: 0-3

SPE 115 Principles of Speech (3)

BTE 139 Professional Development (Speech Intensive) and (0)

BUS 217 Business Communications (Speech Intensive) (0)

Select 1 course from the following: 2-3

ECO 201 Principles of Macro Economics (3)

POS 105 Intro. to Political Science (3)

PSY 115 Psychology of Adjustment (2)

Core Requirements

BTE 101 Keyboarding I 4-5

BTE 104 Keyboarding SpeedBuilding 3-4

BTE 288 Model Office 3

BUS 217 Business Communications (Speech Intensive) 3

CIS 125 WordPerfect or 3

CIS 126 Microsoft Word

CIS 139 Integration Software 3

CIS 155 Spreadsheet Concepts 3

Major Requirements

BTE 108 Business Machines: Ten Key by Touch 2

BTE 120 Records Management 4

BTE 121 Alpha Speedwriting I 4

BTE 133 Word Processing Communications & Applications 3

BTE 139 Professional Development 3

BTE 297 Cooperative Education 3

CIS 130 Intro. to the Internet 3

CIS 145 Database Concepts 3

Total 59-65

Certificate in Business Technology

Customer Service Specialist

CCD NORTH, CCD EAST, CCD WEST

Customer Service Specialist is a 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 Customer Service Specialist certificate program credits apply toward the 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.

	Credit Hours
BTE 102 Basic Keyboarding Applications	3
BTE 103 Typing Development I	2
BTE 160 Data Entry I	3
or	
BTE 297 Cooperative Work Experience	(3)
BUS 236 Principles of Marketing	3
BUS 237 Customer Service (Capstone)	3
CIS 118 Intro. to PC Applications	4
CIS 126 Microsoft Word	3
CIS 140 Intro. to PC Databases	2
PSY 115 Psychology of Adjustment	2
Total	25

Certificate in Business Technology

Customer Service Representative

CCD NORTH, CCD EAST, CCD WEST

Customer Service Representative is a 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 Customer Service Representative certificate program credits apply toward the 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.

	Credit Hours
BTE 102 Basic Keyboarding Applications	3
BTE 103 Typing Development I	2
BUS 236 Principles of Marketing	3
BUS 237 Customer Service (Capstone)	3
CIS 118 Intro. to PC Applications	4
CIS 126 Microsoft Word	3
Total	18

Certificate in Business Technology

Executive Assistant

CCD AURARIA

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 follow:
 - 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		Credit Hours
BTE 139	Professional Development	3
CIS 155	Spreadsheet Concepts	3
BUS 217	Business Communications	3
BUS 228	Principles of Management	3
CIS 138	Business Applications on the World Wide Web	3
CIS 139	Integration Software	3
Total		18

Certificate in Business Technology

General Clerical

CCD AURARIA

This certificate is 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 follow:
 - 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)		Credit Hours
BTE 104	Keyboarding SpeedBuilding	4
BTE 108	Business Machines: Ten Key by Touch	2
BTE 120	Records Management	4
CIS 125	WordPerfect	3
or		
CIS 126	Microsoft Word	
BTE 297	Cooperative Education (Capstone)	3
Total		16

Option II - 2 Semesters

(with permission of BTE faculty advisor)

ACC 101	Fundamentals of Accounting	3-4
or		
ACC 121	Accounting Principles I	
BTE 101	Keyboarding I	5
or		
BTE 202	Keyboarding II	
BTE 104	Keyboarding SpeedBuilding	4
BTE 108	Business Machines: Ten Key by Touch	2
BTE 120	Records Management	4
BTE 133	Word Processing Communications & Applications	3
CIS 125	WordPerfect	3
CIS 126	Microsoft Word	3
BTE 139	Professional Development	3
BTE 297	Cooperative Education (Capstone)	3
Total		33-34

Certificate in Business Technology

Stenographic

CCD AURARIA

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

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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		Credit Hours
BTE 101	Keyboarding I	5
or		
BTE 202	Keyboarding II	
BTE 104	Keyboarding SpeedBuilding	4
BTE 108	Business Machines: Ten Key by Touch	2
BTE 120	Records Management	4
BTE 121	Alpha Speedwriting I	4
BTE 133	Word Processing Communications & Applications	3
CIS 125	WordPerfect	3
or		
CIS 126	Microsoft Word	
BUS 217	Business Communications	3
BTT 288	Model Office	3
BTE 297	Cooperative Education (Capstone)	3
Total		34

Certificate in Business Technology

Word Processor

CCD NORTH, CCD EAST, CCD WEST

Word Processor is a 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 Word Processor certificate program credits apply toward the 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.

		Credit Hours
BTE 101	Keyboarding I	4
BTE 103	Typing Development I	3
	or	
CIS 126	Microsoft Word	3
BTE 160	Data Entry I	3
BTE 200	Office Procedures	3
	or	
BTE 297	Cooperative Work Experience	(3)
CIS 225	Advanced Word Processing (Capstone)	3
CIS 118	Intro. to PC Applications	4
CIS 130	Intro. to the Internet	3
PSY 115	Psychology of Adjustment	2
	Total	28

Chemistry

Associate of Science Degree with a Chemistry Emphasis

(See AS Degree, page 40)

Communications

Associate of Arts Degree with a Communications Emphasis

(See AA Degree, page 36)

Computer Information Systems

The CIS program enables a student to work for and pursue a career in computers. In this field, the Community College of Denver offers several Associate of Applied Science degrees, many academic certificate programs, and multiple certificates-of-training at its Auraria campus and branch campus sites. The courses, programs and degrees will help a student obtain employment in the computer field, upgrade a student's skills, or help a student advance on the job.

In 1981, CCD and the business community entered into a partnership and established the Computer Training for People with Disabilities (CTPD) program. This program is specifically designed to train selected disabled persons for entry-level positions in computers.

Associate of Applied Science Degree in Computer Information Systems

Business Emphasis

This program prepares the student as an entry-level specialist to work with and use personal computers (PCs). Upon completion of the program, students can set up and configure personal computers and their peripherals and understand communication systems. Students completing the Business emphasis will be able to apply business and managerial methodologies to an information systems environment.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Completion of CIS 118 with a grade of C or better.
3. GPA of 2.0 or higher in CIS courses.

Completion of 12 semester hours of college-level work. Or, in place of above requirements, have completed the Business Applications Specialist certificate program.

General Education Requirements	Credit Hours
CIS 118 Intro. to PC Applications	4
*ENG 121 English Composition I	3
or	
ENG 131 Technical Writing I	

Select 1 course from the following:	3-4
MAT 103 Contemporary College Mathematics	(3)
*MAT 121 College Algebra	(4)
MAT 135 Intro. to Statistics	(3)

Select 1 course from the following:	2-3
*ECO 201 Principles of Macro Economics	(3)
POS 105 Intro. to Political Science	(3)
PSY 115 Psychology of Adjustment	(2)

SPE 115 Principles of Speech	3
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*Students seeking transfer to a four-year institution must take these courses

Core Requirements

CIS 110 Intro. to Operating Systems	2
CIS 119 Intro. to Programming	3
CIS 130 Intro. to the Internet	3
CIS 170 Microcomputer Hardware	3
CIS 175 Intro. to Telecommunications	3
CIS 200 Local Area Networking Concepts	2
CIS 285 Computer Capstone	1

Major Requirements		
ACC 121	Accounting Principles I	4
BUS 115	Intro. to Business	3
BUS 228	Principles of Management	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 156	Advanced Spreadsheet Concepts	3
CIS 166	Visual Basic Programming	3

Students seeking transfer to a four-year institution must also take the following courses. Other students must select 9 credits of elective courses with CIS advisor approval.

ENG 122	English Composition II	3
ENG 131	Technical Writing I	3
MAT 135	Intro. to Statistics	3
Total		63-65

**Certificate in Computer Information Systems
Business Applications Specialist
CCD WEST**

Business Applications Specialist is a program designed for completion in two, 17-week semesters. Students are prepared to use Basic, Visual Basic and C++ programming; use e-mail, the Internet and the World Wide Web; and perform basic PC repairs and install PC upgrades. Students also are prepared to use database and spreadsheet applications in a variety of business applications and function in a computer-assisted environment, providing problem solving and production assistance. Graduates are prepared to enter positions as Computer Specialists.

All Business Applications Specialist certificate program credits apply toward the requirements of the AAS degree in Computer Information Systems, Programming and Applications emphasis, if the CIS 167 option is taken. All credits apply toward the requirements of the AAS degree in Computer Information Systems, Business emphasis, if the ACC 121 option is taken.

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

	Credit Hours	
ACC 101	Fundamentals of Accounting	3
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 166	Visual Basic Programming	3

Select 1 course from the following:		
ACC 121	Accounting Principles I	(4)
CIS 167	C Language Programming (C++)	(3)
CIS 170	Microcomputer Hardware	3
MAT 103	Contemporary College Mathematics	3
PSY 115	Psychology of Adjustment	2
Total		35-36

**Associate of Applied Science Degree in
Computer Information Systems
Business Applications Programmer Emphasis
CCD AURARIA**

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. This AAS degree program begins each summer and is specifically designed to train selected disabled persons for entry-level positions as computer programmers, emphasizing the COBOL language. It is designed for students seeking the AAS 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, South Classroom Building, room 134, 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 follow:
 - 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 Coordinator.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ECO 202	Principles of Micro Economics	3
ENG 121	English Composition I	3
	or	
ENG 131	Technical Writing I	(3)
MAT 103	Contemporary College Mathematics	3
SPE 115	Principles of Speech	3

Business Core		Credit Hours
ACC 121	Accounting Principles I	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3

CIS Courses		
CIS 119	Intro. to Programming (with permission of CIS advisor)	3
CIS 145	Database Concepts	3
CIS 167	C Language Programming (C++)	3
CIS 212	UNIX	3
CIS 218	Advanced PC Applications	2

CIS 220	PC Data Recovery & Software Repair	3
CIS 241	Oracle	3
CIS 254	Windows NT Workstation	4
CIS 260	COBOL Programming	3
CIS 261	Advanced COBOL Programming	3
CIS 263	CICS/COBOL Programming	3
CIS 269	Online Program Development	3
CIS 276	Systems Analysis & Design	3
CIS 277	Operating Systems and JCL	3
CIS 297	Cooperative Education/Internship (Capstone)	6
	Total	74

Certificate in Computer Information Systems

Business Applications Programmer

CCD AURARIA

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 phoning 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 follow:
 - 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 director.

Business Core		Credit Hours
ACC 121	Accounting Principles I	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3
CIS Courses		
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 145	Database Concepts	3
CIS 167	C Language Programming (C++)	3
CIS 212	UNIX	3
CIS 218	Advanced PC Applications	2
CIS 220	PC Data Recovery & Software Repair	3
CIS 241	Oracle	3
CIS 254	Windows NT Workstation	4
CIS 260	COBOL Programming	3
CIS 261	Advanced COBOL Programming	3
CIS 263	CICS/COBOL Programming	3
CIS 269	Online Program Development	3
CIS 276	Systems Analysis & Design	3
CIS 277	Operating Systems and JCL	3
CIS 297	Cooperative Education/Internship (Capstone)	6
	Total	62

Associate of Applied Science Degree in Computer Information Systems

Cisco Networking Associate Emphasis

The Community College of Denver has entered into a partnership with Cisco Systems as a Regional Cisco Academy. This program trains and certifies students to design, build and maintain networks. Upon completion of this program, the student will be qualified to take the exam to become a Cisco Certified Network Associate.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. 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.
5. Or, in place of above requirements, have completed the Cisco Associate Network Specialist certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I or	3
ENG 131	Technical Writing I	(3)

Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)

Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)

SPE 115	Principles of Speech	3
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Core Requirements

CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1

Major Requirements

CIS 206	Cisco Network Associate I	5
CIS 207	Cisco Network Associate II	5
CIS 208	Cisco Network Associate III	5
CIS 209	Cisco Network Associate IV	5

Select an additional 9 or more credit hours of CIS courses with CIS advisor approval. 9

Total	61-63
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Certificate in Computer Information Systems

Cisco Associate Network Administrator

CCD AURARIA, CCD NORTH

Cisco Associate Network Administrator is a program designed for completion in two, 15-week semesters. It prepares students to design, build, program and maintain Cisco systems, networks, switches and routers. This program is delivered by Cisco certified teachers and is designed to prepare graduates to take the examinations required for Cisco certification as a Cisco Certified Network Associate.

All Cisco Associate Network Administrator certificate program credits apply toward the requirements of the AAS degree in Computer Information Systems, Cisco Associate Networking Associate emphasis.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Completion of or co-registered for a total of 12 credits in CIS.

Students are encouraged to participate in the CIS Assessment System to ensure appropriate course preparation, or to have obtained a minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

Major Requirements		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 200	Local Area Networking Concepts	2
CIS 206	Cisco Network Associate I	5
CIS 207	Cisco Network Associate II	5
CIS 208	Cisco Network Associate III	5
CIS 209	Cisco Network Associate IV	5
CIS 185	Computer Capstone (Certificate)	1
Total		32

Certificate-of-Training in Computer Information Systems

Cisco Network Technician

CCD AURARIA, CCD NORTH

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT trains the student to work with Cisco systems, networks and routers.

		Credit Hours
CIS 118	Intro. to PC Applications	4
CIS 200	Local Area Networking Concepts	2
CIS 206	Cisco Network Associate I	5
CIS 207	Cisco Network Associate II	5
CIS 208	Cisco Network Associate III	5
CIS 209	Cisco Network Associate IV	5
Total		26

Associate of Applied Science Degree in Computer Information Systems

Computer Specialist Emphasis

This program prepares the student as an entry-level specialist to work with and use personal computers (PCs). Upon completion of the program, students can install and configure personal computers and their peripherals, configure application systems, manage communications or networks and use many major software packages.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. 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.
5. Or, in place of above requirements, have completed the PC Help Desk Specialist certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
	or	
ENG 131	Technical Writing I	(3)
Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
SPE 115	Principles of Speech	3

Core Requirements

CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1

Major Requirements

CIS 112	Intro. to Windows	2
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 166	Visual Basic Programming	3
CIS 226	Computer Diagnosis & Repair	3
CIS 275	Advanced Telecommunications	3
CIS 276	Systems Analysis & Design	3

Select an additional 9-12 or more credit hours of CIS courses with CIS advisor approval.

Total 61-66

Certificate in Computer Information Systems Computer Specialist

CCD AURARIA

This program is designed to train students in microcomputer use and operations, with a focus on the computer hardware used by business and industry.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

Major Requirements		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 166	Visual Basic Programming	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 226	Computer Diagnosis and Repair	3
CIS 275	Advanced Telecommunications	3
CIS 185	Computer Capstone (Certificate)	1
Total		34

Certificate in Computer Information Systems PC Help Desk Specialist

CCD AURARIA, CCD NORTH, CCD EAST, CCD WEST

PC Help Desk Specialist is a program designed for completion in two, 17-week semesters. It prepares students to install PC applications; use and instruct others to use software that includes word processing, database, spreadsheet and graphic presentation applications; and use e-mail, the Internet and the World Wide Web. Students also are prepared to use Basic programming; perform PC repairs, install PC upgrades and test for 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.

All PC Help Desk Specialist certificate program credits apply toward the requirements of the AAS degree in Computer Information Systems, Computer Specialist emphasis.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Completion of or co-registered for a total of 12 credits in CIS.
3. Students are encouraged to participate in the CIS Assessment System to ensure appropriate course preparation, or to have obtained a minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

Major Requirements		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 112	Intro. to Windows	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 126	Microsoft Word	3
CIS 130	Intro. to the Internet	3
CIS 135	Graphics Technology	2
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 170	Microcomputer Hardware	3
CIS 200	LAN Concepts	2
CIS 226	Computer Diagnosis and Repair	3
CIS 227	A+ Certification	1
CIS 228	PC Help Desk Skills (Capstone)	3
Select an additional 4 or more credit hours of CIS courses with CIS advisor approval.		4
Total		42

**Certificate-of-Training in
Computer Information Systems
Microcomputer Technician II
CCD AURARIA**

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT affords an opportunity to specialize in advanced functions and maintenance of the microcomputer. (Students must complete the COT Microcomputer Technician I before beginning this certificate.)

		Credit Hours
CIS 200	LAN Concepts	2
CIS 226	Computer Diagnosis and Repair	3
CIS 227	A+ Certification Preparation	1
CIS 254	Windows NT Workstation	4
CIS 275	Advanced Telecommunications	3
Total		13

**Certificate-of-Training in
Computer Information Systems
Microcomputer Technician I
CCD AURARIA, CCD NORTH, CCD EAST, CCD WEST**

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT affords an opportunity to specialize in functions and use of the microcomputer.

		Credit Hours
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
Total		16

**Associate of Applied Science Degree in
Computer Information Systems
Information Technology Emphasis**

This program prepares the student as an entry-level specialist to work with and use information technology. Upon completion of the program, students can use many major software packages, configure personal computers and their peripherals, manage application systems and implement communication or network systems.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. 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.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I or	3
ENG 131	Technical Writing I	

Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)

Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
SPE 115	Principles of Speech	3

Core Requirements

CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1

Major Requirements

CIS 112	Intro. to Windows	2
CIS 125	WordPerfect	3 or
CIS 126	Microsoft Word	(3)
CIS 139	Integration Software	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 156	Advanced Spreadsheet Concepts	3

CIS 166	Visual Basic Programming	3
CIS 179	Software/Systems Survey	3
CIS 276	Systems Analysis & Design	3
Select an additional 3 or more credit hours of CIS courses with CIS advisor approval.		3
Total		61-63

**Certificate in Computer Information Systems
Information Technology Specialist
CCD AURARIA**

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 follow:
 - 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.

		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 125	WordPerfect	3
	or	
CIS 126	Microsoft Word	(3)
CIS 130	Intro. to the Internet	3
CIS 139	Integration Software	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 175	Intro. to Telecommunications	3
CIS 179	Software/Systems Survey	3
CIS 276	Systems Analysis & Design	3
CIS 185	Computer Capstone (Certificate)	1
Total		34

**Certificate-of-Training in
Computer Information Systems
Microsoft Office Technician II
CCD AURARIA**

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT affords an opportunity to gain greater expertise in Microsoft's application software. (Students must complete the COT Microsoft Office Technician I before beginning this certificate.)

		Credit Hours
CIS 119	Intro. to Programming	3
CIS 132	Intermediate Web Authoring	3
CIS 135	Graphics Technology	2
CIS 225	Advanced Word Processing	3
Total		11

**Certificate-of-Training in
Computer Information Systems
Microsoft Office Technician I**

CCD AURARIA, CCD NORTH, CCD EAST, CCD WEST

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT affords an opportunity to specialize in Microsoft's application software.

		Credit Hours
CIS 118	Intro. to PC Applications	4
CIS 126	Microsoft Word	3
CIS 139	Integration Software	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
Total		16

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

This program prepares the student as an entry-level specialist to work with and use personal computers (PCs). Upon completion of the program, students can set up and configure personal computers and their peripherals, configure application systems, manage communications or networks, and use many major software packages.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Completion of CIS 118 with a grade of C or better.
3. GPA of 2.0 or higher in CIS courses.

Completion of 12 semester hours of college-level work. Or, in place of above requirements, have completed the Web Page Developer certificate.

		Credit Hours
General Education Requirements		
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
	or	
ENG 131	Technical Writing I	
Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
SPE 115	Principles of Speech	3

Core Requirements					Credit Hours
CIS 110	Intro. to Operating Systems	2	CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3	CIS 118	Intro. to PC Applications	4
CIS 130	Intro. to the Internet	3	CIS 119	Intro. to Programming	3
CIS 170	Microcomputer Hardware	3	CIS 130	Intro. to the Internet	3
CIS 175	Intro. to Telecommunications	3	CIS 131	Intro. to Web Authoring	3
CIS 200	Local Area Networking Concepts	2	CIS 132	Intermediate Web Authoring	3
CIS 285	Computer Capstone	1	CIS 134	Web Page Layout & Design (Capstone)	3
			CIS 168	Java Programming	3
			CIS 180	Intro. to Multimedia Technology	3
			CIS 181	Digital Image Editing	3
			CIS 182	Digital Video Editing	3
			CIS 185	Computer Capstone (Certificate)	1
			CIS 231	Web Programming I	3
				Select an additional 7 or more credit hours of CIS courses with CIS advisor approval.	7
				Total	44
Major Requirements					
CIS 131	Intro. to Web Authoring	3			
CIS 132	Intermediate Web Authoring	3			
CIS 134	Web Page Layout & Design (Capstone)	3			
CIS 168	Java Programming	3			
CIS 180	Intro. to Multimedia Technology	3			
CIS 181	Digital Image Editing	3			
CIS 182	Digital Video Editing	3			
CIS 231	Web Programming I	3			
MUM 225	Web Page Design	3			
	Select an additional 6 or more credit hours of CIS courses with CIS advisor approval.	6			
	Total	65-67			

**Certificate in Computer Information Systems
Web Page Developer**

CCD AURARIA, CCD EAST, CCD NORTH

This program prepares the student for employment as an entry-level Web Page Specialist, Web Page Designer or Web Page Editor. Upon completion of the program, the student will be able to design Web pages using the most current software.

At CCD East and North, Web Page Developer is a 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, FrontPage, and Visual Basic Script. Graduates are prepared to enter positions as Web Page Designers, Web Page Specialists, Web Page Editors and Multimedia Specialists.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.
 - e. Minimum TABE assessment score of 9th grade on reading and math, or co-enrollment in REA 060 and/or MAT 033

**Certificate-of-Training in
Computer Information Systems
Internet Technician II**

CCD AURARIA, CCD EAST, CCD NORTH

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT affords the student advanced Internet capabilities and expertise. (Students must complete the COT Internet Technician I before beginning this certificate.)

		Credit Hours
CIS 134	Web Page Layout & Design (Capstone)	3
CIS 180	Intro. to Multimedia Technology	3
CIS 181	Digital Image Editing	3
CIS 182	Digital Video Imaging	3
	Total	12

**Certificate-of-Training in
Computer Information Systems
Internet Technician I**

CCD AURARIA, CCD NORTH, CCD EAST, CCD WEST

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT trains the student to interface with and utilize the resources of the Internet.

		Credit Hours
CIS 118	Intro. to PC Applications	4
CIS 130	Intro. to the Internet	3
CIS 131	Intro. to Web Authoring	3
CIS 132	Intermediate Web Authoring	3
CIS 231	Web Programming I	3
	Total	16

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

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 computer network. The student will be equally competent to administer both a Novell network and a Windows NT network. Additionally, the program prepares the student for industry evaluation, including Novell CNA and Microsoft MCPS.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. 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.
5. Or, in place of above requirements, have completed the NT Network Specialist certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I or	3
ENG 131	Technical Writing I	
Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
SPE 115	Principles of Speech	3
Core Requirements		
CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1

Major Requirements

- Select any 5 courses from the following: 19-21
- | | | |
|---------|---------------------------|-----|
| CIS 206 | Cisco Network Associate I | (5) |
| CIS 254 | Windows NT Workstation | (4) |

CIS 255	Novell 4x Administration	(4)
CIS 256	Novell 3x Administration	(3)
CIS 257	Advanced Novell Administration	(4)
CIS 258	Windows NT Server	(4)

Select an additional 9-10 or more credit hours of	9-10
Total	60-65

**Certificate in Computer Information Systems
Novell 3x Network Administration
CCD AURARIA**

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 follow:
 - 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 should 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.

		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 170	Microcomputer Hardware	3
CIS 200	Local Area Networking Concepts	2
CIS 256	Novell 3x Administration	3
CIS 257	Advanced Novell Administration or	4-5
CIS 206	Cisco Network Associate I	(5)
CIS 276	Systems Analysis & Design	3
CIS 185	Computer Capstone (Certificate)	1

Select 1 additional CIS course with CIS advisor approval	3-4
Total	28-30

**Certificate in Computer Information Systems
Novell 4x Network Administration**

CCD AURARIA

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 follow:
 - 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 should 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.

	Credit Hours
CIS 110 Intro. to Operating Systems	2
CIS 118 Intro. to PC Applications	4
CIS 119 Intro. to Programming	3
CIS 170 Microcomputer Hardware	3
CIS 200 Local Area Networking Concepts	2
CIS 255 Novell 4x Administration	4
CIS 257 Advanced Novell Administration or	4-5
CIS 206 Cisco Network Associate I	(5)
CIS 276 Systems Analysis & Design	3
CIS 185 Computer Capstone (Certificate)	1

Select 1 additional CIS course with CIS advisor approval	3-4
Total	29-31

**Certificate in Computer Information Systems
Windows NT Network Administration**

CCD AURARIA

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 follow:
 - 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 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.

	Credit Hours
CIS 110 Intro. to Operating Systems	2
CIS 118 Intro. to PC Applications	4
CIS 119 Intro. to Programming	3
CIS 170 Microcomputer Hardware	3
CIS 200 Local Area Networking Concepts	2
CIS 254 Windows NT Workstation	4
CIS 258 Windows NT Server	4
CIS 276 Systems Analysis & Design	3
CIS 285 Computer Capstone	1

Select 1 additional CIS course with CIS advisor approval	3-4
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Total	29-30
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**Certificate in Computer Information Systems
NT Network Specialist**

CCD NORTH

NT Network Specialist is a program designed for completion in two, 17-week semesters. It prepares students 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 test for A+ Certification; and set-up and manage Windows NT networks and connecting equipment. Graduates are prepared to enter positions as NT network specialists and PC support specialists.

All NT Network Specialist certificate program credits apply toward the requirements of the AAS degree in Computer Information Systems, Network Administration 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.

	Credit Hours
BTE 102 Basic Keyboard Applications	2
CIS 110 Intro. to Operating Systems	2
CIS 112 Intro. to Windows	2
CIS 118 Intro. to PC Applications	4
CIS 119 Intro. to Programming	3
CIS 130 Intro. to the Internet	3
CIS 170 Microcomputer Hardware	3
CIS 175 Intro. to Telecommunications	3
CIS 200 LAN Concepts	2

CIS 226	Computer Diagnosis and Repair	3
CIS 227	A+ Certification Preparation	1
CIS 254	Windows NT Workstation	4
CIS 258	Windows NT Server (Capstone)	4
PSY 115	Psychology of Adjustment	2
Total		38

**Certificate in Computer Information Systems
PC Repair Specialist**

CCD AURARIA, CCD NORTH, CCD EAST, CCD WEST

PC Repair Specialist is a program designed for completion in two, 15-week semesters. It prepares students 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 test for A+ Certification. Graduates are prepared to enter positions as PC repair specialists.

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

Program Admission Requirements

- Assessment scores or course equivalents as follow:
 - English at level 3 or completion of ENG 100 with a C or better;
 - reading at level 3a or completion of REA 090 with a C or better;
 - 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.
- Students should have completed or co-registered for a total of 12 credit hours in Computer Information Systems.
- Students are encouraged to participate in the CIS Assessment System to ensure appropriate course preparation, or to have obtained a minimum TABE assessment score of 9th grade on reading and mathematics, or co-enrollment in REA 060 and/or MAT 033.

		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 112	Intro. to Windows	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	LAN Concepts	2
CIS 226	Computer Diagnosis and Repair (Capstone)	3
CIS 227	A+ Certification Preparation	1
Select 1 additional CIS course with CIS advisor approval		2-3
Total		28-29

**Certificate-of-Training in
Computer Information Systems
Novell Network Technician
CCD AURARIA**

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT provides training in the Novell network operating system.

		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 200	LAN Concepts	2
CIS 206	Cisco Network Associate I	5
CIS 255	Novell 4x Administration	4
CIS 256	Novell 3x Administration	3
Total		20

**Certificate-of-Training in
Computer Information Systems
Windows NT Technician
CCD AURARIA, CCD NORTH**

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT provides training in the Windows NT network system.

		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 200	LAN Concepts	2
CIS 254	Windows NT Workstation	4
CIS 258	Windows NT Server	4
Total		16

**Associate of Applied Science Degree in
Computer Information Systems
Oracle Applications Specialist Emphasis
CCD NORTH**

This program prepares the student as an entry-level specialist to work with and use Oracle operating and applications software. Students are prepared to use e-mail, the Internet and the World Wide Web; use Basic programming; set-up and manage Oracle databases; program and produce Oracle forms, reports and other productions; program and design Oracle Web pages; and manage Oracle systems. Graduates are prepared to enter positions as Oracle Applications Specialists and Oracle Database Administrators.

Program Admission Requirements

- Assessment scores or course equivalents as follow:
 - English at level 3 or completion of ENG 100 with a C or better;
 - reading at level 3a or completion of REA 090 with a C or better;
 - 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.
- 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.
5. Or, in place of above requirements, have completed the Oracle Applications Specialist certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I or	3
ENG 131	Technical Writing I	
Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
SPE 115	Principles of Speech	3
Core Requirements		
CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1
Major Requirements		
CIS 112	Intro. to Windows	2
CIS 145	Database Concepts	3
CIS 243	Intro. to SQL	3
CIS 244	SQL/PL SQL	3
CIS 245	Web Based Oracle Applications	3
CIS 246	Intro. to Oracle Applications	3
CIS 247	Oracle Designer	3
CIS 258	Windows NT Server	4
Select an additional 3 or more credit hours of CIS courses with CIS advisor approval.		3
Total		59-61

**Certificate in Computer Information Systems
Oracle Applications Specialist
CCD NORTH**

Oracle Applications Specialist is a 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; set-up and manage Oracle databases; program and produce Oracles forms, reports and other productions; program and design Oracle Web pages, and manage

Oracle systems. Graduates are prepared to enter positions as Oracle Applications Specialists and Oracle Database Administrators.

All Oracle Applications Specialist certificate program credits apply toward the requirements of the AAS degree in Computer Information Oracle Applications Specialist 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.

		Credit Hours
CIS 112	Intro. to Windows	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 145	Database Concepts	3
CIS 243	Intro. to SQL	3
CIS 244	SQL/PL SQL	3
CIS 245	Web Based Oracle Applications	3
CIS 246	Intro. to Oracle Applications	3
CIS 247	Oracle Designer	3
CIS 258	Windows NT Server	4
MAT 103	Contemporary College Mathematics	3
PSY 115	Psychology of Adjustment	2
Total		39

**Associate of Applied Science Degree in
Computer Information Systems
PC Specialist/LAN Administrator
CCD AURARIA**

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. 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 follow:
 - 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		Credit Hours
CIS 118	Intro. to PC Applications	4
ECO 201	Principles of Macro Economics	3
ENG 121	English Composition I	3
	or	
ENG 131	Technical Writing I	
MAT 103	Contemporary College Mathematics	3
SPE 115	Principles of Speech	3

Business Core

ACC 121	Accounting Principles I	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3

CIS Courses

CIS 119	Intro. to Programming (with permission of CIS advisor)	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 167	C Language Programming (C++)	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 179	Software/Systems Survey	3
CIS 218	Advanced PC Applications	2
CIS 226	Computer Diagnosis & Repair	3
CIS 241	Oracle	3
CIS 257	Advanced Novell Administration	4
CIS 258	Windows NT Server	4
CIS 260	COBOL Programming	3
CIS 276	Systems Analysis & Design	3
CIS 297	Cooperative Education/Internship (Capstone)	6
	Total	75

Certificate in Computer Information Systems PC Specialist/LAN Administrator

CCD AURARIA

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, general studies 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 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 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 phoning 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 follow:
 - 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.

Business Core

		Credit Hours
ACC 121	Accounting Principles I	4
BUS 115	Intro. to Business	3
BUS 217	Business Communications	3

CIS Courses

CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 167	C Language Programming (C++)	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 179	Software/Systems Survey	3
CIS 218	Advanced PC Applications	2
CIS 226	Computer Diagnosis & Repair	3
CIS 241	Oracle	3
CIS 257	Advanced Novell Administration	4
CIS 258	Windows NT Server	4
CIS 260	COBOL Programming	3
CIS 276	Systems Analysis & Design	3
CIS 297	Cooperative Education/Internship (Capstone)	6

Total 63

**Associate of Applied Science Degree in
Computer Information Systems
Programming and Applications Emphasis**

This program prepares the student as an entry-level specialist to work with and use personal computers (PCs). Upon completion of the program, students can set up and configure personal computers and their peripherals and understand communication systems. Students completing the Programming and Applications emphasis will be able to design and execute fundamental programs in the industry's most popular programming languages and demonstrate proficiency in database and spreadsheet applications.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. 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.
5. Or, in place of above requirements, have completed the Business Applications Specialist certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
	or	
ENG 131	Technical Writing I	
Select 1 course from the following:		3-4
MAT 103	Contemporary College Mathematics	(3)
MAT 121	College Algebra	(4)
MAT 135	Intro. to Statistics	(3)
Select 1 course from the following:		2-3
ECO 201	Principles of Macro Economics	(3)
POS 105	Intro. to Political Science	(3)
PSY 115	Psychology of Adjustment	(2)
SPE 115	Principles of Speech	3
Core Requirements		
CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1

Major Requirements

CIS 145	Database Concepts	3
CIS 155	Spreadsheet Concepts	3
CIS 156	Advanced Spreadsheet Concepts	3
CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming (C++)	3
CIS 168	Java Programming	3
CIS 212	UNIX	3
	or	
CIS elective	approved by CIS advisor	(3)
CIS 266	Advanced Visual Basic Programming	3
CIS 267	Advanced C Language Programming (C++)	3
CIS 275	Advanced Telecommunications	3

Students seeking transfer to a four-year institution must also take the following course. Other students must select 1 CIS elective course with CIS advisor approval.

MAT 135	Intro. to Statistics	3
Total		65-67

**Certificate in Computer Information Systems
Computer Programming**

CCD AURARIA

This program prepares the student for employment as an entry-level computer programmer. Upon completion of the program, the student will be able to design and execute fundamental programs in the industry's most popular programming languages.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

Major Requirements		Credit Hours
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming (C++)	3
CIS 168	Java Programming	3
CIS 169	Visual C++ Programming	3
	or	
CIS 267	Advanced C Language Programming (C++)	(3)
CIS 266	Advanced Visual Basic Programming	3
CIS 185	Computer Capstone (Certificate)	1
Select an additional 5 or more credit hours of CIS courses with CIS advisor approval.		5
Total		30

**Certificate-of-Training in
Computer Information Systems
Programming Technician II**
CCD AURARIA

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT affords the student expertise in programming languages and techniques. (Students must complete the COT Programming Technician I before beginning this certificate.)

	Credit Hours
CIS 168 Java Programming	3
CIS 212 UNIX	3
CIS 266 Advanced Visual Basic Programming	3
CIS 267 Advanced C Language Programming (C++)	3
Total	12

**Certificate-of-Training in
Computer Information Systems
Programming Technician I**
CCD AURARIA, CCD WEST

The Certificate-of-Training (COT) provides the student a way to focus on specific computer skills. This COT gives the student training in programming languages and techniques.

	Credit Hours
CIS 110 Intro. to Operating Systems	2
CIS 118 Intro. to PC Applications	4
CIS 119 Intro. to Programming	3
CIS 166 Visual Basic Programming	3
CIS 167 C Language Programming (C++)	3
Total	15

**Associate of Applied Science Degree in
Computer Information Systems
Telecommunications Emphasis**

This program prepares the student as an entry-level specialist to work with telecommunication systems. Upon completion of the program, students can install and configure personal computers and their peripherals, configure application systems, manage communications or networks and use many major software packages.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. 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.
5. Or, in place of above requirements, have completed a CIS Work Train certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I or	3
ENG 131	Technical Writing I	

Select 1 course from the following:	3-4
MAT 103 Contemporary College Mathematics	(3)
MAT 121 College Algebra	(4)
MAT 135 Intro. to Statistics	(3)

Select 1 course from the following:	2-3
ECO 201 Principles of Macro Economics	(3)
POS 105 Intro. to Political Science	(3)
PSY 115 Psychology of Adjustment	(2)
SPE 115 Principles of Speech	3

Core Requirements

CIS 110	Intro. to Operating Systems	2
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 200	Local Area Networking Concepts	2
CIS 285	Computer Capstone	1

Major Requirements

CIS 112	Intro. to Windows	2
CIS 166	Visual Basic Programming	3
CIS 226	Computer Diagnosis & Repair	3
CIS 275	Advanced Telecommunications	3
CIS 276	Systems Analysis & Design	3
ELT 107	Basic Electronics	3
ELT 108	Intro. to Networking, The Physical Layer	2
ELT 109	Intro. to Fiber Optics, The Physical Layer	1

Select an additional 9-12 or more credit hours of CIS courses with CIS advisor approval.

Total	61-66
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**Certificate in Computer Information Systems
Telecommunication Specialist**
CCD AURARIA

This program is designed to train students in microcomputer use and operations with a focus on the telecommunications industry.

	Credit Hours	
CIS 110	Intro. to Operating Systems	2
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
CIS 166	Visual Basic Programming	3
CIS 170	Microcomputer Hardware	3
CIS 175	Intro. to Telecommunications	3
CIS 226	Computer Diagnosis & Repair	3
CIS 275	Advanced Telecommunications	3
CIS 185	Computer Capstone (Certificate)	1
ELT 107	Basic Electronics	3

ELT 108	Intro. to Networking, The Physical Layer	2
ELT 109	Intro. to Fiber Optics, The Physical Layer	1
	Total	34

Computer Science

Associate of Science Degree with a Computer Science Emphasis

(See page 61. Complete AS information begins on page 42)

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 follow:
 - 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		Credit Hours
ENG 131	Technical Writing I	3
MAT 103	Contemporary College Mathematics	3
PHY 105	Conceptual Physics	4
AAS requirements in Arts, Humanities and Social Studies		5

Major Requirements

DRI 105	Intro. to Drafting	5
CAD 110	Computer-Aided Drafting I	3
DRI 106	Dimensioning & Tolerancing	2
DRI 107	Geometric Tolerancing	2
DRI 109	Pictorial Drawing	2
DRI 111	Descriptive Geometry & Auxiliary Views	2

DRI 113	Intersections & Developments	3
DRI 116	Mechanical Detail Drafting	5
DRI 200	Intro. to Civil/Topographic Drafting	3
DRI 203	Intro. to Architectural Drafting	3
DRI 205	Intro. to Process Pipe Drafting	2
DRI 207	Intro. to Structural Drafting	2
DRI 209	Intro. to Electrical Drafting	2
DRI 230	Civil/Topographic Drafting I	8
DRI 235	Civil/Topographic Drafting II (Capstone)	4
	Total	63

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 follow:
 - 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		Credit Hours
ENG 131	Technical Writing I	3
MAT 103	Contemporary College Mathematics	3
PHY 105	Conceptual Physics	4
AAS requirements in Arts, Humanities and Social Studies		5

Major Requirements

DRI 105	Intro. to Drafting	5
CAD 110	Computer-Aided Drafting I	3
DRI 106	Dimensioning & Tolerancing	2
DRI 107	Geometric Tolerancing	2
DRI 109	Pictorial Drawing	2
DRI 111	Descriptive Geometry & Auxiliary Views	2
DRI 113	Intersections & Developments	3
DRI 116	Mechanical Detail Drafting	5
DRI 200	Intro. to Civil/Topographic Drafting	3
DRI 203	Intro. to Architectural Drafting	3
DRI 205	Intro. to Process Pipe Drafting	2
DRI 207	Intro. to Structural Drafting	2
ELT 100	DC Fundamentals	3
ELT 102	AC Fundamentals	2

DRI 209	Intro. to Electrical Drafting	2
DRI 260	Electrical Drafting (Capstone)	6
	Total	62

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

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

General Education Requirements	Credit Hours
ENG 131 Technical Writing I	3
MAT 103 Contemporary College Mathematics	3
PHY 105 Conceptual Physics	4
AAS requirements in Arts, Humanities and Social Sciences	5

Major Requirements

DRI 105	Intro. to Drafting	5
CAD 110	Computer-Aided Drafting I	3
DRI 106	Dimensioning & Tolerancing	2
DRI 107	Geometric Tolerancing	2
DRI 109	Pictorial Drawing	2
DRI 111	Descriptive Geometry & Auxiliary Views	2
DRI 113	Intersections & Developments	3
DRI 116	Mechanical Detail Drafting	5
DRI 200	Intro. to Civil/Topographic Drafting	3
DRI 203	Intro. to Architectural Drafting	3
DRI 205	Intro. to Process Pipe Drafting	2
DRI 207	Intro. to Structural Drafting	2
DRI 209	Intro. to Electrical Drafting	2
DRI 220	Advanced Mechanical Drafting I	8
DRI 225	Advanced Mechanical Drafting II (Capstone)	4
	Total	63

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

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

General Education Requirements	Credit Hours
ENG 131 Technical Writing I	3
MAT 103 Contemporary College Mathematics	3
PHY 105 Conceptual Physics	4
AAS requirements in Arts, Humanities and Social Sciences	5

Major Requirements

DRI 105	Intro. to Drafting	5
CAD 110	Computer-Aided Drafting I	3
DRI 106	Dimensioning & Tolerancing	2
DRI 107	Geometric Tolerancing	2
DRI 109	Pictorial Drawing	2
DRI 111	Descriptive Geometry & Auxiliary Views	2
DRI 113	Intersections & Developments	3
DRI 116	Mechanical Detail Drafting	5
DRI 200	Intro. to Civil/Topographic Drafting	3
DRI 203	Intro. to Architectural Drafting	3
DRI 205	Intro. to Process Piping Drafting	2
DRI 207	Intro. to Structural Drafting	2
DRI 209	Intro. to Electrical Drafting	2
DRI 250	Process Pipe Drafting I	8
DRI 255	Process Piping Drafting II (Capstone)	4
	Total	63

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 follow:
 - 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		Credit Hours
ENG 131	Technical Writing I	3
MAT 103	Contemporary College Mathematics	3
PHY 105	Conceptual Physics	4
AAS requirements in Arts, Humanities and Social Studies		5

Major Requirements

DRI 105	Intro. to Drafting	5
CAD 110	Computer-Aided Drafting I	3
DRI 106	Dimensioning & Tolerancing	2
DRI 107	Geometric Tolerancing	2
DRI 109	Pictorial Drawing	2
DRI 111	Descriptive Geometry & Auxiliary Views	2
DRI 113	Intersections & Developments	3
DRI 116	Mechanical Detail Drafting	5
DRI 200	Intro. to Civil/Topographic Drafting	3
DRI 203	Intro. to Architectural Drafting	3
DRI 205	Intro. to Process Pipe Drafting	2
DRI 207	Intro. to Structural Drafting	2
DRI 209	Intro. to Electrical Drafting	2
DRI 240	Structural Drafting I	8
DRI 245	Structural Drafting II (Capstone)	4
Total		64

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 follow:
 - 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.

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

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 follow:
 - 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.

		Credit Hours
DRI 105	Intro. to Drafting	5
CAD 110	Computer-Aided Drafting I	3
DRI 106	Dimensioning & Tolerancing	2
DRI 107	Geometric Tolerancing	2
DRI 109	Pictorial Drawing	2
DRI 111	Descriptive Geometry & Auxiliary Views	2
DRI 113	Intersections & Developments	3
JSW 295	Job Search Workshop	1
DRI 116	Mechanical Detail Drafting (Capstone)	5
Total		25

Early Childhood Education

(See Teacher Education)

Earth Science

Associate of Science Degree with an Earth Science Emphasis

(See AS Degree, page 40)

Economics

Associate of Arts Degree with an Economics Emphasis

(See AA Degree, page 36)

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 follow:
 - 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

	Credit Hours
MAT 103 Contemporary College Mathematics	3
PHY 105 Conceptual Physics	4
SPE 115 Principles of Speech	3
ENG 131 Technical Writing I (must be completed in first 2 semesters)	3
CIS 118 Intro. to PC Applications	4

Major Requirements

ELT 100 DC Fundamentals	3
ELT 101 DC Circuits & Magnetism	2
ELT 102 AC Fundamentals	2
ELT 103 AC Circuits	3
ELT 104 Complex Circuit Analysis	3
ELT 110 Diode Circuits	3
ELT 111 Transistor Amplifiers	3
ELT 112 JFETs & Oscillators	2
ELT 114 IC Operational Amplifiers	3
ELT 200 Pulse & Digital Fundamentals	3
ELT 201 Digital Circuits	3
ELT 202 Microprocessor Fundamentals	2

ELT 203 Microprocessor & Microcomputer Systems	3
ELT 210 Communications I	3
ELT 211 Instruments & Measurements I	3
ELT 285 Troubleshooting Techniques for Analog & Digital Systems (Capstone)	5
Total	63

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 follow:
 - 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.

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

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 follow:
 - 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.

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

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.

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

Pre-Engineering

Associate of Science Degree with a Pre-Engineering Emphasis

(See AS Degree, page 42)

English/Literature

Associate of Arts Degree with an English/Literature Emphasis

(See AA Degree, page 39)

Environmental and Refrigeration Technology

Associate of Applied Science Degree in Environmental and Refrigeration Technology

Commercial/Industrial Refrigeration, Heating and Air Conditioning

CCD 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

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

COMMERCIAL REFRIGERATION TECHNICIAN OPTION

General Education Requirements	Credit Hours
ENG 131 Technical Writing I	3
MAT 103 Contemporary College Mathematics	3
PHY 105 Conceptual Physics	4
SPE 115 Principles of Speech	3
SOC 101 Intro. to Sociology	3
Major Requirements	
CAD 100 Commercial Blueprints & Computer-Aided Drafting	3
CIS 118 Intro. to PC Applications	4
RAC 111 Electricity & Electronics I	3
RAC 112 Electricity & Electronics II	2
RAC 114 Fundamentals of Refrigeration I	2
RAC 116 Fundamentals of Refrigeration II	3
RAC 200 Refrigeration Systems, Components & Applications	3
RAC 205 Heat Loads & System Development	2
RAC 208 Special Refrigeration Systems	3
RAC 211 Installation & Service Refrigeration Systems	3
RAC 212 Fundamentals of Air Conditioning	3
RAC 214 Unitary & Central Station Systems	3
RAC 215 Air Flow Principles & Distribution	2
RAC 216 HVAC Control Systems	3
RAC 285 Air Conditioning Troubleshooting & Servicing (Capstone)	4
RAC 297 Cooperative Education	4
Total	63

ENVIRONMENTAL CONTROLS TECHNICIAN OPTION

General Education Requirements		Credit Hours
ENG 131	Technical Writing I	3
MAT 103	Contemporary College Mathematics	3
PHY 105	Conceptual Physics	4
SPE 115	Principles of Speech	3
SOC 101	Intro. to Sociology	3
Major Requirements		
CAD 100	Commercial Blueprints & Computer-Aided Drafting	3
CIS 118	Intro. to PC Applications	4
CIS 119	Intro. to Programming	3
CIS 130	Intro. to the Internet	3
RAC 111	Electricity & Electronics I	4
RAC 112	Electricity & Electronics II	2
RAC 114	Fundamentals of Refrigeration I	2
RAC 116	Fundamentals of Refrigeration II	3
RAC 200	Refrigeration Systems, Components & Applications	3
RAC 205	Heat Loads & System Development	2
RAC 212	Fundamentals of Air Conditioning	3
RAC 215	Air Flow Principles & Distribution	2
RAC 216	HVAC Control Systems	3
*RAC 275	Direct Digital Control Systems	1
*RAC 276	Metasys: HVAC Application Specific Controller Engineering	2
*RAC 277	Metasys DX-9100 Engineering	2
*RAC 278	Metasys Companion Facility Operators	1
*RAC 279	Metasys Facility Operators	2
RAC 297	Cooperative Education	4
	Johnson Controls Courses	
Total		64

Certificate in Environmental and Refrigeration Technology Refrigeration and Air Conditioning CCD 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

- Assessment scores or course equivalents as follow:
 - English at level 3 or completion of ENG 100 with a C or better;
 - reading at level 3a or completion of REA 090 with a C or better;
 - study skills at level 1; and
 - math at level 2 or completion of MAT 035 with a C or better.
- 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.

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

Essential Skills

Certificate in Essential Skills

The Essential Skills certificate is a collaboration that addresses the need of employers for entry-level workers with a baseline of skills, and the need of welfare reform to provide skills training in the context of a "work-first" format.

Each student's educational plan will have a minimum of 16 credit hours, not to exceed a maximum of 29 credit hours. All participants will complete a minimum of 12 credit hours of core course work. This includes at least 9 credit hours of workplace core courses, which includes no fewer than 3 credit hours of cooperative education. The remaining minimum of 7 credit hours (depending on the vocational track) will include a combination of vocational core courses and electives.

For more information on the Essential Skills certificate, call the Workplace Learning Project Coordinator at 303-620-4427, extension 326.

Gerontology

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

(See AA Degree, page 36)

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 follow:
 - 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		Credit Hours
GNT 201	Intro. to Gerontology	3
GNT 213	Psychology of Aging	3
GNT 221	Overview of Programs & Services	3
GNT 237	Death & Dying	3
GNT 285	Gerontology Practicum (Capstone)	3
Select 3 courses with advisor approval:		9
BIO 204	Physiological Aspects of Aging	(3)
GNT 101	Nutrition	(3)
GNT 214	Social Issues & Aging	(3)
GNT 215	Aging in a Diverse Society	(3)
GNT 295	Leadership Development	(3)
GNT 299	Independent Study	
Total		

Golf Course Management

Associate of Applied Science Degree in Golf Course Management

This program is designed to prepare students with job entry-level skills in the golf industry through academic courses and internship experience. Employment opportunities are in golf course operations, equipment repair and business management. Graduates of the program will be prepared for entry-level employment and work up to management positions. Given community interest in health and wellness, increase in leisure time and the increased desire for physical activity, this career emphasis is expected to continue to grow.

Students may earn a certificate of completion after three or more courses, or an AAS degree, depending on their personal goals. Call 303-365-8300 to schedule an appointment to discuss options with the program advisor. The three certificates of completion are: General Golf Course Knowledge Certificate (GCM 110, 111 and 112) Retail/Proshop Services Certificate (ACC 101 and 110, GCM 201 and 206) and Grounds/Turf Maintenance Certificate (GCM 202, 203 and 211)

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

General Education Requirements		Credit Hours
Select 1 course from the following:		4-5
BIO 105	Science of Biology	(4)
CHE 101	Introduction to Chemistry I	(5)
CHE 106	General, Organic and Biochemistry	(4)
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
or		
ENG 131	Intro. to Technical Writing	(3)
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3
Major Requirements		
ACC 101	Fundamentals of Accounting	3
ACC 110	Business Math	3
BUS 115	Intro. to Business	3
BUS 227	Human Resources Management	3
BUS 228	Principles of Management	3
GCM 110	Golf I	2
GCM 111	Golf II	2
GCM 112	Short Game and Putting	2
GCM 201	Intro. to Golf Management	3
GCM 202	Golf Course Design	2
GCM 203	Turf Management & Maintenance	3
GCM 206	Resort Food & Beverage Operations	2
GCM 209	Methods of Teaching Golf	2
GCM 210	Club Fitting—Design & Repair	2
GCM 211	Rules & Fundamentals of Golf	2
GCM 214	Legal Issues in Golf Course Management	3
GCM 285	Golf Shop Operations & Maintenance	
Internship (Capstone)		2
Total		59-60

Graphic Arts

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. Upon 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 follow:
 - 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 2 or completion of REA 060 with a C or better; and
 - d. math at level 2b or completion of MAT 100 with a C or better.
2. Meet with a faculty program advisor and obtain an authorized signature.

General Education Requirements

	Credit Hours
ENG 131 Intro. to Technical Writing	3
MAT 103 Contemporary College Mathematics	3
PSY 101 General Psychology I	3

Select 1 course from the following AAS general education requirements: ART 151; LIT 115, 201, 202; MUS 120; REA 151; CHN 101, JPN 101, SPA 101

Major Requirements

GRA 101 Intro. to Graphic Arts & Traditional Layout	3
GRA 102 Electronic Composition Art & Copy Prep	3
GRA 103 Line & Halftone Photography	3
GRA 104 Electronic Publishing	3
GRA 105 Resume & Portfolio	3
GRA 111 Beginning Offset Presses	3
GRA 112 Stripping, Image Assembly, Platemaking & Inks	3
GRA 113 Paper & Ink Management & Print Production I	3
GRA 114 Intermediate Offset Press & Print Production II	3
GRA 201 Electronic Graphics	3
GRA 202 Electronic Page Layout	3
GRA 203 Electronic Scan & Color Theory	3
GRA 204 Electronic Prepress	3
GRA 205 Digital Photography	3
GRA 185 Bindery & Portfolio (Speech Intensive) or	3
GRA 285 Printers Portfolio & Advanced Printing Techniques (Capstone) (Speech Intensive)	(3)
GRA 299 Independent Studies/GRA Internship	3-6
Total	60-63

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. Upon 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 follow:
 - 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 2 or completion of REA 060 with a C or better; and
 - d. math at level 2b or completion of MAT 100 with a C or better.

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

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 follow:
 - 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 2 or completion of REA 060 with a C or better; and
 - d. math at level 2b or completion of MAT 100 with a C or better.

	Credit Hours
GRA 101 Intro. to Graphic Arts & Traditional Layout	3
GRA 102 Electronic Composition, Art & Copy Prep	3
GRA 103 Line & Halftone Photography	3
GRA 104 Electronic Publishing	3
GRA 105 Resume & Portfolio (Capstone)	3

GRA 111	Beginning Press Operations	3
GRA 112	Stripping, Image Assembly, Platemaking & Inks	3
GRA 113	Paper & Ink Management & Print Production I	3
GRA 114	Intermediate Offset Press & Print Production II	3
GRA 185	Bindery & Portfolio	3
	Total	30

Graphic Design

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 follow:
 - 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 AA Core	Credit Hours
I. English	6
ENG 121, 122	
II. Speech	3
SPE 115	
III. Mathematics	3-5
(Select any 1 of the following)	
MAT 121, 125, 135, 201, 202	
IV. Physical & Biological Sciences	4-5
(Select any 1 of the following)	
AST 101, 102	
BIO 105, 111, 112	
CHE 101, 102, 111, 112	
GEY 111	
PHY 105, 111, 112, 211, 212	
V. Social & Behavioral Sciences	9
(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	

VI. Humanities	9
(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	

General Education Sub-Total 34-37

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	Graphic Design Prod. & Prepress II	3

Capstone Course

GRD 285	Creative Graphic Design & Portfolio Preparation	3
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*Students who take ART 111 and ART 112 as General Education should add ART 122 and GRD 200.

Arts Subtotal 30

Total 64-67

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
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Arts Subtotal 30

Total 64-67

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 follow:
 - 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		Credit Hours
SPE 115	Principles of Speech	3
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3

Select 2 AAS general education courses from 2 of the following 3 areas:	6
Arts and Humanities	
Physical and Biological Sciences	
Social and Behavioral Sciences	

Major Requirements

ART 121	Drawing I	3
ART 131	Design I	3
GRD 100	Lettering & Typographic Design	3
GRD 103	MAC Computer Art	3
GRD 105	Advertising Typography & Layout	3
GRD 107	Rendering/Mixed Media	3
GRD 200	Advertising Design & Portfolio Preparation	3
GRD 203	Adobe Illustrator	3
GRD 206	Graphic Design Production & Prepress I	3
GRD 207	Graphic Design Production & Prepress II	3
GRD 209	Quark Express	3
GRD 220	PhotoShop	3
GRD 297	Graphic Design Internship	3
GRD 285	Creative Graphic Design & Portfolio Preparation (Capstone)	3

Select 2 courses from the following:	6	
ART 122	Drawing II/Mixed Media	(3)
ART 132	Design II	(3)
ART 151	Fund. of Black & White Photography	(3)
ART 211	Painting I	(3)
MUM 101	Intro. to Multimedia	(3)
Total		63

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. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

Major requirements:		Credit Hours
ENG 100	Composition Style & Technique	3
ART 121	Drawing I	3
ART 131	Design I	3
GRD 100	Lettering & Typographic Design	3
GRD 103	MAC Computer Art	3
GRD 105	Advertising Typography & Layout	3
GRD 220	PhotoShop	3
Total		21

Select 2 courses with advisor approval:	6	
ART 132	Design II	(3)
GRD 200	Advertising Design and Portfolio Preparation	(3)
GRD 203	Adobe Illustrator	(3)
GRD 297	Graphic Design Internship	(3)
MUM 206	Fractal Painter I	(3)
MUM 210	3-D Modeling & Animation	(3)
GRD 209	Quark Xpress on Macintosh (Capstone)	3
Total		30

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. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

Major requirements:		Credit Hours
ENG 100	Composition Style & Technique	3
ART 121	Drawing I	3
ART 131	Design I	3
GRD 100	Lettering & Typographic Design	3
GRD 103	MAC Computer Art	3
GRD 105	Advertising Typography & Layout	3
GRD 200	Advertising Design and Portfolio Preparation	3
Total		21

Select 2 courses with advisor approval:		6
ART 122	Drawing II/Mixed Media	(3)
GRD 206	Graphic Design Production & Prepress I	(3)
GRD 209	Quark Xpress	(3)
GRD 220	PhotoShop	(3)
GRD 297	Graphic Design Internship	(3)
GRD 285	Creative Graphic Design & Portfolio Preparation (Capstone)	3
Total		30

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. GRD 103 is prerequisite to all computer classes.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

Major requirements:		Credit Hours
ENG 100	Composition Style & Technique	3
ART 121	Drawing I	3
ART 131	Design I	3
GRD 100	Lettering & Typographic Design	3
GRD 103	MAC Computer Art	3

GRD 105	Advertising Typography & Layout	3
GRD 209	Quark Xpress	3
Total		21
GRA 204	Electronic Prepress	3
Select 1 class with advisor approval:		3
GRD 200	Advertising Design & Portfolio Prep.	(3)
GRD 206	Graphic Design Production & Prepress I	(3)
GRD 297	Graphic Design Internship	(3)
GRA 203	Electronic Scan & Color Theory (Capstone)	3
Total		30

Grief and Bereavement Specialist Certificate in Grief and Bereavement

The Community College of Denver offers the only Grief and Bereavement certificate program at any college level in Colorado. Course work includes the areas of grief and bereavement theory, palliative care, grief in family and individual contexts and ethics. This interdisciplinary certificate program prepares students for employment in communities and institutions serving clients with a variety of grief and bereavement needs. These settings include hospice, hospitals, funeral homes, nursing homes, private businesses, religious institutions, churches, nursing associations, human services, social work and counseling organizations.

All interested persons should call 303-556-2472 or 303-365-8300 for an appointment with the Grief and Bereavement program coordinator.

Students must complete all certificate course work with a grade of C or better.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

		Credit Hours
GBS 237	Death and Dying	3
GBS 245	Palliative Care	3
GBS 255	Grief and Bereavement Theory	3
GBS 265	Individual, Family and Group Bereavement Counseling	3
GBS 275	Spiritual, Cultural, and Ethical Issues In Death and Bereavement	3
GBS 285	Grief and Bereavement Internship	3
HSE 107	Interviewing Principles and Practices	3
Total		21

HEALTH RELATED

Dental Hygiene

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 follow:
 - 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 303-365-7771.
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:

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

		Credit Hours
First Semester		
DEH 101	Pre-Clinic Dental Hygiene Science	2
DEH 102	Pre-Clinic Care	2
DEH 103	Embryology & Histology	2
DEH 105	Dental Radiology	3
DEH 109	Dental Anatomy	3
DEH 111	Medical & Dental Emergencies	3
DEH 160	Head & Neck Anatomy	2

Second Semester		
DEH 116	Preventive Dentistry	3
DEH 150	Dental Hygiene Clinic Science I	2
DEH 152	Dental Hygiene Clinic Care I	3
DEH 154	Periodontology I	3
DEH 156	Applied Pharmacology	3
DEH 158	General & Oral Pathology	3
Total First Year		34
Third Semester		
		Credit Hours
DEH 201	Dental Hygiene Clinic Science II	2
DEH 203	Dental Hygiene Clinic Care II	4
DEH 205	Dental Materials	3
DEH 209	Local & Regional Dental Anesthesiology	3
DEH 211	Community Dental Health	3
Fourth Semester		
DEH 250	Clinic Science III	2
DEH 252	Clinic Care III (Capstone)	4
DEH 254	Periodontology II	3
DEH 256	Community Field Experience	3
DEH 258	Ethics & Issues in Dental Hygiene	2
DEH 260	Practice Management	2
Total Second Year		31
Total for Program (Includes General Education Courses)		96

Health and Wellness

Associate of Applied Science Degree in Health and Wellness

This degree and its emphases are designed to prepare graduates for entry-level employment in the broad field of health and wellness careers. Students may choose among 12 emphases depending on their interests, the skills acquired and program requirements. In addition, students may complete a certificate and become employed while continuing to work on their degree.

Students completing the degree requirements also will have met the certificate requirements in their chosen career emphasis. Certificate and degree emphases are as follows:

Clinical Medical Assistant	AAS, C
Nurse Aide	C
Comprehensive Medical Assistant	AAS, C
Health Information Specialist	AAS, C
Medical Clerk	C
Health and Wellness Management	AAS
Massage Therapy	AAS, C
Medical Transcriber	AAS, C
Medical Unit Coordinator	AAS, C
Psychiatric Technician	AAS, C
Psychiatric Technician: Advanced Placement	C
Radiology/Orthopedic Assistant	AAS, C
Surgical Technology	AAS, C

Associate of Applied Science Degree in Health and Wellness

Clinical Medical Assistant Emphasis

The Clinical Medical Assistant program is designed to prepare students to conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments, usually in hospital or clinic settings. Graduates are prepared to enter positions as clinical medical assistants and medical assistants.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Clinical Medical Assistant certificate program.

General Education Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	4-5 or
BIO 201	Anatomy & Physiology I	(4)
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3-5 or higher
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3 or
PSY 235	Psychology of Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

BTE 102	Basic Keyboarding Applications	3
THA 111	The Human Body	4
*THA 151	Technical Procedures	3
THA 153	Medical Terminology II	2
*THA 200	Patient Care	3
THA 205	Pharmacology Practices	4
THA 212	Internship Seminar	1
THA 230	Clinical Procedures	7
THA 297	Internship Work Experience (Capstone)	4

*NUR 100, 6 credits, substitutes for THA 151 and THA 200.

Total	60-64
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Clinical Medical Assistant Certificate

CCD EAST

Clinical Medical Assistant is a 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, usually in hospital or clinic settings. Graduates are prepared to enter positions as clinical medical assistants and medical assistants.

All Clinical Medical Assistant certificate program credits apply toward the requirements of the AAS degree in Health and Wellness, Clinical Medical Assistant 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.

		Credit Hours
BTE 102	Basic Keyboarding Applications	3
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2
SOC 103	Sociology of Health Care	3
THA 111	The Human Body	4
*THA 151	Technical Procedures	3
THA 153	Medical Terminology II	2
*THA 200	Patient Care	3
THA 205	Pharmacology Practices	4
THA 212	Internship Seminar	1
THA 230	Clinical Procedures	7
THA 297	Internship Work Experience (Capstone)	4

*NUR 100, 6 credits, substitutes for THA 151 and THA 200.

Total 40

Nurse Aide Certificate

CCD EAST

Nurse Aide is a 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 through 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 Nurse Aide certificate program credits apply toward the Clinical Medical 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.

		Credit Hours
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
NUR 100	Nurse Aide Procedures and Patient Care	6
PSY 115	Psychology of Adjustment	1
THA 212	Internship Seminar	1
THA 297	Internship Work Experience (Capstone)	4
	Total	16

Associate of Applied Science Degree in Health and Wellness

Comprehensive Medical Assistant Emphasis

The Comprehensive Medical Assistant program is designed to prepare students to perform front office tasks, complete insurance forms, make office appointments, perform ICD-9 and CPT coding, conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments, usually in hospital or clinic settings. Graduates are prepared to enter positions as certified medical assistants and medical assistants.

This program is certified through the American Association of Medical Assisting. Graduates can obtain national certification by examination through this association.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Comprehensive Medical Assistant certificate program.

	General Education Requirements	Credit Hours
BIO 119	Concepts of Anatomy & Physiology or	4-5
BIO 201	Anatomy & Physiology I	(4)
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics or higher	3-5
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3
	Core Requirements	
CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment or	2-3
PSY 235	Psychology of Human Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements		
AHA 152	Medical Office Communications	3
AHA 155	Medical Manager	2
AHA 156	Basic Coding	2
AHA 211	Medical Secretary Skills	4
BTE 102	Basic Keyboarding Applications	3
THA 111	The Human Body	4
*THA 151	Technical Procedures	3
THA 153	Medical Terminology II	2
*THA 200	Patient Care	3
THA 205	Pharmacology Practices	4
THA 212	Internship Seminar	1
THA 230	Clinical Procedures	7
THA 297	Internship Work Experience (Capstone)	4
*NUR 100 substitutes for THA 151 and THA 200.		
Total		71-75

**Comprehensive Medical Assistant Certificate
CCD EAST**

Comprehensive Medical Assistant is a program designed for completion in three, 15-week semesters. This program is certified through the American Association of Medical Assisting. Students are prepared to perform front office tasks, complete insurance forms, make office appointments, perform ICD-9 and CPT coding, conduct patient evaluations, take and record clinical measurements, give injections and provide other patient treatments, usually in hospital or clinic settings.

Graduates can obtain national certification by examination through the American Association of Medical Assisting. Graduates are prepared to enter positions as certified medical assistants and medical assistants.

All Comprehensive Medical Assistant certificate program credits apply toward the requirements of the AAS degree in Health and Wellness, Comprehensive Medical Assistant 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.

	Credit Hours
AHA 152	Medical Office Communications 3
AHA 155	Medical Manager 2
AHA 156	Basic Coding 2
AHA 211	Medical Secretary Skills 4
BTE 102	Basic Keyboarding Applications 3
HWE 100	Medical Terminology I 2
HWE 103	First Aid/CPR: Emergency Response 2
PSY 115	Psychology of Adjustment 2
SOC 103	Sociology of Health Care 3
THA 111	The Human Body 4
*THA 151	Technical Procedures 3
THA 153	Medical Terminology II 2
*THA 200	Patient Care 3
THA 205	Pharmacology Practices 4
THA 212	Internship Seminar 1

THA 230	Clinical Procedures	7
THA 297	Internship Work Experience (Capstone)	4
*NUR 100 substitutes for THA 151 and THA 200.		
Total		51

**Associate of Applied Science Degree in
Health and Wellness
Health Information Specialist Emphasis**

The Health Information Specialist program is designed to prepare students to use Microsoft Word, manage medical files, use medical coding, prepare admissions and discharge records, and assemble and analyze medical data, usually in hospital or clinic settings. Graduates are prepared to enter positions as health information specialists and medical records clerks.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Health Information Specialist certificate program.

General Education Requirements	Credit Hours
BIO 119	Concepts of Anatomy & Physiology 4-5
	or
BIO 201	Anatomy & Physiology I (4)
ENG 121	English Composition I 3
MAT 103	Contemporary College Mathematics 3-5
	or higher
SOC 101	Intro. to Sociology 3
SPE 115	Principles of Speech 3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3
	or	
PSY 235	Psychology of Human Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

AHA 120	Medical Filing	2
AHA 155	The Medical Manager	3
AHA 200	Medical Transcription I	4
AHA 204	Medical Records I	3
AHA 250	Medical Records II	4
AHA 297	Internship Work Experience (Capstone)	3

BTE 101	Keyboarding I	4
BTE 160	Data Entry I	3
THA 111	The Human Body	4
THA 212	Internship Seminar	1
Total		60-64

Health Information Specialist Certificate

CCD EAST

Health Information Specialist is a 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, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical records clerks and health information specialists.

The Health Information Specialist certificate program credits apply toward the requirements of the AAS degree in Health and Wellness, Health Information Specialist 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.

		Credit Hours
AHA 120	Medical Filing	2
AHA 155	The Medical Manager	3
AHA 200	Medical Transcription I	4
AHA 204	Medical Records I	3
AHA 250	Medical Records II (Capstone)	4
AHA 297	Internship Work	3
BTE 101	Keyboarding I	4
BTE 160	Data Entry I	3
CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2
SOC 103	Sociology of Health Care	3
THA 111	The Human Body	4
THA 212	Internship Seminar	1
Total		44

Medical Clerk Certificate

CCD EAST

Medical Clerk is a 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, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical clerks.

All Medical Clerk certificate program credits apply toward the Health Information Specialist 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.

		Credit Hours
AHA 120	Medical Filing	2
AHA 155	The Medical Manager (Capstone)	3
BTE 101	Keyboarding I	4
CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2
SOC 103	Sociology of Health Care	3
THA 111	The Human Body	4
Total		26

Associate of Applied Science Degree in Health and Wellness

Health and Wellness Management Emphasis

The Health and Wellness Management program is designed to prepare students for entry-level employment. Occupations for which students will be prepared include personal care providers, home health aides, fitness center staff, health and wellness promotion coordinators within business and industry, wellness educators with health insurance companies, national health organizations, diet center staff, fitness resort staff and fitness event coordinators.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

Signature authorization on completed program application from program coordinator. To apply to the program call for an appointment at 303-365-8300. The Health and Wellness Management program is located at CCD Lowry, 950 Yosemite St.

General Education Requirements	Credit Hours	
BIO 119	Concepts of Anatomy & Physiology	5
ENG 121	English Composition I	3
MAT 121	College Algebra	3-4
	or	
MAT 135	Intro. to Statistics	(3)
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements		
CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3
	or	
PSY 235	Psychology of Human Growth & Development	(3)
SOC 103	Sociology of Health Care	3
Major Requirements		
BUS 115	Intro. to Business	3
FHR 100	Rhythmic Aerobics	2
FHR 208	Biomechanics of Movement	3
GNT 201	Intro. to Gerontology	3
HWM 101	Essentials of Total Fitness & Wellness	3
HWM 201	Health Psychology	3
HWM 205	Health and Wellness Marketing and Promotion	3
HWM 285	Health & Wellness Management Internship (Capstone)	5
NUT 100	Foundations of Nutrition	3
	Select 2 courses from the following:	4
FHR 101	Aerobics Walk/Jog/Step	(2)
FHR 102	Volleyball	(2)
FHR 104	Weight Training	(2)
FHR 105	Swimming I	(2)
FHR 106	Water Exercise	(2)
FHR 110	Golf I	(2)
	Total	62-64

Associate of Applied Science Degree in Health and Wellness

Massage Therapy Emphasis

The Massage Therapy program prepares students with the knowledge and skills necessary to practice massage at an entry-level position. Graduates are prepared for the Certification Exam for Massage Therapists.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Massage Therapy certificate program.
3. Submit a completed Massage Therapy program application at CCD Lowry, 950 Yosemite St.
4. Meet with the program advisor to plan course work. Call the Massage Therapy program at 303-365-8300.

General Education Requirements		Credit Hours
BIO 201	Human Anatomy & Physiology I	4
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics or higher	3-5
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3
Core Requirements		
CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3
	or	
PSY 235	Psychology of Human Growth & Development	(3)
SOC 103	Sociology of Health Care	3
Major Requirements		
BIO 202	Human Anatomy & Physiology II	4
BUS 115	Intro. to Business	3
FHR 208	Biomechanics of Movement	3
MST 201	Basic Massage Therapy	3
MST 202	Ethics of Touch	2
MST 203	Pathophysiology for Massage Therapists	2
MST 211	Deep Tissue/Sports Massage	3
MST 214	Massage for the Elderly	2
MST 222	Advanced Massage Therapies	3
MST 285	Massage Therapy Internship (Capstone)	5
NUT 100	Foundations of Nutrition	3
	Total	58-60

Massage Therapy Certificate

The Massage Therapy certificate program prepares students with the knowledge and skills necessary to practice massage at an entry-level position. Graduates are prepared for the Certification Exam for Massage Therapists.

The Massage Therapy certificate consists of 48 credit hours of course work. The certificate prepares the student to sit for the 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.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 a completed Massage Therapy program application at CCD Lowry, 950 Yosemite St.
3. Meet with the program advisor to plan course work. Call the Massage Therapy program at 303-365-8300.

General Education Requirements		Credit Hours
BIO 201	Human Anatomy & Physiology I	4
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3-5 or higher

Core Requirements

HWE 103	First Aid/CPR: Emergency Response	2
PSY 235	Psychology of Human Growth & Development	3

Major Requirements

BIO 202	Human Anatomy & Physiology II	4
BUS 115	Intro. to Business	3
FHR 208	Biomechanics of Movement	3
MST 201	Basic Massage Therapy	3
MST 202	Ethics of Touch	2
MST 203	Pathophysiology for Massage Therapists	2
MST 211	Deep Tissue/Sports Massage	3
MST 214	Massage for the Elderly	2
MST 222	Advanced Massage Therapies	3
MST 285	Massage Therapy Internship (Capstone)	5
NUT 100	Foundations of Nutrition	3
Total		48

Associate of Applied Science Degree in Health and Wellness

Medical Transcriber Emphasis

The Medical Transcriber program is designed to prepare students to use Microsoft Word, use medical coding, prepare insurance billings and transcribe general, medical, surgical and radiological data, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical transcribers.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Medical Transcriber certificate program.

General Education Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	4-5 or
BIO 201	Anatomy & Physiology I	(4)
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3-5 or higher
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3 or
PSY 235	Psychology of Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

AHA 152	Medical Office Communications	3
AHA 155	The Medical Manager	3
AHA 156	Basic Coding	2
AHA 200	Medical Transcription I	4
AHA 207	Medical Transcription II (Capstone)	6
AHA 297	Internship Work Experience	3
BTE 101	Keyboarding I	4
CIS 126	Microsoft Word	3
THA 111	The Human Body	4
THA 212	Internship Seminar	1
Total		62-66

Medical Transcriber Certificate

CCD EAST

The Medical Transcriber program is designed for completion in two, 17-week semesters.

It prepares students to use Microsoft Word, use medical coding, prepare insurance billings, and transcribe general, medical, surgical and radiological data. Graduates are prepared to enter positions as medical transcribers.

All Medical Transcriber certificate program credits apply toward the requirements of the AAS degree in Health and Wellness, Medical Transcriber 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.

		Credit Hours
AHA 152	Medical Office Communications	3
AHA 155	The Medical Manager	3
AHA 156	Basic Coding	2
AHA 200	Medical Transcription I	4
AHA 207	Medical Transcription II (Capstone)	6
AHA 297	Internship Work Experience	3
BTE 101	Keyboarding I	4

CIS 126	Microsoft Word	3
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2
SOC 103	Sociology of Health Care	3
THA 111	The Human Body	4
THA 212	Internship Seminar	1
	Total	42

Associate of Applied Science Degree in Health and Wellness

Medical Unit Coordinator Emphasis

The Medical Unit Coordinator program is designed to prepare students to use Microsoft Word; organize non-critical functions of the nursing unit; provide liaison between physicians, nurses, patients, family members and other health departments; and plan and coordinate the daily activities of the nursing unit, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical unit coordinators.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Medical Unit Coordinator certificate program.

General Education Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology or	5
BIO 201	Anatomy & Physiology I	(4)
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics or higher	3-5
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment or	2-3
PSY 235	Psychology of Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

AHA 158	Medical Unit Coordinating I	7
AHA 209	Medical Unit Coordinating II (Capstone)	7
AHA 297	Internship Work Experience	3
BTE 101	Keyboarding I	4

BTE 160	Data Entry I	3
CIS 126	Microsoft Word	3
THA 111	The Human Body	4
THA 212	Internship Seminar	1
	Total	61-65

Medical Unit Coordinator Certificate

CCD EAST

Medical Unit Coordinator is a 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, usually in hospital or clinic settings. Graduates are prepared to enter positions as medical unit coordinators.

All Medical Unit Coordinator certificate program credits apply toward the requirements of the AAS degree in Health and Wellness, Medical Unit Coordinator 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.

		Credit Hours
AHA 158	Medical Unit Coordinating I	7
AHA 209	Medical Unit Coordinating II (Capstone)	7
AHA 297	Internship Work Experience	3
BTE 101	Keyboarding I	4
BTE 160	Data Entry I	3
CIS 126	Microsoft Word	3
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2
SOC 103	Sociology of Health Care	3
THA 111	The Human Body	4
THA 212	Internship Seminar	1
	Total	41

Associate of Applied Science Degree in Health and Wellness

Psychiatric Technician Emphasis

The Psychiatric Technician program is designed to prepare the student to practice as a psychiatric technician in specialized health care settings with client populations experiencing psychiatric disorders and/or developmental disabilities. Graduates are eligible for state licensing and prepared to enter positions working with the developmentally disabled and the mentally ill.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Psychiatric Technician certificate program.

General Education Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	5
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics or higher	3-5
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment or	2-3
PSY 235	Psychology of Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

HSE 113	Human Services for Persons with Developmental Disabilities	3
NUR 101	Core Concepts of Pharmacology	1
NUR 109	Basic Nursing Skills	4
LPT 100	Fundamental Concepts & Clinical Application	2
LPT 111	Nursing Principles of Psychiatric Care	7

Select an additional 15 credit hours with LPT advisor approval. 15

Total 61-65

Psychiatric Technician Certificate

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, at CCD Lowry, 950 Yosemite St. 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 follow:
 - 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. Make an appointment with the program coordinator, 303-365-8300, and bring a copy of the Basic Skills Assessment results and copies of official transcripts from other colleges attended. The student will then 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.

Major Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	5
HSE 113	Human Services for Persons with Developmental Disabilities	3
NUR 101	Core Concepts of Pharmacology	1
NUR 109	Basic Nursing Skills	4
LPT 100	Fundamental Concepts & Clinical Application	2
LPT 111	Nursing Principles of Psychiatric Care	7
Total		22

Psychiatric Technician:

Advanced Placement Certificate

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 follow:
 - 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		Credit Hours
Completion of Psychiatric Technician DD program		14
LPT 110	Nursing Concepts for Adv. Placement Psychiatric Technicians	1
LPT 111	Nursing Principles of Psychiatric Care	7
Total		22

Associate of Applied Science Degree in Health and Wellness

Radiology/Orthopedic Assistant Emphasis

The Radiology/Orthopedic Assistant program is designed to prepare students to conduct patient evaluations, take and record clinical measurements, assist in radiological procedures, process radiological film, and assist in orthopedic procedures, usually in hospital or clinic settings. Graduates are prepared to enter positions as radiology assistants and orthopedic assistants.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Radiology/Orthopedic Assistant certificate program.

General Education Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	4-5
or		
BIO 201	Anatomy & Physiology I	(4)
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics	3-5
or higher		
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3
or		
PSY 235	Psychology of Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

BTE 102	Basic Keyboarding Applications	3
THA 111	The Human Body	4
THA 151	Technical Procedures	3
THA 153	Medical Terminology II	2
THA 210	Radiology Assisting	6
THA 212	Internship Seminar	1
THA 220	Orthopedic Assisting	8
THA 297	Internship Work Experience (Capstone)	4
Total		60-64

Radiology/Orthopedic Assistant Certificate CCD EAST

Radiology/Orthopedic Assistant is a 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, usually in hospital or clinic settings. Graduates are prepared to enter positions as radiology and orthopedic assistants.

All Radiology/Orthopedic Assistant certificate program credits apply toward the requirements of the AAS degree in Health and Wellness, Radiology/Orthopedic Assistant 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.

		Credit Hours
BTE 102	Basic Keyboarding Applications	3
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2
SOC 103	Sociology of Health Care	3
THA 111	The Human Body	4
THA 151	Technical Procedures	3
THA 153	Medical Terminology II	2
THA 210	Radiology Assisting	6
THA 212	Internship Seminar	1
THA 220	Orthopedic Assisting	8
THA 297	Internship Work Experience (Capstone)	4
Total		40

Associate of Applied Science Degree in Health and Wellness

Surgical Technology Emphasis

This program is designed to prepare the student for an entry-level position as a surgical technologist who scrubs and assists in the operating room. Graduates are eligible for certification examination. Applications and all applicable documentation and test results need to be submitted to the Surgical Technology program coordinator by March 1 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 Education Center at CCD Lowry, 950 Yosemite St. Enrollment is limited to 20 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 follow:
 - 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 303-365-8300 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 an official transcript to CCD's Office of Admissions, Registration and Records.
 4. Application materials must be submitted by March 1 to be considered for admission into the class beginning summer of the academic year. Eligible applicants are selected first-come, first-served, based on the dates applications are received in the Surgical Technology Office at the Health Education Center at CCD Lowry, 950 Yosemite St.

General Education Requirements		Credit Hours
Select either BIO 119, or both BIO 201 and 202:		5-8
BIO 119	Concepts of Anatomy & Physiology or both	(5)
BIO 201	Anatomy & Physiology I and	(4)
BIO 202	Anatomy & Physiology II	(4)
ENG 121	English Composition I	3
MAT 103	Contemporary College Mathematics or higher	3-5
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3
Core Requirements		
CIS 118	Intro. to PC Applications	4
HWE 100	Medical Terminology I	2
HWE 103	First Aid/CPR: Emergency Response	2
PSY 115	Psychology of Adjustment	2-3
	or	
PSY 235	Psychology of Growth & Development	(3)
SOC 103	Sociology of Health Care	3

Major Requirements

STE 100	Intro. to Surgical Technology	5
STE 105	Pharmacology for Surgical Technology	2
STE 106	Surgical Skills	7
STE 107	Surgical Instrumentation	3
STE 109	Surgical Technology	3
	Laboratory Experience	
STE 110	Surgical Technology Practicum (Capstone)	7
STE 115	Surgical Pathology & Intervention	4
	Total	61-67

Surgical Technology Certificate

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 March 1 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 Education Center at CCD Lowry, 950 Yosemite St. Enrollment is limited to 20 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 follow:
 - 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 303-365-8300 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 an official transcript to CCD's Office of Admissions, Registration and Records.
 4. Application materials must be submitted by March 1 to be considered for admission into the class beginning summer of the academic year. Eligible applicants are selected first-come, first-served, based on the dates applications are received in the Surgical Technology Office at the Health Education Center at CCD Lowry, 950 Yosemite St. Applicants not accepted are considered for the following year.

General Education Requirements		Credit Hours
Select either BIO 119, or both BIO 201 and 202:		
*BIO 119	Concepts of Anatomy & Physiology or both	(5)
*BIO 201	Anatomy & Physiology I and	(4)
*BIO 202	Anatomy & Physiology II	(4)
ENG 121	English Composition I	3
Summer		
HWE 100	Medical Terminology I	2
STE 100	Intro. to Surgical Technology	5
Fall		
STE 105	Pharmacology for Surgical Technology	2
STE 106	Surgical Skills	7
STE 107	Surgical Instrumentation	3
Spring		
STE 109	Surgical Technology Laboratory Experience	3
STE 110	Surgical Technology Practicum (Capstone)	7
STE 115	Surgical Pathology & Intervention	4
Total		41-44

Medical Cluster

Associate of Science Degree with a
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
(See AS Degree, page 40)

Nursing

Associate of Applied Science Degree in Nursing 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 September 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 Center for Health, Math and Science.

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 5:00 p.m. in the Nursing Lab at the Lowry Health Education Center, 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;
 - b. math assessment level 2a;
 - c. reading assessment level 3b; and
 - d. study skills assessment level 3.

The assessment levels stated above must be met before a student will be admitted to the program regardless of previous course work. There are no exceptions.

3. Submit the completed application packet as soon as possible. The completed application packet includes the program application form, two sealed letters of reference dated within the past 12 months, and a copy of the Basic Skills Assessment scores. 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 enrolling into NUR courses.

Prerequisites and/or

General Education Requirements		Credit Hours
*BIO 201	Human Anatomy & Physiology I	4
*BIO 202	Human Anatomy & Physiology II	4
*BIO 205	Microbiology	4
*PSY 235	Psychology of Human Growth & Development	3
ENG 121	English Composition I	3
MAT 100 or higher		3-5
NUT 101	Nutrition as Therapy	2
Humanities Core Elective	(See AAS curriculum for a list of approved courses)	3

*Must have been completed within the past 10 years.

Major Requirements		
NUR 101	Core Concepts in Pharmacology	1
NUR 103	Pharmacology for Nursing	2
NUR 109	Basic Nursing Skills	3
NUR 111	Nursing Concepts & Issues	5
NUR 112	Nursing Care of the Hospitalized Client I	7
NUR 113	Nursing Care of the Elderly Client	3
NUR 114	Family-Centered Nursing I	5
NUR 208	Nursing Assessment & Diagnosis	3
NUR 210	Family-Centered Nursing II	6
NUR 211	Principles of Psychiatric Nursing	5
NUR 212	Nursing Care of Hospitalized Client II	8
NUR 214	Leadership & Management in Nursing	2
NUR 285	Comprehensive Nursing Internship (Capstone)	3
Total		79-82

Associate of Applied Science Degree in Nursing 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. Applicants are accepted for admission each fall and spring semester. The Nursing program participates in the Colorado Nursing Articulation model through which the college grants 38 practical nursing credits when the student completes articulation requirements. Educational validation through testing is required if the applicant graduated 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 admission into the program.

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

Program 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 5:00 p.m. in the Nursing Lab at the Lowry Health Education Center, 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;
 - b. math assessment level 2a;
 - c. reading assessment level 3b; and
 - d. study skills assessment level 3.

The assessment levels stated above must be met before a student will be admitted to the program regardless of previous course work. There are no exceptions.

3. Submit the completed application packet as soon as possible. The completed application packet includes the program application form, two sealed letters of reference dated within the past 12 months, and a copy of the Basic Skills Assessment scores. 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 enrolling in NUR courses.

Prerequisites and/or General Education Requirements			Credit Hours
*BIO 201	Human Anatomy & Physiology I		4
*BIO 202	Human Anatomy & Physiology II		4
*BIO 205	Microbiology		4
*PSY 235	Psychology of Human Growth & Development		3
ENG 121	English Composition I		3
MAT 100	or higher		3-5
Humanities	Core Elective (See AAS curriculum for a list of approved courses)		3
NUR 126	Nursing Process Concepts & Skills		2

Credit awarded for Practical Nurse Education under Colorado Nursing Articulation Agreement. 28

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

Major Requirements

NUR 208	Nursing Assessment & Diagnosis	3
NUR 211	Principles of Psychiatric Nursing	5
NUR 212	Nursing Care of Hospitalized Client II	8
NUR 210	Family-Centered Nursing II	6
NUR 214	Leadership & Management in Nursing	2
NUR 285	Comprehensive Nursing Internship (Capstone)	3
Total		78-80

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 an Associate degree in Nursing.

Applicants are accepted first-come, first-served, according to the date their completed application packets are received in the Nursing Office. Applicants will be notified of their status by April 15 for admission into fall semester, or by September 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 Center for Health, Math and Science.

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 5:00 p.m. in the Nursing Lab at the Lowry Health Education Center, 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;
 - b. math assessment level 2a;
 - c. reading assessment level 3b; and
 - study skills assessment level 3.

The assessment levels stated above must be met before a student will be admitted to the program regardless of previous course work. There are no exceptions.

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

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

Prerequisites and/or

General Education Requirements		Credit Hours
*BIO 201	Human Anatomy & Physiology I	4
*BIO 202	Human Anatomy & Physiology II	4
*PSY 235	Psychology of Human Growth & Development	3
ENG 121	English Composition I	3
MAT 100	or higher	3-5
NUT 101	Nutrition as Therapy	2

*Must have been completed within the past 10 years.

Requirements	Credit Hours
NUR 101 Core Concepts of Pharmacology	1
NUR 103 Pharmacology for Nursing	2
NUR 109 Basic Nursing Skills	3
NUR 111 Nursing Concepts & Issues	5
NUR 112 Nursing Care of Hospitalized Client I	7
NUR 113 Nursing Care of the Older Adult	3
NUR 114 Family-Centered Nursing Care I	5
Total	45-47

Perioperative Nursing Certificate

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, Health Education Center at CCD Lowry, 950 Yosemite St. 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 follow:
 - 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 Health Education Center at CCD Lowry, 950 Yosemite, or by calling 303-365-8300 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); 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.

- Applicants must schedule an interview with the Perioperative Nursing program coordinator. Please call 303-365-8300 for an appointment.

Major Requirements	Credit Hours
Fall	
ORN 220 Perioperative Nursing I	6
Spring	
ORN 221 Perioperative Nursing II (Capstone)	8
Total	14

Radiography

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, including the hospital. The program consists of five semesters of course work that includes classroom, laboratory and clinical internship experience. Graduates earn an AAS degree and are eligible to apply for registration by the American Registry of Radiologic Technologists.

The program begins fall semester of each year. Information and requirements can be obtained from the Educational Planning and Advising Center or the Radiography Program Coordinator. 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.

- Qualify for an application by meeting the following criteria:
 - English assessment level 3;
 - math assessment level 2a;
 - reading assessment level 3; and
 - study skills assessment level 3.

All prospective Radiography students must take the Basic Skills Assessment. The assessment levels stated above must be met before a student will be admitted to the program regardless of previous course work. There are no exceptions.

To get an application, students must meet with a radiography program advisor. Call 303-365-8300 to make an appointment. Bring a copy of the Basic Skills Assessment test results and student transcripts of course work at CCD, or other colleges attended.

It is important to submit an application as soon as the above qualifications are met. Applicants are accepted for admission by the date the completed application packet is received.

A completed application packet includes the program application, copies of Basic Skills Assessment results, previous college transcripts and an educational plan.

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

General Education Requirements	Credit Hours
ENG 121 English Composition I	3
Select either BIO 119, or both BIO 201 and 202:	5-8
*BIO 119 Concepts of Anatomy & Physiology or both	(4)
*BIO 201 Anatomy & Physiology I and	(4)
*BIO 202 Anatomy & Physiology II	(4)
Select 1 course from the following:	3-4
MAT 103 Contemporary College Mathematics	(3)
MAT 105 Intermediate Algebra	(4)
MAT 121 College Algebra	(4)
MAT 135 Intro. to Statistics	(3)
Select 1 course from the following:	3
SOC 101 Intro. to Sociology I	(3)
PSY 101 General Psychology I	(3)
PSY 235 Psychology of Human Growth & Development	(3)

*Must have been completed within the past five years.

Radiography Program

Fall		
RTR 102 Radiographic Imaging I		3
RTR 103 Radiographic Equipment		3
RTR 104 Radiographic Internship I		5
RTR 105 Radiographic Patient Care I		3
Spring		
RTR 112 Radiographic Imaging II		3
RTR 113 Radiographic Equipment II		3
RTR 114 Radiographic Internship II		5
RTR 115 Radiographic Patient Care II		2
Summer		
RTR 124 Radiographic Internship III		7
Fall		
RTR 202 Imaging III (Speech Intensive)		3
RTR 203 Radiation Biology/Protection		2
RTR 204 Radiographic Internship IV		8
Spring		
RTR 214 Radiographic Internship V		11
RTR 216 Radiography Capstone		3
Total		75-79

Certificate in Limited Scope Radiography

This program prepares the student as a limited scope radiographer who practices in the physician's office or small clinic. Limited scope radiographers are not prepared to practice in the hospital. The program consists of three semesters of course work that includes classroom, laboratory and clinical internship experience. Graduates earn a certificate and are eligible to take the State of Colorado Limited Scope Radiography Exam.

The program begins fall semester of each year. Information and requirements can be obtained from the Educational Planning and Advising Center, or the Radiography program coordinator.

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;
 - b. math assessment level 2a;
 - c. reading assessment level 3; and
 - d. study skills assessment level 3.

All prospective Radiography students must take the Basic Skills Assessment. The assessment levels stated above must be met before a student will be admitted to the program regardless of previous course work. There are no exceptions.

To get an application, students must meet with a radiography program advisor. Call 303-365-8300 to make an appointment. Bring a copy of the Basic Skills Assessment test results and student transcripts of course work at CCD, or other colleges attended.

It is important to submit an application as soon as the above qualifications are met. Applicants are accepted for admission by the date the completed application packet is received.

A completed application packet includes the program application, copies of Basic Skills Assessment results, previous college transcripts and an educational plan.

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

General Education Requirements	Credit Hours
ENG 121 English Composition I	3
Select either BIO 119, or both BIO 201 and 202:	5-8
*BIO 119 Concepts of Anatomy & Physiology or both	(4)
*BIO 201 Anatomy & Physiology I and	(4)
*BIO 202 Anatomy & Physiology II	(4)
Select 1 course from the following:	3-4
MAT 103 Contemporary College Mathematics	(3)
MAT 105 Intermediate Algebra	(4)
MAT 121 College Algebra	(4)
MAT 135 Intro. to Statistics	(3)

Select 1 course from the following:	3
SOC 101 Intro. to Sociology I	(3)
PSY 101 General Psychology I	(3)
PSY 235 Psychology of Human Growth & Development	(3)

*Must have been completed within the past five years.

Limited Scope Radiography Program

Fall	
RTR 102 Radiographic Imaging I	3
RTR 103 Radiographic Equipment	3
RTR 104 Radiographic Internship I	5
RTR 105 Radiographic Patient Care I	3
Spring	
RTR 112 Radiographic Imaging II	3
RTR 113 Radiographic Equipment II	3
RTR 114 Radiographic Internship II	5
RTR 115 Radiographic Patient Care II	2
Summer	
RTR 120 Radiography Limited Scope Internship	3
RTR 185 Radiography Limited Scope Capstone	2
Total	46-50

History

Associate of Arts Degree with a History Emphasis
(See AA Degree, page 36)

Humanities/Philosophy

Associate of Arts Degree with a Humanities/Philosophy Emphasis
(See AA Degree, page 36)

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 follow:
 - 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	Credit Hours
I. English	6
ENG 121, 122	
II. Speech	3
SPE 115	
III. Mathematics	3-5
(Select any 1 of the following)	
MAT 121, 125, 135, 201, 202	
IV. Physical & Biological Sciences	4-5
(Select any 1 of the following)	
AST 101, 102	
BIO 105, 111, 112	
CHE 101, 102, 111, 112	
GEY 111	
PHY 105, 111, 112, 211, 212	
V. Social & Behavioral Sciences	9
(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	
VI. Humanities	9
(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	
General Education Sub-Total	34-37
Major Requirements	
HSE 106 Survey of Human Services	3
Offered Fall Semester Only:	
HSE 107 Interviewing Principles & Practices	3
HSE 205 Human Services for Groups	3
HSE 206 Human Services for Families	3
HSE 211 Human Services Practicum II	4
Offered Spring Semester Only:	
HSE 108 Intro. to Therapeutic Systems	3
HSE 115 Human Services Practicum I	4
HSE 285 Human Services Practicum III (Capstone)	7
Total	64-67

Associate of Applied Science Degree in Human Services 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 follow:
 - 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	Credit Hours
ENG 131 Technical Writing I	3
or	
ENG 121 English Composition I	
MAT 103 Contemporary College Mathematics	3-5
or higher	
SPE 115 Principles of Speech	3
PSY 101 Intro. to Psychology	
or	
SOC 101 Intro. to Sociology	
or	
PSY 235 Psychology of Human Growth & Development	3
AAS Humanities requirement	3
Major Requirements	
HSE 105 Intro. to Social Welfare	3
HSE 106 Survey of Human Services	3
Offered Fall Semester Only:	
HSE 107 Interviewing Principles & Practices	3
HSE 109 Social Issues in Human Services	3
HSE 205 Human Services for Groups	3
HSE 206 Human Services for Families	3
HSE 207 Community Organization	3
HSE 211 Human Services Practicum II	4

Offered Spring Semester Only:

HSE 108	Intro. to Therapeutic Systems	3
HSE 115	Human Services Practicum I	4
HSE 208	Social Welfare Policy	3
HSE 209	Crisis Theory & Intervention	3
HSE 285	Human Services Practicum III (Capstone)	7
Total		60-62

**Certificate in Human Services
Case Management/Residential Service Aide
CCD AURARIA AND REGIONAL ASSESSMENT AND
TRAINING CENTER, FORT LOGAN**

This program prepares students for entry-level positions as case management aides or residential aides. The certificate program is transferable to the AAS and AGS in Human Services. Students must complete all certificate course work with a C grade or better.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

		Credit Hours
Electives	Basic Skills	6
HSE 106	Survey of Human Services	3
HSE 107	Interviewing Principles & Practices	3
Elective	HSE or Core	5

Offered Spring Semester Only:

HSE 209	Crisis Theory & Intervention	3
HSE 115	Human Services Practicum I (Capstone)	4-6
Total		24-26

**Associate of Applied Science Degree in
Human Services
Special Education Paraprofessional**

Special Education Paraprofessional is a program designed to prepare students to provide services to special populations and their parents in a public school or agency environment. It is not primarily designed as a program for transfer to baccalaureate institutions; however, some courses may qualify for transfer. See a faculty advisor for specific situations.

Working under the direct supervision of a teacher or other professional, the Special Education Paraprofessional communicates with, supervises, instructs, provides first aid to and is sensitive to special education populations. Graduates are prepared to enter positions as special edu-

cation paraprofessionals, special education aides and teacher's aides. Employment often requires a Colorado Bureau of Investigation background check.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Special Education Paraprofessional certificate program.

General Education Requirements		Credit Hours
CIS 118	Intro. to PC Applications	4
ENG 121	English Composition I	3
or		
ENG 131	Technical Writing I	(3)
MAT 103	Contemporary College Mathematics or higher	3-5
Select 1 course from the following:		2-3
PSY 101	General Psychology	(3)
PSY 115	Psychology of Adjustment	(2)
PSY 235	Psychology of Growth & Development	(3)
SOC 101	Intro. to Sociology	(3)
SPE 115	Principles of Speech	3

Major Requirements

HSE 110	Overview of Special Populations	3
HSE 111	Comm. Skills/Special Populations	3
HSE 112	Health & Safety Issues in Schools	1
HSE 114	Student Supervision/Behavior Mgmt.	3
HSE 115	Human Services Practicum I	4
HSE 141	Basic Instructional Techniques	3
HSE 142	Transitional Support Skills	3
HSE 211	Human Services Practicum II	4
HSE 217	Cultural Diversity in Human Services	3
HSE 285	Human Services Practicum III (Capstone)	7

Select an additional 15 or more credit hours of courses with HSE advisor approval. 15

Total 64-67

**Special Education Paraprofessional Certificate
CCD NORTH**

Special Education Paraprofessional is a 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 teacher or other professional, the special education paraprofessional communicates with, supervises, instructs, provides first aid to and is sensitive to special education populations. Graduates are prepared to enter positions as special edu-

cation paraprofessionals, special education aides and teacher's aides. Employment often requires a Colorado Bureau of Investigation background check.

All Special Education Paraprofessional certificate program credits apply toward the requirements of the AAS degree in Human Services, Special Education Paraprofessional emphasis.

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

		Credit Hours
CIS 118	Intro. to PC Applications	4
HSE 110	Overview of Special Populations	3
HSE 111	Comm. Skills/Special Populations	3
HSE 112	Health & Safety Issues in Schools	1
HSE 114	Student Supervision/Behavior Mgmt.	3
HSE 115	Human Services Practicum I	4
HSE 141	Basic Instructional Techniques	3
HSE 142	Transitional Support Skills	3
HSE 211	Human Services Practicum II (Certificate Capstone)	4
HSE 217	Cultural Diversity in Human Services	3
PSY 115	Psychology of Adjustment	2
Total		33

Special Education Aide Certificate

CCD NORTH

Special Education Aide is a 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, supervises, instructs and provides 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 Special Education Aide certificate program credits apply toward the 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.

		Credit Hours
HSE 110	Overview of Special Populations	3
HSE 111	Comm. Skills/Special Populations	3
HSE 112	Health and Safety Issues in Schools	1
HSE 114	Student Supervision/Behavior Mgmt.	3
HSE 115	Human Services Practicum I (Certificate Capstone)	4
HSE 141	Basic Instructional Techniques	3
Total		17

Intergenerational Studies

Associate of Applied Science Degree in Intergenerational Studies

The field of Intergenerational Studies consists of programs and occupations that require knowledge about the entire life span, particularly about working with young children and older adults. There are opportunities for careers in intergenerational programs, long-term care, childcare, education, recreation and similar areas. This program is the only one of its kind in the state of Colorado.

All interested persons should call 303-365-8300 to schedule an appointment with the Intergenerational Studies program coordinator at CCD Lowry, 950 Yosemite St.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 1c or completion of MAT 035 with a C or better.

General Education Requirements	Credit Hours
ENG 121 English Composition I or	3
ENG 131 Technical Writing I	(3)
MAT 103 Contemporary College Mathematics	3
PSY 235 Psychology of Growth & Development	3
SOC 101 Intro. to Sociology	3
SPE 115 Principles of Speech	3
CIS 118 Intro. to PC Applications	4

Major Requirements

ECP 101 Intro. to Early Childhood Professions	3
ECP 102 Intro. to Early Childhood Lab Techniques	3
ECP 148 Guidance Strategies for Children	3
GNT 201 Intro. to Gerontology	3
GNT 285 Gerontology Practicum (Capstone)	3
GNT 295 Leadership Development	3
HSE 107 Interviewing Principles & Practices	3
HWE 103 First Aid/CPR: Emergency Response	2
HWM 201 Health Psychology	3
IGS 201 Intro. to Intergenerational Studies	2
IGS 214 Intergenerational Programs and Services	2
IGS 221 Intergenerational Social and Policy Issues	3
IGS 285 Intergenerational Studies Internship (Capstone)	5
NUT 100 Foundations of Nutrition	3
Total	60

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 follow:
 - 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 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. Meet with a faculty program advisor and obtain an authorized signature.

General Education AA Core	Credit Hours
I. English	6
I. English	6
ENG 121, 122	
II. Speech	3
SPE 115	
III. Mathematics	3-5
(Select any 1 of the following)	
MAT 121, 125, 135, 201, 202	
IV. Physical & Biological Sciences	4-5
(Select any 1 of the following)	
AST 101, 102	
BIO 105, 111, 112	
CHE 101, 102, 111, 112	
GEY 111	
PHY 105, 111, 112, 211, 212	
V. Social & Behavioral Sciences	9
(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	
VI. Humanities	9
(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	
General Education Sub-Total	34-37

Major Requirements

CIS 125	WordPerfect	
	or	
CIS 126	Microsoft Word	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 101	Legal Writing	(3)
PAR 105	Torts	(3)
PAR 109	Property	(3)
PAR 115	Domestic Relations	(3)
PAR 125	Tax Law	(3)
PAR 126	Creditor/Debtor/Bankruptcy	(3)
PAR 201	Business Organizations	(3)
PAR 205	Probate	(3)
PAR 207	Legal Research Seminar I	(3)
PAR 208	Legal Research Seminar II	(3)
PAR 214	Administrative Law	(3)
PAR 231	Investigations I	(3)
PAR 239	Criminal Law	(3)
PAR 241	Environmental Law	(3)
PAR 252	Constitutional Law	(3)
PAR 258	Contracts	(3)
PAR 297	Cooperative Education	(3-6)
PAR 299	Independent Study	(1-3)
	Total	70-73

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 follow:
 - 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 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.

		Credit Hours
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
Elective	PAR	3
CIS 125	WordPerfect	3
	or	
CIS 126	Microsoft Word	
CIS 140	Microcomputers Databases	3
PAR 185	Paralegal Synthesis I (Capstone)	3
	Total	33

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

- Assessment scores or course equivalents as follow:
 - English at level 2 or completion of ENG 060 with a C or better;
 - reading at level 2 or completion of REA 060 with a C or better;
 - study skills at level 2 or completion of REA 060 with a C or better; and
 - math at level 2a or completion of MAT 056 with a C or better.
- Meet with a faculty program advisor and obtain an authorized signature.

General Education Requirements		Credit Hours
ENG 121	English Composition I	3
MAT 121	College Algebra	4
	or	
MAT 103	Contemporary College Mathematics	3
SPE 115	Principles of Speech	3

Select 1 course from the following

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

Select 1 course from the following

- AAS Social & Behavioral Sciences requirements: 3
- ANT 101, 111; ECO 201, 202; GEO 105;
 HIS 101, 102, 201, 202; PSY 101, 102;
 POS 105, 111; SOC 101, 102

Major Requirements

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
CIS 125	WordPerfect	
	or	
CIS 126	Microsoft Word	3

Select 9 courses from the following:		25-30
PAR 105	Torts	(3)
PAR 109	Property	(3)
PAR 115	Domestic Relations	(3)
PAR 125	Tax Law	(3)
PAR 126	Creditor/Debtor/Bankruptcy	(3)
PAR 185	Paralegal Synthesis I	(3)
PAR 201	Business Organizations	(3)
PAR 205	Probate	(3)
PAR 207	Legal Research Seminar I	(3)
PAR 208	Legal Research Seminar II	(3)
PAR 214	Administrative Law	(3)
PAR 231	Investigations I	(3)
PAR 239	Criminal Law	(3)
PAR 241	Environmental Law I	(3)
PAR 252	Constitutional Law	(3)
PAR 258	Contracts	(3)
PAR 297	Cooperative Education	(3-6)
PAR 299	Independent Study	(1-3)
PAR 285	Paralegal Synthesis II (Capstone)	3
	Total	67-75

Mathematics

Associate of Science Degree with a Mathematics Emphasis
 (See AS Degree, page 40)

Multimedia Design

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

- Assessment scores or course equivalents as follow:
 - English at level 2 or completion of ENG 060 with a C or better;
 - reading at level 3 or completion of REA 109 with a C or better;
 - study skills at level 3 or completion of REA 109; and
 - math at level 2b or completion of MAT 100 with a C or better.
- Signature authorization on program application from MUM faculty advisor.
- All students are required to be computer literate before entering the program.

General Education Requirements	Credit Hours
SPE 115 Principles of Speech	3
ENG 121 English Composition I	3
MAT 105 Intermediate Algebra	4

Select 2 AAS general education courses from the following 3 areas:	6-8
Arts and Humanities	
Physical and Biological Sciences	
Social and Behavioral Sciences	
Total	16-18

Major Requirements	
CIS 131 Intro. to Web Authoring	3
GRD 103 MAC Computer Art	3
MUM 101 Intro. to Multimedia	3
MUM 104 Design for the Computer	3
MUM 105 Image Processing & Manipulation	3
MUM 107 Integrated Video Production	3
MUM 206 Fractal Painter I	3
MUM 225 Web Page Design	3
MUM 285 Multimedia Portfolio Preparation (Speech Intensive Capstone)	3
MUM 297 Multimedia Internship	3-6
MUS 220 Computer Music	3
Total	33-36

COMPUTER GRAPHICS EMPHASIS

ART 131 Design I	3
GRD 203 Adobe Illustrator	3
GRD 209 Quark Xpress (Capstone)	3
GRD 220 PhotoShop	3
or	
MUM 230 Advanced PhotoShop	(3)
MUM 210 3-D Modeling and Animation	3
Total	15

GRAPHIC ARTS EMPHASIS

GRA 102 Electronic Composition, Art & Copy Preparation	3
GRA 103 Line & Halftone Photography	3
GRA 104 Electronic Publishing	3
GRA 107 Intro. to Web & Homepage	3
GRA 202 Electronic Page Layout	3
Total	15

GRAPHIC DESIGN EMPHASIS

GRD 100 Lettering & Typographic Design	3
GRD 105 Advertising Typography & Layout	3
GRD 200 Ad Design & Portfolio Preparation	3
GRD 206 Graphic Design Production & Prepress I	3
GRD 285 Creative Graphic Design & Portfolio Preparation (Capstone)	3
Total	15

MUSIC EMPHASIS

MUS 101 Music Theory I	3
MUS 102 Music Theory II	3
MUS 299 Independent Study	6
Total	12

PHOTOGRAPHY EMPHASIS

PHO 101 Fundamentals of Photography	3
PHO 102 Fundamentals of Color Photography	3
PHO 107 History of Photography	3
PHO 204 Intro. to Digital Imaging	3
PHO 205 Non-Chemical Printing	3
Total	15

VIDEO PRODUCTION/COMMUNICATIONS EMPHASIS

COM 251 Intro. to Television Production	3
COM 252 Videography/Editing	3
COM 253 Script & Storyboard Writing	3
COM 254 Media Writing/Media Overview	3
COM 255 Survey of Film	3
Total	15
Program Total	
Music Emphasis	61-66
All Other Emphases	64-69

Certificate in Multimedia Design

This program is designed to provide students with skills necessary for entry into the field of Multimedia Design.

Program Admission Requirements

- I. Assessment scores or course equivalents as follow:
 - 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 105 with a C or better.

	Credit Hours
CIS 131 Intro. to Web Authoring	3
GRD 103 MAC Computer Art	3
HUM 121 Survey of Humanities I	3
MUM 101 Intro. to Multimedia	3
MUM 104 Design for the Computer	3
MUM 105 Image Processing & Manipulation	3
MUM 206 Fractal Painter I	3
MUM 210 3-D Modeling and Animation	3
MUM 225 Web Page Design	3

Select an additional 6 credit hours from the following 6 electives with MUM advisor approval.

GRD 105	Advertising Typography & Layout	(3)
GRD 203	Adobe Illustrator	(3)
MUM 107	Integrated Video Production	(3)
MUM 285	Multimedia Portfolio Preparation (Speech Intensive Capstone)	(3)
MUM 297	Multimedia Internship	(3)
	Total	33

Music

Associate of Arts Degree with a Music Emphasis
(See AA Degree, page 36)

Photography

Associate of Arts Degree with a Photography Emphasis
(See AA Degree, page 36)

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 follow:
 - 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 Core	Credit Hours
I. English	6
I. English ENG 121, 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 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, 102
- SOC 101, 102

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

*Must be taken as general education or extra electives.

General Education Sub-Total 34-37

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)

Select a minimum of 1 elective course from the following:	3
PHO 205	Photography Workshop (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 these courses.

Capstone Course

PHO 285	Seminar in Photography	3
	Total	67-70

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 freelance, portrait and creative photography.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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		Credit Hours
ENG 121	English Composition I	3
MAT 121	College Algebra	3-4
MAT 103	Contemporary College Mathematics	
SPE 115	Principles of Speech	3

Select 2 AAS general education courses from the following 3 areas: 6

- Arts & Humanities
- Physical & Biological Sciences
- Social & Behavioral Sciences

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 2 courses from the following: 6

PHO 201	View Camera Techniques	(3)
PHO 202	Studio Lighting	(3)
PHO 203	The Fine Print	(3)

Select 2 courses from the following: 6

PHO 211	Portrait Photography	(3)
PHO 212	Landscape Photography	(3)
PHO 213	Creative Process	(3)

Select a minimum of 9 credit hours from the following: 9

ART 211	Painting I	(3)
ART 132	Design II	(3)
BUS 115	Intro. to Business	(3)
GRD 103	MAC Computer Art	(3)
GRD 105	Advertising Typography & Layout	(3)
GRD 220	PhotoShop	(3)
PHO 290	Special Topics	(1-3)

PHO 295	Job Search Workshop	(1)
PHO 297	Cooperative Education (variable credit)	(3-6)
PHO 285	Seminar in Photography (Capstone)	3
Total		60-61

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 freelance, portrait and creative photography.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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.

		Credit Hours
ART 121	Drawing I	3
ART 131	Design I	3
ENG 121	English Composition	3
PHO 101	Fundamentals of Photography	3
PHO 102	Fundamentals of Color	3
PHO 111	Intermediate Black & White	3
PHO 112	Intermediate Color Photography	3

Select a minimum of 6 credits from the following: 6

GRD 105	Advertising Typography & Layout	(3)
BUS 115	Intro. to Business	(3)
PHO 201	View Camera Techniques	(3)
PHO 202	Studio Lighting	(3)
PHO 203	The Fine Print	(3)
PHO 205	Photography Workshop	(3)
PHO 211	Portrait Photography	(3)
PHO 213	Creative Process	(3)
PHO 215	Photography Seminar	(3)
PHO 297	Cooperative Education	(3-6)

PHO 185 Advanced Photography (Capstone) 3

Total 30

Physics

Associate of Science Degree with a Physics Emphasis (See AS Degree, page 40)

Political Science

Associate of Arts Degree with a Political Science
Emphasis
(See AA Degree, page 36)

Printing

(See Graphic Arts, page 82)

Psychology

Associate of Arts Degree with a Behavioral Sciences
Emphasis, Psychology Emphasis
(See AA Degree, page 36)

Recreational Assistant

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 internship experiences, the graduate qualifies under the National Recreation and Park Association as a certified Leisure Assistant.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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. Or, in place of the above requirements, have completed the Recreational Assistant certificate program.
3. Submit a completed Recreational Assistant program application at CCD Lowry, 950 Yosemite St.
4. Meet with the program advisor to plan course work. Call the Recreational Assistant program coordinator at 303-365-8300.

General Education Requirements		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	5
ENG 121	English Composition I	3
MAT 135	Intro. to Statistics	3
SOC 101	Intro. to Sociology	3
SPE 115	Principles of Speech	3

Core Requirements

CIS 118	Intro. to PC Applications	4
HWE 103	First Aid/CPR: Emergency Response	2
PSY 235	Psychology of Growth & Development	3
SOC 103	Sociology of Health Care	3

Major Requirements

FHR 208	Biomechanics of Movement	3
HWM 101	Essentials of Total Fitness and Wellness	3
HWM 201	Health Psychology	3

RAE 201	Intro. to Recreational Leisure	3
RAE 202	Recreation & Leisure in Special Populations	3
RAE 203	Intro. to Therapeutic Recreation	3
RAE 204	Health & Safety in Recreation & Leisure	3
RAE 215	Recreational Assistant Internship I	4
RAE 285	Recreational Assistant Externship II (Capstone)	5

Select 2 courses from the following:	4	
FHR 100	Rhythmic Aerobics	(2)
FHR 101	Aerobics Walk/Jog/Step	(2)
FHR 102	Volleyball	(2)
FHR 104	Weight Training	(2)
FHR 105	Swimming I	(2)
FHR 106	Water Exercise	(2)
FHR 110	Golf I	(2)
Total	63	

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 303-365-8300.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 a completed Recreational Assistant program application to CCD Lowry, 950 Yosemite St.
3. Meet with the program advisor to plan course work. Call the Recreational Assistant program coordinator at 303-365-8300.

General Education Requirements (proof of equivalencies)		Credit Hours
BIO 119	Concepts of Anatomy & Physiology	5
ENG 121	English Composition I	3
MAT 135	Intro. to Statistics	3
Major Requirements		
FHR 208	Biomechanics of Movement	3
HWE 103	First Aid/CPR: Emergency Response	2
HWM 101	Essentials of Total Fitness and Wellness	3
RAE 201	Intro. to Recreational Leisure	3
RAE 202	Recreation & Leisure in Special Populations	3
RAE 203	Intro. to Therapeutic Recreation	3
RAE 204	Health & Safety in Recreation & Leisure	3
RAE 215	Recreational Assistant Internship I	4
RAE 285	Recreational Assistant Externship II (Capstone)	5
Select 2 courses from the following:		4
FHR 100	Rhythmic Aerobics	(2)
FHR 101	Aerobics Walk/Jog/Step	(2)
FHR 102	Volleyball	(2)
FHR 104	Weight Training	(2)
FHR 105	Swimming I	(2)
FHR 106	Water Exercise	(2)
FHR 110	Golf I	(2)
Total		44

Sociology

**Associate of Arts Degree with a Behavioral Sciences
Emphasis, Sociology Emphasis**
(See AA Degree, page 36)

Speech

Associate of Arts Degree with a Speech Emphasis
(See AA Degree, page 36)

Teacher Education

**Associate of General Studies Degree:
MSCD Elementary 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 follow:
 - 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	6
I. English	6
ENG **121, **122	
II. Speech	3
SPE **115	
III. Mathematics	3-5
(Select any 1 of the following)	
MAT **121, 125, 135, 201, 202	
IV. Physical & Biological Sciences	4-5
(Select any 1 of the following)	
AST 101, 102	
BIO **105, 111, 112	
CHE 101, 102, 111, 112	
GEY 111	
PHY 105, 111, 112, 211, 212	
V. Social & Behavioral Sciences	9
(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	
VI. Humanities	9
(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	

**Required courses to complete MSCD Elementary Teacher Education requirements.

General Education Sub-Total 34-36

Teacher Education licensure students will need to declare an academic major and minor when they transfer to MSCD. Courses from the CCD core and electives may be used for lower division major or minor courses.

Major Requirements

MSCD courses for which CCD courses will substitute are listed in parentheses.

ECP 110	Child Growth & Development (MSCD PSY 180-4)	4
EDU 201	Elementary Education in U.S. (MSCD EDU 212-3)	3
EDU 202	Urban & Multicultural Education (MSCD EDU 264-2)	3

Electives 11-13
Select CCD credits with EDU advisor approval

Capstone Course		
EDU 285	Critical Thinking in Educational Issues & Trends	3
	Total	58-62

Associate of General Studies Degree in Early Childhood 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 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 ECE Capstone course test. Any student not completing CCD's Capstone course must successfully complete with an 80 percent or better on the exit competency test 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 follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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	6
ENG **121, **122	
II. Speech	3
SPE **115	
III. Mathematics	3-5
(Select any 1 of the following)	
MAT **121, 125, **135, 201, 202	
IV. Physical & Biological Sciences	4-5
(Select any 1 of the following)	
AST 101, 102	
BIO **105, 111, 112	
CHE 101, 102, 111, 112	
GEY 111	
PHY 105, 111, 112, 211, 212	
V. Social & Behavioral Sciences	9
(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	
VI. Humanities		9
(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		

*Required for Colorado Department of Human Services Director License

**Required courses to complete MSCD ECE Teacher Education requirements.

General Education Sub-Total	34-37
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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 234-3)	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

MSCD Electives or Contract Minor
These courses may be used as electives or contract minor courses, but DO NOT substitute for MSCD-ECE licensure courses:

ECP 148	Guidance Strategies for Children	3
ECP 205	Nutrition & the Young Child	3
ECP 206	Working with Parents, Families & Community Systems	3
ECP 227	Curriculum Development: Methods/Techniques	3

Capstone Course

ECP 226	Administration of Early Childhood Care & Education Programs	3
ECP Subtotal		28
Total		62-64

Associate of General Studies Degree in Early Childhood 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 will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate. The student completes a 9-credit emphasis in Violence Counseling.

Graduate exit competency is measured by successful completion (80 percent) of the ECE Capstone course test. Any student not completing CCD's Capstone course must successfully complete with an 80 percent or better on the exit competency test 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 follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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	6
I. English ENG **121, **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 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	9

- PSY *101, *102
- SOC 101, 102
- 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

*Required for Colorado Department of Human Services Director License

**Required courses to complete MSCD ECE Teacher Education requirements.

General Education Sub-Total 34-37

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 234-3)	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

MSCD Electives or Contract Minor
 These courses may be used as electives or contract minor courses, but DO NOT substitute for MSCD-ECE licensure courses:

ECP 148	Guidance Strategies for Children	3
ECP 205	Nutrition & the Young Child	3
ECP 206	Working with Parents, Families & Community Systems	3
ECP 210	Curriculum: First Start: Including Children with Disabilities	3
ECP 225	Curriculum: Anti-Bias	3
ECP 227	Curriculum Development: Methods/Techniques	3
ECP 275	Curriculum: Violence Prevention	3

Capstone Course

ECP 226	Administration of Early Childhood Care & Education Programs	3
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ECP Subtotal 37

Total 71-74

Associate of Applied Science Degree in Early Childhood Education

Early Childhood Education (AAS-ECE)

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 will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate. The student completes a 9-credit emphasis in Violence Counseling.

Graduate exit competency is measured by successful completion (80 percent) of the ECE Capstone course test. Any student not completing CCD's Capstone course must successfully complete with an 80 percent or better on the exit competency test 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 follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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	Credit Hours
MAT 100 or higher	3-5
ENG 100 Composition, Style & Technique	3
SPE 115 Principles of Speech	3
PSY 235 Psychology of Growth & Development	3
or	
PSY 101 General Psychology	(3)
Course from AAS Humanities Requirement	3
Total	15-17

Major Requirements

ECP 101 Intro. to Early Childhood Professions	3
ECP 102 Intro. to Early Childhood Lab Techniques	3
ECP 110 Child Growth & Development	4
ECP 148 Guidance Strategies for Children	3
ECP 205 Nutrition & the Young Child	3
ECP 206 Working with Parents, Families & Community Systems	3
ECP 226 Administration of Early Childhood Care & Education Programs	3
ECP 227 Curriculum Development:	3

Methods/Techniques:

ECP 235 Curriculum: Music/Movement & the Young Child	3
ECP 250 Supervised Student	5

Practicum/Seminar I		
ECP 251	Supervised Student Practicum/Seminar II (Capstone)	5
ECP 253	Children's Assessment Systems	1
ECP 254	Observing & Utilizing Young Children's Assessment Instruments	1

Select 9 credits from the following curriculum electives:		9
ECP 111	Infant & Toddler Theory & Practice	(3)
ECP 210	First Start: Including Children with Disabilities	(3)
ECP 215	Creativity & the Young Child	(3)
ECP 225	Curriculum: Anti-Bias	(3)
ECP 245	Curriculum: Art & the Young Child	(3)
ECP 265	Curriculum: Science/Math & the Young Child	(3)
ECP 275	Curriculum: Violence Prevention	(3)
Program Total		64-66

Associate of Applied Science Degree in Early Childhood Education

Early Childhood Education/Violence Counseling (AAS-ECE/VC)

This program meets the vocational training needs for personnel involved in the care and education of young children (birth through 8 years) and all Colorado Department of Human Services licensing academic requirements. A grade of C or better is required in all degree classes. Students completing the degree requirement will have met the requirements for an Early Childhood Education Group Leader certificate and an Early Childhood Education Director certificate. The student completes a 9-credit emphasis in Violence Counseling.

Graduate exit competency is measured by successful completion (80 percent) of the ECE Capstone course test. Any student not completing CCD's Capstone course must successfully complete with an 80 percent or better on the exit competency test 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 follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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	Credit Hours
MAT 100 or higher	3-5
ENG 100 Composition, Style & Technique	3
SPE 115 Principles of Speech	3
PSY 235 Psychology of Growth & Development	3
or	
PSY 101 General Psychology	(3)
Course from AAS Humanities Requirement	3
Total	15-17

Major Requirements

ECP 101 Intro. to Early Childhood Professions	3
ECP 102 Intro. to Early Childhood Lab Techniques	3
ECP 110 Child Growth & Development	4
ECP 148 Guidance Strategies for Children	3
ECP 205 Nutrition & the Young Child	3
ECP 206 Working with Parents, Families & Community Systems	3
ECP 210 First Start: Including Children with Disabilities	3
ECP 225 Curriculum: Anti-Bias	3
ECP 226 Administration of Early Childhood Care & Education Programs	3
ECP 227 Curriculum Development:	3

Methods/Techniques:

ECP 235 Curriculum: Music/Movement & the Young Child	3
ECP 250 Supervised Student	5

Practicum/Seminar I

ECP 251 Supervised Student Practicum/Seminar II (Capstone)	5
ECP 253 Children's Assessment Systems	1
ECP 254 Observing & Utilizing Young Children's Assessment Instruments	1
ECP 275 Curriculum: Violence Prevention	3

Optional: Select any of the following electives:

ECP 111 Infant & Toddler Theory & Practice	(3)
ECP 215 Creativity & the Young Child	(3)
ECP 245 Curriculum: Art & the Young Child	(3)
ECP 265 Curriculum: Science/Math & the Young Child	(3)

Total 64-66

**Certificate in Early Childhood Education
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

- I. Assessment scores or course equivalents as follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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

Credit Hours

ECP 101 Intro. to Early Childhood Professions	3
ECP 102 Intro. to Early Childhood Lab Techniques	3
ECP 110 Child Growth & Development	4
ECP 148 Guidance Strategies for Children	3
ECP 205 Nutrition & the Young Child	3
ECP 226 Administration of Early Childhood Care & Education Programs (Capstone)	3
ECP 227 Curriculum Development:	3

Methods/Techniques

ECP Elective	3
PSY 101 General Psychology	3
or	
PSY 235 Psychology of Human Growth & Development	

Select 1 course from the following:	3
ECP 111 Infant & Toddler Theory & Practice	(3)
ECP 210 Curriculum: First Start: Including Children with Disabilities	(3)
ECP 215 Creativity & the Young Child	(3)
Total	31

**Certificate in Early Childhood Education
Group Leader**

CCD AURARIA, CCD WEST

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.

All Early Childhood Education Group Leader certificate program credits apply toward the requirements of the AAS degree in Early Childhood Education.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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

		Credit Hours
ECP 101	Intro. to Early Childhood Professions	3
ECP 102	Intro. to Early Childhood Lab Techniques	3
ECP 110	Child Growth & Development	4
ECP 148	Guidance Strategies for Children	3
	Select 1 course from the following:	3
ECP 111	Infant & Toddler Theory & Practice	(3)
	or	
ECP 227	Curriculum Development: Methods/Techniques	(3)
	Total	16

Certificate in Early Childhood Education

Group Leader/Child Development Associate (CDA)

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 follow:
 - a. English at level 4 or completion of ENG 060 with a C or better;
 - b. reading at level 3a or completion of REA 105 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
ECP 102	Intro. to Early Childhood Lab Techniques	3
ECP 110	Child Growth & Development	4
ECP 148	Guidance Strategies for Children	3
ECP 290	Special Topics: CDA	3
	Select 1 course from the following:	3
ECP 111	Infant & Toddler Theory & Practice	(3)
	or	
ECP 227	Curriculum Development: Methods/Techniques	(3)
	Total	19

Theatre

Associate of Arts Degree with a Theatre Emphasis

(See AA degree, page 36)

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 dean in the Center for Health, Math and Science for information on this program.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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 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 follow:
 - 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.		General Education Requirements	Credit Hours
		CIS 118 Intro. to PC Applications	4
		ENG 121 English Composition I	3
		or	
		ENG 131 Technical Writing I	
Apprenticeship Training	Credit Hours	Select one course from the following:	3-4
Four- to five-year training and Capstone	43	MAT 103 Contemporary College Math	(3)
Three-year training and Capstone	40	MAT 121 College Algebra	(4)
General Education Requirements		SPE 115 Principles of Speech	3
ENG 121 or 131	3	Select one course from the following:	2-3
MAT 103 or 121	4	ECO 201 Principles of Macro Economics	(3)
Select 1 course from the following		POS 105 Intro. to Political Science	(3)
AAS Physical & Biological Sciences requirements:	4-5	PSY 115 Psychology of Adjustment	(2)
AST 101, 102; BIO 105, 111, 112*			
CHE 101, 102, 111, 112; GEY 111;		Major Requirements	
PHY 105, 111, 112, 211, 212		MTO 130 Intro. to Machine Shop	2
Select 1 course from the following		MTO 131 Machine Math and Prints I	3
AAS Humanities requirements:	3-4	MTO 132 Mills I	4
ART 111, 112; CIS 118;		MTO 133 Engine Lathes I	4
HUM 121, 122, 123; LIT 115, 201, 202		MTO 140 Metrology	2
MUS 120, 121, 122; PHI 111, 112, 113		MTO 141 Mills II	4
Any foreign language 111 or higher;		MTO 142 Machine Math and Prints II	1
THE 105, 211, 212		MTO 143 Engine Lathes II	3
Select 1 course from the following		MTO 221 Engine Lathes III	2
AAS Social & Behavioral Sciences requirements:	3	MTO 223 Job Shop Machining I	3
ANT 101, 111; ECO 201, 202; GEO 105;		MTO 250 Auto Cad I	3
HIS 101, 102, 201, 202; PSY 101, 102;		MTO 251 CNC Operations (Capstone)	3
POS 105, 111; SOC 101, 102		MTO 252 CNC Principles	4
SPE 115 Intro. to Speech	3	MTO 253 CNC Mathematics I	2
(3-year apprenticeship program only)		Select an additional 6 or more credit hours with MTO advisor approval.	6
Total	63-68	Total	61-63

**Associate of Applied Science Degree In Trades
CNC Machine Tool Operator**

This program prepares the student as an entry-level specialist to work with CNC lathes, CNC mills and most other machine tools. Students are prepared to work with common metrology processes, various types of drawings and prints, AutoCAD software and CNC programming. Graduates are prepared to enter positions as CNC machine tool operators.

Program Admission Requirements

1. Assessment scores or course equivalents as follow:
 - 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;
 - d. math at level 2a or completion of MAT 103 with a C or better.
2. Or, in place of the above requirements, have completed the CNC Machine Tool Operator certificate program.

**CNC Machine Tool Operator Certificate
CCD NORTH**

CNC Machine Tool Operator is a program designed for completion in two, 17-week semesters. It prepares students with the job-entry skills necessary to perform most operations on the vertical mill, horizontal mill, lathe, grinder/shaper, CNC mill and CNC lathe. Graduates are prepared to enter positions as CNC machine tool operators.

All CNC Machine Tool Operator certificate program credits apply toward the requirements of the AAS degree in Trades, CNC Machine Tool Operator.

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

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math and Prints I	3
MTO 132	Mills I	4
MTO 133	Engine Lathes I	4

MTO 140	Metrology	2
MTO 141	Mills II	4
MTO 142	Machine Math and Prints II	1
MTO 143	Engine Lathes II	3
MTO 221	Engine Lathes III	2
MTO 223	Job Shop Machining I	3
MTO 250	Auto Cad I	3
MTO 251	CNC Operations (Capstone)	3
MTO 252	CNC Principles	4
MTO 253	CNC Mathematics I	2
PSY 115	Psychology of Adjustment	1
Total		41

Machine Tool Operator Certificate

CCD NORTH

Machine Tool Operator is a program designed for completion in two, 15-week semesters. It prepares students with the 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.

All Machine Tool operator certificate program credits apply toward the CNC Machine Tool Operator 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.

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math and Prints I	3
MTO 132	Mills I	4
MTO 133	Engine Lathes I	4
MTO 140	Metrology	2
MTO 141	Mills II	4
MTO 143	Engine Lathes II (Capstone)	3
MTO 223	Job Shop Machining I	3
PSY 115	Psychology of Adjustment	1
Total		26

Lathe Operator Certificate

CCD NORTH

Lathe Operator is a program designed for completion in one, 15-week semester. It prepares students with the job-entry skills necessary to perform most operations on the lathe. Graduates are prepared to enter positions as lathe operators.

All Lathe Operator certificate program credits apply toward the Machine Tool Operator certificate program requirements.

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

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math and Prints I	3
MTO 133	Engine Lathes I	4
MTO 140	Metrology	2
MTO 143	Engine Lathes II	3
MTO 223	Job Shop Machining I (Capstone)	2
Total		16

Mill Operator Certificate

CCD NORTH

Mill Operator is a program designed for completion in one, 15-week semester. It prepares students with the job-entry skills necessary to perform most operations on mills. Graduates are prepared to enter positions as mill operators.

All Mill Operator certificate program credits apply toward the Machine Tool Operator certificate program requirements.

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

		Credit Hours
MTO 130	Intro. to Machine Shop	2
MTO 131	Machine Math and Prints I	3
MTO 132	Mills I	4
MTO 140	Metrology	2
MTO 141	Mills II	4
MTO 223	Job Shop Machining I (Capstone)	2
Total		17

Associate of Applied Science Degree In Trades

Fabrication Welder

This program prepares the student as an entry-level specialist to work with most operations in oxy-acetylene welding, shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding on metals that range from heavy plate and pipe to thin gauge sheet metals. Various steels and aluminum metal are used. Graduates are prepared to enter such positions as arc welders, industrial welders, production welders, fabrication welders and TIC or MIG welders.

Program Admission Requirements

- Assessment scores or course equivalents as follow:
 - English at level 3 or completion of ENG 100 with a C or better;
 - reading at level 3a or completion of REA 090 with a C or better;
 - study skills at level 3 or completion of REA 109 with a C or better;
 - math at level 2a or completion of MAT 103 with a C or better.
- Or, in place of the above requirements, have completed the Fabrication Welder certificate program.

General Education Requirements	Credit Hours
CIS 118 Intro. to PC Applications	4
ENG 121 English Composition I	3
or	
ENG 131 Technical Writing I	
Select one course from the following:	3-4
MAT 103 Contemporary College Math	(3)
MAT 121 College Algebra	(4)
SPE 115 Principles of Speech	3
Select one course from the following:	2-3
ECO 201 Principles of Macro Economics	(3)
POS 105 Intro. to Political Science	(3)
PSY 115 Psychology of Adjustment	(2)
Major Requirements	
WEF 100 Oxyacetylene Welding I	3
WEF 102 Air Arc Gouging	2
WEF 108 SMAW Set Up and Padding	4
WEF 109 SMAW I	4
WEF 110 SMAW II	4
WEF 111 SMAW Structural I	4
WEF 112 SMAW Structural II	3
WEF 114 Welding Math and Prints I	3
WEF 130 GMAW Set Up	2
WEF 203 Pipe Welding	3
WEF 205 GMAW Thin Gauge and Structural	4
WEF 207 GTAW Set Up	2
WEF 208 GTAW Thin Gauge and Alloy (Capstone)	4
Select an additional 3 or more credit hours with WEF advisor approval.	3
Total	60-62

**Fabrication Welder Certificate
CCD NORTH**

Fabrication Welder is a program designed for completion in two, 17-week semesters. It prepares students with the job-entry skills necessary to perform most operations in oxyacetylene welding, shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding on materials that range from heavy plate to thin-gauge sheet metals and are composed of various steels and aluminum. Graduates are prepared to enter positions as arc, plate, industrial, production, fabrication, TIG or MIG and construction welders.

The Fabrication certificate program credits and the previously listed General Studies Core credits complete the requirements of the AAS degree in Trades, Fabrication Welder.

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

	Credit Hours
PSY 115 Psychology of Adjustment	1
WEF 100 Oxyacetylene Welding I	3
WEF 102 Air Arc Gouging	2
WEF 108 SMAW Set Up and Padding	4
WEF 109 SMAW I	4
WEF 110 SMAW II	4

WEF 111 SMAW Structural I	4
WEF 112 SMAW Structural II	3
WEF 114 Welding Math and Prints I	3
WEF 130 GMAW Set Up	2
WEF 203 Pipe Welding	3
WEF 205 GMAW Thin Gauge and Structural	4
WEF 207 GTAW Set Up	2
WEF 208 GTAW Thin Gauge and Alloy (Capstone)	4
Total	43

**Arc Welder Certificate
CCD NORTH**

Arc Welder is a 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 Arc Welder certificate program credits apply toward the 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.

	Credit Hours
PSY 115 Psychology of Adjustment	1
WEF 100 Oxyacetylene Welding I	3
WEF 102 Air Arc Gouging	2
WEF 108 SMAW Set Up and Padding	4
WEF 109 SMAW I	4
WEF 110 SMAW II	4
WEF 111 SMAW Structural I	4
WEF 112 SMAW Structural II (Capstone)	3
WEF 114 Welding Math and Prints I	3
Total	28

**Basic Welder Certificate
CCD NORTH**

Basic Welder is a program designed for completion in one, 15-week semester. It prepares students with job-entry skills necessary to perform most operations in shielded metal arc welding on common sizes of steel materials. Graduates are prepared to enter positions as welders and arc welders.

All Basic Welder certificate program credits apply toward the Arc Welder certificate program requirements.

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

	Credit Hours
WEF 108 SMAW Set-Up and Padding	4
WEF 109 SMAW I	4
WEF 110 SMAW II	4
WEF 111 SMAW Structural I (Capstone)	4
Total	16

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 online 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 hours

Designed for students with limited science or mathematics background. Provides opportunities for the student to practice study skills and strategies for learning biology, chemistry, mathematics and physics.

290 Special Topics Course

Carries 1 to 6 credits hours

Course titles (topics) will vary. Permission of the instructor and division dean is required prior to registration. Four-year institutions vary in their acceptance policies for special topics courses. Students planning to transfer should keep a portfolio of their work.

295 Job Search Workshop

Variable credit hours

Presents information on the nature of work, employer expectations, résumé writing, job interview techniques and job search skills.

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 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 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

3 credit hours

Emphasizes the basic elements of the accounting cycle through statement preparation. Includes common book-keeping procedures for handling cash receipts and disbursements and working with accounts receivable and payable. Includes practice in handling journals and ledgers.

ACC 110 Business Math

3 credit 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

3 credit hours

Prerequisite: ACC 121

Introduces taxation and explains how the income tax affects individuals.



ACC 113 Computerized Accounting

4 credit hours

Prerequisite: ACC 101 and 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

2 credit hours

Provides the student with a better understanding of the laws governing payroll and the theory and procedures for setting up payroll systems.

ACC 116 Computerized Billing

3 credit hours

Prerequisite: ACC 101, BTE 102 or instructor consent

Introduces the concepts and operations of a computerized billing system. Topics include searches, queries, entering and posting account charges and payments, corrections and audits of journals, and preparation and printing of reports.

ACC 121 Accounting Principles I

4 credit hours

Corequisite: 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

4 credit hours

Prerequisite: 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)

3 credit hours

Prerequisite: ACC 122

Studies the asset valuation process. Acquaints students with the historical, conceptual and pragmatic dimension of a wide range of major accounting issues that are integral to the development of balance sheets, income statements and statements of changes in financial positions for the complex organization. This is a capstone course.

ACC 215 Accounting Systems

3 credit 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

3 credit hours

Prerequisite: ACC 122

Introduces the theory, concept and procedures of cost accounting. Gives students a basic understanding of managerial and cost accounting systems used in manufacturing businesses.

Administrative Health Assistant**AHA 120 Medical Filing**

3 credit hours

Introduces the student to the basic rules and principles of filing in medical facilities. Topics include numeric filing, terminal digit filing, cross-referencing, 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

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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

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

Prerequisite: ASL 101

Continues topics introduced in ASL 101. Emphasizes critical and logical thinking in ASL. Assists the non-native user of ASL to better integrate signing into the larger deaf community. Also, students will add to their basic ability to communicate with the deaf in social and individual settings.

Anthropology**ANT 101 Cultural Anthropology**

3 credit hours

Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change and applied anthropology.

ANT 107 Introduction to Archaeology

3 credit hours

Surveys the recovery of human prehistoric and historic past through excavation, analysis and interpretation of material remains, including the archaeology and prehistory of several areas of the world. Covers the work of archaeologists along with discussions of major theories and excavations.

ANT 111 Physical Anthropology

3 credit hours

Studies human biology and its effects on behavior. Includes principles of genetics and evolution, vertebrates and primates, human origins, human variations and ecology.

ANT 203 Urban Socio-Anthropology

3 credit hours

Prerequisite: ANT 101 or SOC 101 or SOC 102

Examines how cities and city life are shaped by cultural, social, political and economic forces operating at many different levels. Examines the history and theoretical roots of urban anthropology and sociology, ethnographic fieldwork in urban environments, and urban social organization in cross-cultural perspective. Students will be able to apply general principles in a global context.

ANT 265 Violence and Culture

3 credit hours

Prerequisite: ANT 101, SOC 101, or SOC 102

Examines violence in multiple cultural contexts. Develops an understanding of societal and institutional causes of violence, explores resources for intervention and treatment and provides service learning applications in violence treatment. Topics include culture, gender and ethnicity, the media, family violence, sexual violence, the state, prevention and treatment.

Arabic**ARB 111 First-Year Arabic I**

5 credit hours

Gives students a fundamental understanding of the Arabic language and develops their basic listening, speaking, reading and writing skills.

Art**ART 110 Art Appreciation**

3 credit hours

Introduces cultural significance of the visual arts, including painting, photography, sculpture, crafts, design and architecture. Surveys the techniques, terminology and traditions of art, as well as current trends. Provides students with opportunities to visit galleries and museums of art in the Denver area.

ART 111 Art History I

3 credit hours

Provides the knowledge base to understand the visual arts, including works from Western and non-Western cultures. Surveys the visual arts from the ancient through the medieval periods.

ART 112 Art History II

3 credit hours

Provides the knowledge base to understand the visual arts, including works from Western and non-Western cultures. Surveys the visual arts from the Renaissance through the modern periods.

ART 121 Drawing I

3 credit hours

Introduces various approaches and media designed to develop drawing skills and visual awareness.

ART 122 Drawing II/Mixed Media

3 credit hours

Prerequisite: ART 121

Continues topics introduced in ART 121 with emphasis in the use of a variety of contemporary media and drawing materials, individual expressive style, color and advanced composition.

ART 131 Design I

3 credit hours

Studies basic design elements, visual perception, form and composition.

ART 132 Design II

3 credit 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

Prerequisite: 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

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

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

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

Prerequisite: 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

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

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

Introduces a technical and formal foundation for the beginning student, including composition, color, materials and techniques of acrylic painting.

ART 212 Painting II

3 credit hours

Prerequisite: ART 211

Emphasizes color, composition, techniques and formal visual concepts as they relate to oil painting.

ART 213 Painting III

3 credit hours

Prerequisite: ART 212

Continues advanced work with consistent thematic development, sophisticated color relationships, formal and technical concerns.

ART 214 Painting IV

3 credit hours

Prerequisite: ART 213

Continues advanced work with thematic development, sophisticated color relationships, formal and technical concerns and consistent progression of subject matter.

ART 231 Watercolor I

3 credit hours

Prerequisite: ART 121

Introduces a technical and formal foundation for the beginning student, to include color, composition, materials and techniques of watercolor painting.

ART 232 Watercolor II

3 credit hours

Prerequisite: ART 231

Continues the study of watercolor techniques with an emphasis on subject development, form, color and theme.

ART 251 The Fine Print

3 credit hours

Prerequisite: 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

Prerequisite: ART 151, 152, 153

Introduces basic concepts and principles needed to produce personally expressive photographs with studio lighting equipment, especially electronic flash. Includes working with a variety of camera formats, from 35mm to 4x5 view camera.

ART 253 View Camera Techniques

3 credit hours

Prerequisite: ART 151, 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

Prerequisite: 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

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

Examines methods of science, overall content and structure of the universe, motions of the sun, moon and stars, history of astronomy, tools of the astronomer, the composition, structure, characteristics, and origins of the solar system and potential for extraterrestrial life. Course includes laboratory and observational experience.

AST 102 Astronomy II

4 credit hours

Studies the nature of light, stellar spectra, stellar energy sources, structure and life cycle of stars, the sun, galaxies and the origin and evolution of the universe. Course includes laboratory and observational experience.

Biology**BIO 105 Science of Biology**

4 credit hours

Prerequisite: ENG 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 experiences.

BIO 111 General College Biology I

5 credit hours

Prerequisite: 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

Prerequisite: BIO 111

Continues General College Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. Includes laboratory experience.

BIO 116 Human Biology

3 credit hours

Introduces human anatomy and physiology for those who have no background in science. Does not substitute for a year-long anatomy and physiology course with a laboratory. Topics include: atoms, molecules, cells, energetics, genetics and a brief survey of systems.

BIO 118 Human Ecology and the Environment

3 credit hours

Explores the ways in which human population ecology has an impact on global environmental balance and is, in turn, affected by it. Topics focus on population, natural resources and land use. Introduces selected principles of general ecology such as food webs and biogeochemical cycles.

BIO 119 Concepts of Anatomy and Physiology

5 credit hours

Provides a detailed survey of anatomy and physiology of all body systems. Includes areas of specialization for study in the Gerontology, Health and Wellness Management, Massage Therapy, Psychiatric Technician, Radiography, Recreational Assistant and Surgical Technology programs.

BIO 201 Human Anatomy and Physiology I

4 credit hours

Prerequisite: BIO 116, CHE 106 or one year high school chemistry

Includes atomic, molecular, cellular, tissue and gross morphology of the skeletal, muscular, nervous and endocrine systems. Include required laboratory.

BIO 202 Human Anatomy and Physiology II

4 credit hours

Prerequisite: BIO 201 or instructor consent

Includes atomic, molecular, cellular, histology, gross morphology, and physiology of the reproductive, integumentary, urinary, cardiovascular, lymphvascular, digestive and respiratory systems, plus homeostatic mechanisms. Includes required laboratory.

BIO 205 Microbiology

4 credit 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

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

3 credit hours

Prerequisite: 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

1 credit hour

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

3 credit 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)

1 credit hour

Prerequisite: ACC 121, BUS 115, 217, 221, ECO 201

Reviews and focuses on preceding management and business study; for completion during the final semester before receiving a certificate in management.

BUS 205 Small Business Management

3 credit hours

Prerequisite: 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

3 credit 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

3 credit hours

Prerequisite: BUS 115

Introduces students to the concept, development, present and future importance of international business.

BUS 211 International Marketing

3 credit hours

Prerequisite: BUS 115

Provides a foundation for developing marketing strategies that apply to export and import operation with international businesses.

BUS 215 International Business Environments

3 credit 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

3 credit 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 communication barriers.

BUS 218 Business Communications II

3 credit 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

3 credit hours

Prerequisite: 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

3 credit hours

Prerequisite: 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

3 credit 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

3 credit 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

3 credit 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

3 credit hours

Prerequisite: 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

3 credit 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

3 credit hours

Prerequisite: BUS 115

Familiarizes students with the business activities collectively referred to as "retailing."

BUS 236 Principles of Marketing

3 credit 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

3 credit 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

3 credit 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

3 credit hours

Prerequisite: BUS 115

Offers an overview of the social, economic and marketing environment that involves advertising.

BUS 240 Customer Service for the Retail and Financial Industries

3 credit hours

Covers the communication process, the purpose of business, customers, customer service excellence, service delivery, customer and employee behavior, customer loss, complaints, career paths and job enrichment. Provides the student with the conceptual knowledge and tools to provide customer service in the retail and financial industries.

BUS 241 Introduction to Retail Concepts

3 credit hours

Covers the concepts and history of retail, the retail environment, the retail image, service professionals, merchandising, pricing and customer service. Designed for the student who is interested in the retail industry.

BUS 250 Business of Credit Principles

3 credit hours

Prerequisite: 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.

BUS 270 Business Ethics

3 credit hours

Prerequisite: BUS 115 and 228

Teaches students to discern ethical issues and the influence these issues have on management decision making. Considers the social, ethical and public issues from a strategic perspective. Includes appropriate business response and management approaches for dealing with social issues.

BUS 285 Business Policy and Ethics (Capstone)

3 credit hours

Prerequisite: Sophomore status and course taken in the last semester of study

Designed to integrate the skills learned in prior business study by building upon them through a critical examination of such classic issues as the role of business in society, business policy, business ethics, the complex roles of government and business in a global economic community, and the nature of corporate social responsibility.

Business of Travel and Tourism**BTT 110 Introduction to Travel**

3 credit 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

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

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

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

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

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

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

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**BTE 100 Introduction to Keyboarding**

3 credit hours

Introduces touch keyboarding, as well as basic operations and functions of equipment. Emphasizes learning the alphanumeric keyboard, proper techniques, and speed and control. Designed for students who have minimal or no keyboarding skills.

BTE 101 Keyboarding I

4-5 credit hours

Introduces keyboard, machine parts, correct techniques and accuracy in keyboarding applications of centering, tabulating letters and manuscripts.

BTE 102 Basic Keyboarding Applications

2-3 credit 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

2-3 credit hours

Prerequisite: BTE 101

Improves typing speed and accuracy using the Cortez Peters Championship Typing Method.

BTE 104 Keyboarding SpeedBuilding

1-5 credit 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**

1-2 credit hours

Introduces the student to touch control of a 10-key pad. The class emphasizes the development of speed and accuracy using proper technique.

BTE 120 Records Management

4 credit hours

Corequisite: BTE 101 or instructor consent

Develops the ability to file and retrieve documents using alphabetic, numeric, subject and geographic systems. Provides the participant with records management skills, including emphasis on PC computer management.

BTE 121 Alpha Speedwriting I

4 credit hours

Prerequisite: BTE 101

Covers the theory of an alphabetic system of shorthand. Develops skills in brief forms, theory, dictation speed and transcription.

BTE 133 Word Processing Communications and Applications

3 credit hours

Prerequisite: BTE 101, CIS 125

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

3 credit 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

3 credit 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 160 Data Entry I

3 credit 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

3 credit hours

Prerequisite: BTE 101

Introduces the business world of the 21st century and the various office duties and skills required. Includes organization of office work, incoming and outgoing mail, telephone techniques, office equipment, office communications and business ethics.

BTE 202 Keyboarding II

5 credit hours

Prerequisite: BTE 101

Reinforces fundamentals of keyboarding procedures. Develops speed and accuracy in more advanced levels of production work using the prevailing business forms. Emphasizes quality of output.

BTE 204 Advanced Keyboarding SpeedBuilding

4 credit hours

Prerequisite: BTE 101

Builds greater keyboarding speed and improves accuracy through the use of course technique and concentrated effort.

BTE 206 Health Insurance Methods Claims

3 credit hours

Prerequisite: 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

2 credit hours

Prerequisite: BTE 101

Provides a background in basic legal terminology.

BTE 230 Machine Transcription

5 credit hours

Prerequisite: ENG 100

Helps the student attain competency in transcribing from machine dictation, using the language arts and formatting office papers.

BTE 288 Model Office

3 credit hours

Prerequisite: CIS 125 or 126

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.

Central Service Technician**CST 100 Central Service Technician**

3 credit hours

Prerequisite: High school diploma or GED, or concurrent enrollment in GED and HWE 100, Medical Terminology I

Corequisite: HWE 100

Familiarizes students with principles of central service supply, processing and distribution. Medical terminology, anatomy and physiology, microbiology, sterilization, inventory, storage and communication skills are emphasized. Upon successful course completion, eligible candidates are qualified to sit for the National Institute for the Certification of Healthcare Sterile Processing and Distribution.

CST 105 Central Service Instrument Technician

3 credit hours

Prerequisite: High school diploma or GED, or concurrent enrollment in GED and HWE 100, Medical Terminology I

Corequisite: HWE 100

Emphasizes theoretical and practical aspects of medical instrument identification, cleaning, assembly, sterilization and storage. Prepares student for entry-level positions in medical instrument processing facilities, including hospitals, clinics and free-standing surgical units. Classroom and laboratory instruction is included with clinical site placement for work-related experiences.

Chemistry**CHE 085 Problem Solving**

1 credit hour

Corequisite for All CHE Courses.

A tutorial class designed to help students develop problem-solving skills.

CHE 101 Introduction to Chemistry I

5 credit hours

Prerequisite: ENG 110, MAT 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 the concepts qualitatively and quantitatively.

CHE 102 Introduction to Chemistry II

5 credit 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 the topics quantitatively and qualitatively.

CHE 106 General, Organic and Biochemistry

4 credit hours

Introduces the fundamentals of inorganic, organic and biochemistry. Primarily for students in health or life sciences.

CHE 111 General College Chemistry I

5 credit hours

Prerequisite: CHE 101, ENG 121, MAT 121

Corequisite: ENG 121, MAT 121

Includes the study of thermodynamics, chemical kinetics, chemical equilibrium, acid-base equilibrium, ionic equilibrium, electrochemistry, nuclear 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

Prerequisite: CHE 111

Includes the study of thermodynamics, chemical kinetics, chemical equilibrium, ionic equilibrium, electrochemistry, nuclear chemistry and organic chemistry. Also includes problem-solving skills and descriptive contents for these topics. May include organic chemistry if time permits. Laboratory experiments demonstrate both qualitative and quantitative analytical techniques.

Chinese**CHN 101 Conversational Chinese I**

3 credit hours

Gives students a fundamental understanding of the Chinese language, and develops basic listening, speaking, reading and writing skills. Emphasizes practical conversation, basic sentence structure, vocabulary and culture.

CHN 111 First-Year Chinese I

5 credit hours

Gives students a fundamental understanding of the Chinese language and develops their listening, speaking, reading and writing skills.

CHN 112 First-Year Chinese II

5 credit hours

Prerequisite: CHN 111

Continues to develop students' skills in listening, speaking, reading and writing. Emphasizes basic competency in further use of the Chinese language.

Communications**COM 113 Communication for the Workplace**

2 credit hours

Provides the student with necessary communication skills such as active listening, communicating nonverbally, giving and receiving feedback and understanding diverse communication styles. Also challenges students to engage in problem solving for the workplace, as well as conflict management and people skills. Reinforces the importance of these skills in making a successful transition into a work environment.

COM 126 Introduction to Mass Media

3 credit hours

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

Introduces students to television studio production. Emphasizes skills in the operation of video equipment and production of a short studio television program.

COM 252 Videography/Editing

3 credit hours

Prerequisite: COM 251 or MUM 107 or instructor consent

Introduces theory and practice, history and processes of camera and editing formats that will be integrated with instruction on digital editing software/platforms. Students will film and edit short video productions.

COM 253 Script and Storyboard Writing

3 credit hours

Prerequisite: 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

Prerequisite: 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

Introduces students to the history and appreciation of film. Explores the major movements and issues in the cinema. Includes visual literacy skills used in film analysis.

Computer Information Systems**CIS 105 Introduction to the PC**

2 credit hours

Introduces students with little or no experience with a personal computer to computer terminology and computer application packages. Covers the basic aspects of computer use, focusing on terminology and the operating system.

CIS 110 Introduction to Operating Systems

2 credit 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

2 credit 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

2-4 credit 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

4 credit 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

3 credit hours

Prerequisite: CIS 118

Introduces major programming concepts, including numbering systems, program documentation and design, the DOS operating system and authoring computer programs. Uses BASIC programming language.

CIS 125 WordPerfect

3 credit 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.

CIS 126 Microsoft Word

3 credit 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.

CIS 130 Introduction to the Internet

3 credit hours

Prerequisite: CIS 118 or instructor consent

Introduces the Internet, the global network of computer networks. Explores the Internet's resources and tools. Topics include history, topology, E-mail, lists, Telnet, ftp, WWW and various search engines.

CIS 131 Introduction to Web Authoring

3 credit hours

Prerequisite: CIS 130 or instructor consent

Introduces Web authoring software. Students will design and prepare simple documents for delivery on the World Wide Web. The emphasis in this course is on the technical aspects of computer usage and application.

CIS 132 Intermediate Web Authoring

3 credit hours

Prerequisite: CIS 131

Expands the skills learned in the previous class (CIS 131) using intermediate authoring techniques. Using an authoring tool to create Web pages, students will develop links and import images into their Web pages.

CIS 134 Web Page Layout and Design

3 credit 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

1-2 credit 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

3 credit 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

3 credit hours

Prerequisite: BTE 101 and CIS 125 and 126 or instructor consent

Introduces sharing files and information among software applications and users. To facilitate successful integration, the student will learn the basics of a presentation, spreadsheet and database software applications, as well as advanced features of a word processing software application.

CIS 140 Introduction to PC Databases

2 credit 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

2 credit 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

3 credit hours

Prerequisite: CIS 118 or instructor consent

Introduces the operation 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

2-3 credit hours

Prerequisite: CIS 118 or instructor consent

Introduces the student to concepts and applications of an electronic spreadsheet. Topics include calculations, built-in functions, spreadsheet design and introduction to graphics. Additional topics may include tables and macros.

CIS 152 Advanced PC Spreadsheets

2 credit 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

3 credit hours

Prerequisite: CIS 118 or instructor consent

Introduces the concepts and principles of spreadsheets. These concepts include basic concepts, basic commands, intermediate commands and other related topics.

CIS 156 Advanced Spreadsheet Concepts

3 credit hours

Prerequisite: CIS 155 or instructor consent

Assists individuals in improving their analytical, mathematical, written and oral skills in financial analysis, accounting reports, managerial analysis, and business decisions using advanced techniques in a spreadsheet software package.

CIS 166 Visual Basic Programming

3 credit hours

Prerequisite: CIS 119

Introduces the student to programming concepts using the Visual Basic Programming language. Topics may include program design, loops, arrays, functions, arithmetic, and VB topics such as form layout and design, control properties and methods, event and general procedures and modules.

CIS 167 C Language Programming (C++)

3 credit hours

Prerequisite: CIS 119

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

3 credit hours

Prerequisite: CIS 119

Introduces students to Java programming basics such as threads, event handlers, procedures, user interfaces and multimedia. Multiple applets will be written and tested.

CIS 169 Visual C++ Programming

3 credit hours

Prerequisite: CIS 167

Expands on C++ while introducing the student to the Visual C++ programming environment. Topics may include program design, program structure, pointers and reference, loops, arrays, functions, and Visual C++ topics such as classes, class inheritance, dialogs and controls, and menus and toolbars.

CIS 170 Microcomputer Hardware

3 credit 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

3 credit hours

Prerequisite: 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

3 credit 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

3 credit 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 Technology

3 credit hours

Prerequisite: CIS 130

Develops the technological knowledge and skills in hardware and software for digital image technology.

CIS 182 Digital Video and Sound Technology

3 credit hours

Prerequisite: CIS 181

Builds on CIS 181 to further develop the technological knowledge and skills in hardware and software for digital video and sound technology.

CIS 183 Digital Sound Editing

1 credit hour

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)

1 credit hour

Prerequisite: Consent of CIS advisor

Designed to ensure the student understands the basic concept 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

1-2 credit hours

Prerequisite: CIS 118 or instructor consent

Trains students to use continuous speech applications.

CIS 200 Local Area Networking Concepts

2 credit hours

Prerequisite: 12 CIS credit hours or instructor consent

Introduces networking concepts and terminology, including architecture, transmission media, structure, access and network protocols.

CIS 206 Cisco Network Associate I

5 credit hours

Prerequisite: CIS 118 and 200

Focuses on networking fundamentals, the OSI model and industry standards, network topologies, IP addressing (such as subnet masks), and basic network design. Serves as the first course in a series of four courses. Upon completion of all four courses, students will be qualified to take the Cisco Certified Network Associate (CCNA) exam.

CIS 207 Cisco Network Associate II

5 credit hours

Prerequisite: CIS 206

Focuses on router theory and router technologies, including router configurations, routed and routing protocols, network management, and an introduction to LAN (local area network) switching. Serves as the second course in a series of four courses. Upon completion of all four courses, students will be qualified to take the Cisco Certified Network Associate (CCNA) exam.

CIS 208 Cisco Networking Associate III

5 credit hours

Prerequisite: CIS 207

Focuses on advanced routing and switching, including advanced router configurations, LAN switching, network management, and advanced network design. Serves as the third course in a series of four courses. Upon completion of all four courses, students will be qualified to take the Cisco Certified Network Associate (CCNA) exam.

CIS 209 Cisco Networking Associate IV

5 credit hours

Prerequisite: CIS 208

Focuses on project-based learning, including advanced network design projects and advanced network management projects. Serves as the fourth course in a series of four courses. Upon completion of all four courses, students will be qualified to take the Cisco Certified Network Associate (CCNA) exam.

CIS 212 UNIX

3 credit 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

2-4 credit 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

2 credit 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

3 credit 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 file allocation problems, disk errors and computer boot problems.

CIS 225 Advanced Word Processing

3 credit hours

Prerequisite: CIS 125 and 126

Provides advanced instruction in the application of word processing concepts using the microcomputer. Teaches word processing 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.

CIS 226 Computer Diagnosis and Repair

3 credit hours

Prerequisite: CIS 170 or instructor consent

Covers the hands-on troubleshooting, configuration and installation of microcomputers and their peripherals.

CIS 227 A+ Certification Preparation

1 credit hour

Prerequisite: 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

3 credit 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 231 Web Programming I

3 credit hours

Prerequisite: CIS 130 or instructor consent
Introduces Web programming language for developing Web applications. May use any of the Web programming languages, including HTML and Java Script.

CIS 241 Oracle

3 credit hours

Prerequisite: 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 243 Introduction to SQL

3 credit hours

Prerequisite: CIS 119, 145
Introduces the SQL language, data queries, data sorts and data manipulation. Explores basic SQL statements and Oracle concepts.

CIS 244 SQL/PL SQL

3 credit hours

Prerequisite: CIS 243
Develops skills to create and maintain database objects; store, retrieve and manipulate data; and create PL/SQL blocks of application code that are shared by multiple forms and reports.

CIS 245 Web-Based Oracle Applications

3 credit hours

Prerequisite: CIS 130, 244, 247
Develops skills to retrieve, insert, update and delete data from an Oracle database; defines basic module layout; identifies the main concepts of Web server-based applications; and defines and controls placement of page text.

CIS 246 Introduction to Oracle Applications

3 credit hours

Prerequisite: CIS 112, 244, 258
Develops skills to generate standard reports and create custom-run report forms for cross-application reporting; identifies components of sign-on security for Oracle applications and user responsibilities; and implementation of report security.

CIS 247 Oracle Designer

3 credit hours

Prerequisite: CIS 244
Develops skills to refine data and applications design, generate database objects and simple Oracle Developer and Web-server applications and build database designs.

CIS 254 Windows NT Workstation

4 credit hours

Prerequisite: 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

4 credit hours

Prerequisite: 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

3 credit 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

4 credit 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

4 credit 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

3 credit 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

3 credit 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

3 credit hours

Prerequisite: CIS 260
Introduces the basics of CICS command-level programming. Includes an overview of a CICS online system, the CICS language, terminal device concepts and programming techniques for mapping the terminal screen.

CIS 266 Advanced Visual Basic Programming

3 credit hours

Prerequisite: CIS 166

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 267 Advanced C Language Programming (C++)

3 credit hours

Prerequisite: CIS 167

Continues the study of C++ begun in CIS 167. Topics may include pointers, arrays, linked lists, stacks and queues, trees, advanced interfaces such as menus, windows and cursor control.

CIS 269 Online Program Development

2-3 credit 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 275 Advanced Telecommunications

3 credit hours

Prerequisite: CIS 175

Continues the topics covered in CIS 175. Covers, in detail, the emerging technologies in the telecommunications area such as X.25, ISDN, ATM and frame relays.

CIS 276 Systems Analysis and Design

3 credit 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

3 credit hours

Prerequisite: 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 (Degree)

1 credit hour

Prerequisite: Course taken in graduating semester, student no more than 15 hours from graduation and instructor consent

Designed to ensure the student understands the more advanced concepts and principles of a specific computer area. These concepts may include the computer system, software use and applications, networking principles, programming techniques and others as appropriate.

Computer Science**CSC 230 C++ Programming I**

3 credit hours

Prerequisite: 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

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

Prerequisite: 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

Prerequisite: CAD 110

Introduces basic three-dimensional concepts; intermediate usage of blocks, symbols and shapes; attributes and data extractions; and menu customization techniques. Students will have an introduction to intermediate plotting techniques and assembling multiple drawings.

CAD 210 Computer-Aided Drafting III

3 credit hours

Prerequisite: CAD 110 and 111

Introduces students to three-dimensional and surface modeling, extended and wire-frame construction, and editing 3-D objects. The student will also learn how to maximize AutoCAD's customization features using macros and menus.

CAD 211 Computer-Aided Drafting IV

3 credit hours

Prerequisite: CAD 110, 111 and 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 be able to maximize AutoCAD through the use of AutoLisp.

Dental Hygiene

DEH 101 Pre-Clinic Dental Hygiene Science

2 credit hours

Prerequisite: Program acceptance

Corequisite: First-semester DEH courses

Explores the practice of dental hygiene, including infection control, recording medical and dental histories, providing oral health care instructions, oral cancer screening, scaling and polishing teeth. Lab work includes application of diagnostic, preventive and therapeutic procedures.

DEH 102 Pre-Clinic Care

2 credit hours

Prerequisite: Program acceptance

Corequisite: First semester DEH courses

Introduces the basics of clinical care in a laboratory setting. Students practice on manikins, fellow students and patients from the community. Emphasis is on fundamental instrumentation and patient examination skills.

DEH 103 Embryology and Histology

2 credit hours

Prerequisite: Program acceptance

Corequisite: First-semester DEH courses

Explores the microscopic origin and structures of the body with special emphasis on the tissues of the teeth, face and oral cavity. Covers basic building blocks of the cell, including complex tissues and their arrangement.

DEH 105 Dental Radiology

3 credit hours

Prerequisite: Program acceptance

Corequisite: First-semester DEH courses

Introduces basic concepts of radiation physics, radiation biology and protection, radiograph exposure, processing quality assurance, and radiographic appearance of normal anatomic landmarks, anomalies and pathologies.

DEH 107 Head and Neck Anatomy

2 credit hours

Prerequisite: Program acceptance

Corequisite: 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

Prerequisite: Program acceptance

Corequisite: 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

Prerequisite: Program acceptance

Corequisite: First-semester DEH courses

Provides practicum instruction and introduces beginning skills in evaluating the reason for the emergency, suggestions for preventing these occurrences, and familiarity with equipment, emergency medications and procedures.

DEH 116 Preventive Dentistry

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Second-semester DEH courses

Provides an in-depth study of the principles of interpersonal communication to practice nutritional counseling. Explores the problems associated with special populations and their dental needs. Emphasizes flourides, oral physiotherapy aids and home care instruction.

DEH 150 Dental Hygiene Clinic Science I

2 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Second-semester DEH courses

Provides the theory and discussion of beginning dental hygiene clinical practice with emphasis on patient management, therapeutic aids and advanced instrumentation techniques.

DEH 152 Dental Hygiene Clinic Care I

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Second-semester DEH courses

Provides clinical experience in treating patients, including providing health assessment, dental charting, oral and periodontal evaluations, oral health instructions, scaling and polishing of tooth surfaces and application of therapeutic agents.

DEH 154 Periodontology I

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: 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

Prerequisite: First-semester DEH courses

Corequisite: Second-semester DEH courses

Provides the background to understand drug therapy and to inform patients about drugs that may be employed in the treatment of their dental conditions.

DEH 158 General and Oral Pathology

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Second-semester DEH courses

Prepares students to understand, describe and identify disease. Provides skills necessary to detect deviations from normal in the evaluation of patient's health status, helps students identify appropriate referral mechanisms to render a definitive diagnosis.

DEH 201 Dental Hygiene Clinic Science II

2 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Third-semester DEH courses

Examines pulpal vitality testing, amalgam polishing/margination, bleaching and mouth guards. Special emphasis on caring for handicapped persons and those with medical complications.

DEH 203 Dental Hygiene Clinic Care II

4 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Third-semester DEH courses

Provides continued clinical experience to treat patients with more advanced levels of periodontal disease. The placement of occlusal sealants and amalgam polishing/margination, bleaching mouth guards and night-guard fabrication is added to the services available.

DEH 205 Dental Materials

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Third-semester DEH courses

Provides a survey of materials used in dentistry, as well as training in common dental laboratory procedures; Provides practical experience in the manipulation of dental materials.

DEH 209 Local and Regional Dental Anesthesiology

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: DEH 201, 203, 205, 207, 211

Provides a working knowledge of the theory and practice of local anesthesia and nitrous oxide sedation as applied to the practice of dentistry/dental hygiene. Provides the student with the knowledge and skills necessary to administer local anesthetics and nitrous oxide proficiently and safely.

DEH 211 Community Dental Health

3 credit hours

Prerequisite: First-semester DEH courses

Corequisite: Third-semester DEH courses

Explores the principles, methods and materials related to community dental health. Includes a service learning component.

DEH 250 Clinic Science III

2 credit hours

Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses

Provides learning activities designed to help the graduating dental hygiene student in make the transition from school to private practice. Explores dental specialty skills.

DEH 252 Clinic Care III (Capstone)

4 credit hours

Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses

Facilitates the integration of clinical skills with the development of time management skills necessary for private practice.

DEH 253 Extended Clinic

1-3 credit hours

Prerequisite: Second-year DEH courses

Provides additional time for clinical practice of dental hygiene skills.

DEH 254 Periodontology II

3 credit hours

Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses

Explores applied periodontics with patients presenting advanced levels of periodontal disease. Explores surgical options and examines mechanisms and rationale for referral to specialists.

DEH 256 Community Field Experience

3 credit hours

Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses

Provides practical application of community dental health theory and opportunities to conduct needs assessments on a variety of populations. Emphasizes meeting the needs of specific populations through program planning, implementation and evaluation. Supervised rotations are in low-income, public health facilities.

DEH 258 Ethics and Issues in Dental Hygiene

2 credit hours

Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses

Explores the legal and ethical implications of practicing dental hygiene. Prepares students to benefit the profession, the community and themselves by practicing dental hygiene in an ethically and legally correct manner.

DEH 260 Practice Management

2 credit hours

Prerequisite: Third-semester DEH courses

Corequisite: Fourth-semester DEH courses

Provides practical guidelines and applications of dental hygiene practice management principles.

Drafting for Industry

DRI 105 Introduction to Drafting

5 credit 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

Prerequisite: DRI 105

Introduces dimensioning. Students will learn how to correctly dimension various objects and features on drawings using proper ANSI Y 14.5 1982 standards. Students will be able to calculate and dimension fit tolerances and determine tolerances from standard fit tables.

DRI 107 Geometric Tolerancing

2 credit 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 runouts.

DRI 109 Pictorial Drawing

2 credit hours

Prerequisite: CAD 110, DRI 107

Introduces the principles of pictorial practices. Units covered will be Axonometric Projects (Isometric, Dimetric and Trimetric), Oblique Projections (general, cabinet and cavalier), and Perspective drawing (one- and two-point perspectives). Charts and graphs will also be covered.

DRI 111 Descriptive Geometry and Auxiliary Views

2 credit hours

Prerequisite: DRI 109

Introduces the student to angles that include simple and complex, inclined and oblique, and line and plane applications. The student will learn specific procedures that will allow the determination of a line, true length and point view of a line, the edge view and true size.

DRI 113 Intersections and Developments

3 credit hours

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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, callouts and material list and appropriate dimensioning for the subject matter.

DRI 225 Advanced Mechanical Drafting II (Capstone)

4 credit hours

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: CAD 110, DRI 240
 Continues Structural Drafting I and covers structural poured-in-place concrete foundations, walls and columns, concrete floors systems, and 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

Prerequisite: 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

Prerequisite: 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**

3 credit 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

3 credit 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

4 credit 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

3 credit 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

3 credit hours

Prerequisite: 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

3 credit hours

Prerequisite: 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 Three Years

3 credit hours

Prerequisite: 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

3 credit hours

Prerequisite: ECP 110

Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues and prosocial skills. Ages addressed: birth through age 8.

ECP 150 Supervised Lab for Infants/Toddlers and Preschoolers

3 credit hours

Prerequisite: 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

3 credit 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 206 Working with Parents, Families and Community Systems

3 credit hours

Examines attitudes and family value systems and how they affect parent professional partnerships. Addresses communication, problem-solving and conflict resolution strategies. Plans effective activities and programs for parent involvement. Ages addressed: birth through age 8.

ECP 210 Curriculum: First Start: Including Children with Disabilities

3 credit 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

3 credit 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

3 credit hours

Prerequisite: 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

3 credit hours

Prerequisite: 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

3 credit 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

3 credit hours

Prerequisite: ECP 110, 227
Teaches early childhood educators techniques for facilitating music and movement with young children. Ages addressed: birth through age 8.

ECP 245 Curriculum: Art and the Young Child

3 credit hours

Prerequisite: 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

5 credit hours

Prerequisite: 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)

5 credit 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 253 Children's Assessment Systems

1 credit hour

Prerequisite: ECP 110 or PSY 101 or PSY 235
Corequisite: ECP 250
Examines the objectives, instruments and outcomes for assessment of young children.

ECP 254 Observing and Using Young Children's Assessment Instruments

1 credit hour

Prerequisite: ECP 110 or PSY 101 or PSY 235
Corequisite: ECP 251
Examines the current research on the continuous practice of observing children. Practice with a variety of assessment instruments currently used in Colorado ECE programs.

ECP 265 Curriculum: Science/Math and the Young Child

3 credit hours

Prerequisite: 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

3 credit hours

Prerequisite: 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 118 Labor Economics

3 credit hours

Introduces national labor trends and analyzes labor trends using contemporary labor market theory. Explores the economics of collective bargaining, labor law, the role of government, and additional union labor topics affecting business.

ECO 201 Principles of Macro Economics

3 credit hours

Prerequisite: 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

Prerequisite: Basic Skills Assessment levels of 3 in Math, 3B in Reading and 3 in English
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

Prepares students to take the American College Test, a college admissions test frequently required of matriculating students by colleges and universities.

EDU 201 Elementary Education in the USA

3 credit hours

Prerequisite: ENG 121
Corequisite: EDU 202
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 202 Urban and Multicultural Education

3 credit hours

Prerequisite: ENG 121

Corequisite: EDU 201

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

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

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

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 285 Critical Thinking in Educational Issues and Trends

3 credit hours

Prerequisite: EDU 161, EDU 162 or instructor consent

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

Provides ESL students with basic pre-employment skills that include developing a resume, 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

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

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

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

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

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 107 Basic Electronics

3 credit hours

Provides a brief overview of AC and DC principles. Introduces solid state and digital electronics and explores aspects of telecommunications and network conductivity.

ELT 108 Introduction to Networking, The Physical Layer

2 credit 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 109 Introduction to Fiber Optics, The Physical Layer

1 credit hour

Prerequisite: ELT 108 or instructor consent

Provides additional skills necessary to secure an entry-level position as a networking technician. Includes hands-on practice, theory and related skills of terminating, testing, troubleshooting and installing network fiber optics cabling.

ELT 110 Diode Circuits

3 credit 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

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

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

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

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 170 Basic Telephony

3 credit hours

Prerequisite: ELT 100 and 102

Introduces the student to a technological foundation in all aspects of telephony, including its history and evolution, network and switching issues, transmission capabilities, current and future opportunities. Builds on the prerequisite of AC/DC electronics.

ELT 200 Digital Fundamentals

3 credit 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

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

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

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

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

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

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

Prerequisite: 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

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

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

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

1-5 credit 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

1-5 credit 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

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

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

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

Prerequisite: ENG 100 or ENG assessment level 3

Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. Includes a minimum of five (5) compositions that may include expressive and informative writing, but stress analytical, evaluative and persuasive writing.

ENG 122 English Composition II

3 credit hours

Prerequisite: ENG 121

Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative and/or persuasive papers that incorporate research.

ENG 131 Technical Writing I

3 credit hours

Prerequisite: ENG 100

Develops proficiency in technical writing, emphasizing principles for organizing, drafting and revising a variety of documents for industry, business and government.

ENG 143 Writing Your Autobiography

3 credit hours

Prerequisite: ENG 121

Explores autobiographical writing with an emphasis on anecdotes and remembrances in narrative presentations. This 3 credit hour course is designed for English majors and non-majors.

ENG 221 Creative Writing I

3 credit hours

Prerequisite: ENG 121

Begins development of expression through writing; provides an introduction to literary forms such as poetry, fiction, creative non-fiction and drama; introduces techniques for developing and controlling such forms; and stresses the multicultural and diverse nature of language.

ENG 222 Creative Writing II

3 credit hours

Prerequisite: ENG 221

Continues development of expression through writing; provides instruction in literary forms such as poetry, fiction and/or nonfiction; emphasizes techniques for developing and controlling such forms; and stresses the multicultural and diverse nature of language.

English as a Second Language (ESL)

ESL 001 ESL Spelling Strategies

3 credit 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

1-3 credit hours

Provides listening and speaking activities that help students recognize and produce English vowel and consonant sounds, and common stress and intonation patterns.

ESL 012 Intermediate Pronunciation

1-3 credit hours

Prerequisite: ESL 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

1-3 credit hours

Helps the non-native speaker of English master basic structures in English grammar.

ESL 022 Intermediate Grammar

1-3 credit hours

Prerequisite: ESL 021

Reviews basic structures in English grammar and introduces more advanced structures.

ESL 023 Advanced Grammar

1-3 credit 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

3 credit hours

Provides speaking and listening activities that help the student communicate more competently. Develops vocabulary use and also helps develop clearer pronunciation.

ESL 032 Intermediate Conversation

3 credit 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

3 credit hours

Prerequisite: 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

3 credit hours

Improves comprehension of simple written texts by discussing the meaning, developing word analysis skills and enhancing vocabulary range.

ESL 042 Intermediate Reading

1-3 credit 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

3 credit hours

Prerequisite: ESL 023

Introduces the fundamentals of paragraph organization and development. Helps students develop sentence variety and grammatical competency within well-organized paragraphs.

ESL 053 Advanced Composition

3 credit 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

1-4 credit hours

Teaches limited English vocational students basic communication skills in preparation for vocational training and work.

ESL 062 Vocational ESL II

1-4 credit hours

Provides instruction in advanced English skills for those with limited English for vocational courses and employment.

ESL 080 High Intermediate Language Skills

6-15 credit 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

1-5 credit 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.

Fitness, Health and Recreation**FHR 100 Rhythmic Aerobics**

2 credit hours

Introduces the student to the field of rhythmic aerobics. Includes an overview of health benefits, practical applications in public and private facilities, and choices and opportunities in fitness/recreation/health care centers. A program of choreographed movements will be designed to improve cardiovascular endurance, agility, flexibility, balance, strength, rhythm and coordination.

FHR 101 Aerobics Walk/Jog/Step

2 credit hours

Introduces the student to the field of aerobics. Includes health benefits with practical applications in public and private facilities. Emphasis is on the development of an individual walking/jogging/stepping program designed to improve or maintain cardiovascular endurance, agility, flexibility, balance, strength, coordination, health and longevity.

FHR 104 Weight Training

2 credit hours

Provides basic knowledge of weight training and importance in an overall fitness program. Students will, under the direct supervision of the instructor, develop and practice an individualized weight training program.

FHR 105 Swimming I

2 credit hours

Introduces basic floating and breathing techniques. Teaches elementary crawlstroke, breaststroke, sidestroke and backstroke. Review of health benefits and lap swimming designed to improve cardiovascular endurance.

FHR 106 Water Exercise

2 credit hours

Provides instruction and practice in a variety of aerobic exercises conducted in the swimming pool. Designed to review health benefits and improve cardiovascular endurance. An aerobic fitness opportunity for students who cannot participate in traditional aerobic activities due to physical limitations.

FHR 110 Golf I

2 credit hours

Introduces golf as a lifetime recreational sport. Instruction of and practice in basic golf skills, set-up posture, stance, grip, short and full swings and equipment selection.

FHR 208 Biomechanics of Movement

3 credit hours

Corequisite: BIO 116 or higher

Provides health and wellness majors and those in related areas of movement science with the basic knowledge and understanding of analytical techniques that can be used to improve human performance and avoid injury in sports and exercise.

French**FRE 111 First-year French I**

5 credit hours

Instructs the student in the pronunciation of all the French sounds and introduces first-semester basic grammatical structures. Immerses students in the culture and flavor of France through the innovative materials of French in Action.

FRE 112 First-Year French II

5 credit hours

Prerequisite: FRE 111

Teaches the student how to establish and maintain average conversation in French and introduces second-semester grammatical structure. Immerses student in detailed culture and flavor of France through the innovative materials of French in Action.

FRE 211 Second-Year French I

3 credit hours

Prerequisite: FRE 112

Teaches the student how to establish and maintain an advanced conversation in French and introduces third-semester grammatical structure and writing. Gives more detailed cultural background and flavor of France.

General Education Development**GED 001 GED Preparation**

1-12 credit hours

Prepares the student for the five areas of the Colorado High School Equivalency Examination (formerly GED test): writing, social studies, science, interpreting literature and the arts and mathematics. Includes diagnostic and simulated GED test practice.

GED 052 GED Preparation (Off-campus)

1-12 credit hours

Prerequisite: Student must be 17 years of age

Prepares the student for the five areas of the Colorado High School Equivalency Examination (formerly GED Test): writing, social studies, science, literature and mathematics. Includes diagnostic assessment and simulated test practice. Offered by the GED Institute at community-based sites.

Geography**GE0 105 World Regional Geography**

3 credit hours

Includes concepts of spatial relationships between and among the geographic regions of the world. Includes demographic and cultural (political, economic and historic) forces related to the physical environments of selected regions. Analyzes interrelationships between developed and developing regions.

GE0 125 Geography of Colorado

3 credit 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 upon the environment.

GE0 200 Human Ecology

3 credit hours

Surveys world resources, the nature of world resources, attitude toward resources, environmental principles and the impact of population on resource bases.

Geology**GEY 111 Physical Geology**

4 credit hours

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

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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

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

Prerequisite: 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 237 Death and Dying

3 credit hours

Prerequisite: GNT 201 or PSY 101 or SOC 101

Examines concepts, relationships, organizations and statistics as they relate to the American experience of death and dying. Attention is given to cross-cultural and historical influences on the American attitude toward death. Health care systems' response to death, the political economy and right-to-die and euthanasia issues also will be examined.

GNT 285 Gerontology Practicum (Capstone)

3 credit 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

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.

Golf Course Management**GCM 110 Golf I**

2 credit hours

Introduces golf as a lifetime recreational sport. Instruction of and practice in basic golf skills, set-up posture, stance, grip, short and full swings and equipment selection.

GCM 111 Golf II

2 credit hours

Prerequisite: GCM 110 or instructor consent

Provides instruction for Intermediate Golf, a lifetime recreational sport building on the skills and knowledge gained in Golf I. Includes terrain strategies, types of tournament play and intermediate skills.

GCM 112 Short Game and Putting

2 credit hours

Prerequisite: GCM 110 or instructor consent

Studies the techniques used to develop an effective short game and putting stroke. Emphasis is on basic swing fundamentals and the modern approach to chips, pitches, greenside sand shots and putting.

GCM 201 Introduction to Golf Management

3 credit hours

Provides a basic understanding of the golf industry, including investment opportunities, club operations and current management problems. The story, growth and development, and organizational structure of golf management are explored with a focus on employment opportunities.

GCM 202 Golf Course Design

2 credit hours

Differentiates between design, maintenance and operation of a golf course. Includes directing the staff in design and maintenance, the study of equipment and turf grass principles.

GCM 203 Turf Management and Maintenance

3 credit hours

Prerequisite: Any 100 level science

Provides an introduction to turf science management, including the basic plant structure, physiology, anatomy and function. Explores procedures, as well as direct experience, with horticultural operations, including turf grass propagation, pruning and transplanting. Emphasizes the use of pesticide and chemical application laws and regulations.

GCM 206 Resort Food and Beverage Operations

2 credit hours

Provides a basic understanding of the resort industry, including food service, institutional and resort operations. Explores the history, growth and development, trends and organization structure with a focus on employment.

GCM 209 Methods of Teaching Golf

2 credit hours

Prerequisite: GCM 110

Introduces the methodology used in teaching the game of golf. This includes practical experience in golf swing and error correction.

GCM 210 Club Fitting—Design and Repair

2 credit hours

Combines the study of design and manufacture of golf clubs with the study of golf repair theory. Provides practical "hands-on" experience in repair.

GCM 211 Rules and Fundamentals of Golf

2 credit hours

Prerequisite: GCM 110 or instructor consent

Analysis and study of the basic fundamentals and rules of the game of golf. Emphasis is upon compliance with the rules and the responsibility of the professional to uphold the integrity of the sport of golf.

GCM 214 Legal Issues in Golf Course Management

3 credit hours

Relates aspects of torts, property, contract and constitutional law to golf course management. Addresses issues such as liability for injuries, possession of lost and found items, the contractual obligation to clients and vendors, and the constitutional rights of employees and clients.

GCM 285 Golf Shop Operations and Maintenance Internship

2 credit hours

Provides an internship assignment to learn basic golf shop operations. Includes merchandising, purchasing and resale, product display, inventory control, and staffing and scheduling. Provides hands-on experience in golf cart maintenance, repair, painting, upholstery and winter storage.

Graphic Arts**GRA 101 Introduction to Graphic Arts and Traditional Layout**

3 credit 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

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 type-setting elements.

GRA 103 Line and Halftone Photography

3 credit hours

Prerequisite: GRA 101, 102

Introduces the student to basic dark-room 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 Electronic Publishing

3 credit hours

Prerequisite: GRA 101, 102, 103

Introduces the student to electronic publishing, its history, impact and how it works. Teaches the student how internet search engines work, demonstrates proven methods of promoting pages, and shares tips that will help increase traffic to a site for electronic publishing.

GRA 105 Resume and Portfolio (Capstone)

3 credit hours

Prerequisite: GRA 101, 102, 103, 104

Introduces the student to portfolio presentation and preparation. Teaches resume 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

Introduces students to the Internet, its history and functionality. This course uses the computer to browse the World Wide Web and creates Web presentations and online teaching/learning modules.

GRA 111 Beginning Offset Presses

3 credit hours

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

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

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

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

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 Digital Photography

3 credit 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

Prerequisite: GRA 201, 202, 203, 204, and 205

Continues to prepare the 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

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 103 MAC Computer Art

3 credit 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

Prerequisite: GRD 100

Covers the creation and production of graphic projects emphasizing the creative design process, problem solving, research, strategic planning and target marketing. Provides experience producing thumbnails, roughs and digital layouts, as well as skills for client interaction.

GRD 107 Rendering/Mixed Media

3 credit 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

Prerequisite: 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

Prerequisite: GRD 103 or instructor consent

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

Prerequisite: 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

Prerequisite: 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

Prerequisite: GRD 103 or instructor consent

Corequisite: GRD 209

Uses advanced electronic software on the computer to create all types of publications. Instructs students on black and white page layout and multicolor magazine layouts with Quark, demonstrating how the graphic design industry uses this desktop publishing software.

GRD 220 PhotoShop

3 credit hours

Prerequisite: GRD 103 or instructor consent

Corequisite: GRD 109

Acquaints students with Adobe PhotoShop software, its tools and features. Provides exercises in photo retouching and manipulation, and in image generation for preparation of print medium or as a finished product, and features hands-on computer experience.

GRD 285 Creative Graphic Design and Portfolio Preparation (Capstone)

3 credit hours

Prerequisite: 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

Prerequisite: GRD 207, 285

Introduces students to an on-site internship experience in a wide variety of graphic design-related situations.

Grief and Bereavement Specialist

GBS 237 Death and Dying

3 credit hours

Prerequisite: GNT 201 or PSY 101 or SOC 101

Examines concepts, relationships, organizations and statistics as they relate to the American experience of death and dying. Attention is given to cross-cultural and historical influences on the American attitude toward death. Health care systems' response to death, the political economy and right-to-die and euthanasia issues also will be examined.

GBS 245 Palliative Care

3 credit hours

Prerequisites: GNT 237 or PSY 227 or SOC 237

Investigates palliative care philosophy and its various implementations. Topics include home care, in-facility care and day care models, responses to chronic illness, differences between palliative care and traditional medical models, and pain and symptom control. Communication issues are explored addressing the needs of the dying and their families, including staff stress issues.

GBS 255 Grief and Bereavement Theory

3 credit hours

Prerequisite: GBS 237 or GNT 237 or PSY 227 or SOC 237

Explores current and emerging grief and bereavement theory. Topics will include attachment theory, the emerging continuing bonds theory, defining the grief reaction and the factors influencing the grief reaction. Surveys the funeral system, bereavement following the death of a child, the bereaved child, the death of a parent, death by violence and therapeutic intervention.

GBS 265 Individual, Family and Group Bereavement Counseling

3 credit hours

Prerequisite: GBS 237 or GNT 237 or PSY 227 or SOC 237

Expands and refines the knowledge and skills related to counseling with the dying, their families and the bereaved. Knowledge includes the formation and facilitation of bereavement groups for differing causes of death, family and individual counseling theories and how to find and utilize professional referral and caregiver resources.

GBS 275 Spiritual, Cultural, and Ethical Issues in Death and Bereavement

3 credit hours

Prerequisite: GBS 237 or PSY 227 or SOC 237

Investigates various cultural and religious teachings and understandings of death and dying. Topics include cultural differences, meaning of life, immortality and resurrection and the ethical issues related to the care of the dying and the bereaved.

GBS 285 Grief and Bereavement Internship (Capstone)

3 credit hours

Prerequisite: GNT 237 or PSY 227 or SOC 237, HSE 107

Provides opportunity for the student to render services in a supervised setting. Students will apply theoretical grief and bereavement concepts and skills under the supervision of qualified instructors in the community. Upon successful completion of this course, students may earn a Grief and Bereavement Specialist certificate.

Health and Wellness

HWE 100 Medical Terminology I

2 credit hours

Introduces the origin and structure of the medical language used by those in the hearing arts. Teaches students to interpret, spell and pronounce common medical terms through using word parts and a set of rules.

HWE 103 First Aid/CPR: Emergency Response

2 credit hours

Provides knowledge and skill in procedures for emergency care, accident prevention, injury and/or sudden illness until medical help is received. Educates student in Universal Precautions with populations at risk. Students will earn an American Red Cross card for first aid and cardiopulmonary resuscitation for infant, child and adult.

Health and Wellness Management

HWM 101 Essentials of Total Fitness and Wellness

3 credit hours

Prerequisite: PSY 101 or SOC 101

Provides a systematic introduction to explore health-related fitness and wellness; 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 201 Health Psychology

3 credit hours

Prerequisite: HWM 101

Provides systematic introduction to explore the psychological procedures in prevention, diagnosis and treatment of such medical problems as cardiovascular disorders, headaches, obesity, asthma and chronic pain. Explores psychological factors that contribute to promotion and maintenance of good health and to recovery from existing illness.

HWM 205 Health and Wellness Marketing and Promotion

3 credit hours

Prerequisite: HWM 101

Provides a systematic introduction to the principles of health and wellness. Provides opportunity for students to analyze various methods of marketing, to promote health and wellness in many different ways and design an educational marketing program for health and wellness.

HWM 285 Health and Wellness Management Practicum (Capstone)

5 credit hours

Prerequisite: HWM 101, 201, 205, HWE 103

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 107 Speedy Spanish for Medical Personnel

2 credit hours

Provides health professionals the opportunity to learn basic conversational Spanish needed to communicate with clients and families in a variety of situations.

History

HIS 101 Western Civilization I

3 credit hours

Explores the major political, historical, economic, social, cultural and intellectual events in Western civilization from beginnings to 1650.

HIS 102 Western Civilization II

3 credit hours

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

Examines the major political, historical, economic, social, cultural and intellectual events in United States' history from beginnings to 1865.

HIS 202 United States History II

3 credit hours

Prerequisite: HIS 201

Examines the major political, historical, economic, social, cultural and intellectual events in United States history from 1865 to present.

HIS 205 Women in History

3 credit hours

Conveys the primary ideas of women's history and uses these ideas to analyze the lives of American women from many cultures and to assess the impact of their lives on the history of the United States.

HIS 225 Colorado History

3 credit hours

Examines the major political, historical, economic, social, cultural and intellectual events in Colorado history from beginnings to the present. The course meets for 16 weeks and carries credits of 3 hours lecture or independent study.

HIS 226 History of Denver

3 credit 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."

Human Services

HSE 105 Introduction to Social Welfare

3 credit hours

Examines the historical and philosophical background of statutes, ideologies, political process, policy making, decision rules and influential leaders who have had an impact on shaping the social welfare institutions in the United States.

HSE 106 Survey of Human Services

3 credit 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

3 credit 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

3 credit hours

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

3 credit hours

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

3 credit 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

3 credit hours

Provides knowledge in the areas of effective communication skills, problem-solving skills and analyzing self as a communicator.

HSE 112 Health and Safety Issues in Schools

1 credit hour

Provides students with knowledge in the areas of health and safety issues in schools, basic first aid and CPR procedures, and the feeding and positioning of physically challenged students.

HSE 113 Human Services for Persons with Developmental Disabilities

3 credit hours

Prerequisite: 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

3 credit 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)

4-6 credit 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

3 credit hours

Provides practical experience in a social setting where students learn to apply human services theoretical concepts to hands-on situations. Presents students with the practical limitations and specialized program offerings available to clients in the context of a public assistance service-delivery setting.

HSE 117 Confidentiality

1 credit hour

Emphasizes working with mental health and substance abuse clients, using confidentiality in a clinical practice. Details specific provisions of federal and state statutory regulations involved with client confidentiality.

HSE 121 Psychosocial Interventions for Persons with Developmental Disabilities

3 credit hours

Prerequisite: 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

3 credit 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

3 credit 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

3 credit hours

Prerequisite: HSE 108 or instructor consent

Introduces the concepts, principles, goals and skills of group work as a method of providing human services. Emphasis is on basic practice skills and intervention techniques. Offered fall semester only.

HSE 206 Human Services for Families

3 credit hours

Prerequisite: HSE 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

3 credit hours

Prerequisite: HSE 108 or instructor consent

Examines the theory and practice of organizing communities, neighborhoods, committees and advisory boards as they relate to the social services delivery system. Offered fall semester only.

HSE 208 Social Welfare Policy

3 credit hours

Prerequisite: HSE 109 or instructor consent

Presents models for social policy analysis, program planning and evaluation. Applies models to relevant social welfare issues. Offered spring semester only.

HSE 209 Crisis Theory and Intervention

3 credit hours

Prerequisite: HSE 107 and 108 or instructor consent

Introduces basic theories and principles of crisis intervention from an historical and practical orientation. Offered spring semester only.

HSE 211 Human Services Practicum II

4 credit hours

Prerequisite: HSE 115 or instructor consent

Provides placement in a service agency where the student applies the values, concepts and skills gained in theory courses to the actual process of helping people. Emphasis is on sharpening skills and knowledge, use of self in the helping process, understanding systems and use of community resources. Offered fall semester only.

HSE 213 Substance Abuse: A Multi-Model Approach

3 credit 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

3-7 credit 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

3 credit hours

Prerequisite: 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, Native Americans and immigrants of Asian heritage, and how they respond to mental health services.

HSE 221 Substance Abuse Counseling

4 credit 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

3 credit hours

Prerequisite: HSE 221

Corequisite: HSE 107, 108

Applies advanced counseling skills and staff supervision techniques to clinical practices in substance abuse and mental health settings. Reviews the role of a clinical supervisor and details the process of therapeutic counseling practices.

HSE 285 Human Services Practicum III (Capstone)

7 credit hours

Prerequisite: HSE 211

Provides practical experience working in an approved social service agency. The student participates in various service agency functions as a group member and leader, and further develops skills and knowledge in the use of self and systems in the helping process. Offered spring semester only.

HSE 297 Internship Work Experience

1-6 credit hours

Prerequisite: HSE 114 or 217

Provides students 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

Introduces students to skills development in multicultural education. Consists of Chicano history, migration and labor, education, law and Chicano culture.

HUM 116 African-American Studies

3 credit hours

Emphasizes significant contributions of African-American writers, artists, scientists and political leaders to American civilization. Examines key African-American cultural contributors.

HUM 117 Introduction to Asian-American Studies

3 credit 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

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

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

Examines cultures of the 17th through the 20th centuries, focusing on the interrelatedness of the arts, ideas and history. Considers the influences of industrialism, scientific development and non-European peoples.

HUM 185 Cultural Diversity in the Humanities

3 credit hours

Introduces students to the various aspects of social and cultural diversity. Promotes development of critical thought and growth of multicultural, multisocial and multilingual understanding.

HUM 215 Ideas in a Changing Society

1-3 credit 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

Examines current issues of Chicano culture. General themes include alienation, community identity, political organization, cultural change, ideology and power.

HUM 251 Curanderismo: A Cultural Approach to Holistic Medicine

3 credit hours

Introduces students to intercultural, alternative and holistic approaches to health, diet and medical care.

HUM 285 Seminar in Critical Thinking (Capstone)

3 credit hours

Prerequisite: ENG 121, MAT 135, SPE 115

Shows the interconnections among the various courses required for CCD's AA and AGS degrees. Reviews both the common and unique properties of the subject areas studied.

Intergenerational Studies**IGS 201 Introduction to Intergenerational Studies**

2 credit hours

Prerequisite: ENG 100

Introduces students to the field of intergenerational studies, including its concepts and issues, history and programs, major organizations and resources, and the various competencies needed to work in the field.

IGS 214 Intergenerational Programs and Services

2 credit hours

Prerequisite: ENG 100, IGS 201

Introduces the knowledge and skills needed to develop and manage successful intergenerational programs, including the rationale for intergenerational programs, the needs programs address, program types and purposes, program planning and design, grant preparation and reporting, recruitment and participant training, matching of youth and older adults, publicity and evaluation.

IGS 221 Intergenerational Social and Policy Issues

3 credit hours

Prerequisite: ENG 100

Introduces social and policy issues connected to intergenerational relations, intergenerational programs and the intergenerational field. Provides historical, demographic, economic and cultural background of these issues. Discusses the relevance to intergenerational studies and intergenerational professionals, and examines selected social and policy issues in detail.

IGS 285 Intergenerational Studies Internship

5 credit hours

Prerequisite: IGS 201, 214 and 221, GNT 285, ECP 250

Provides a practical experience in intergenerational studies by facilitating the application of theoretical concepts to hands-on situations. Course emphasis is to develop observation skills, growth in self-awareness, and establish effective communication. Demonstrates an understanding of case management skills and practice within the service delivery network in which the agency interfaces.

Japanese

JPN 101 Conversational Japanese

3 credit hours

Introduces basic vocabulary and grammar to students with no knowledge of Japanese. Includes simple vocabulary and basic sentence structure and emphasizes practical conversational skills to develop a basic understanding of and cultural competence in the daily use of the language.

JPN 111 First-Year Japanese I

5 credit hours

Emphasizes continued development of conversational and listening abilities, reading and writing skills and cultural competence. Includes basic and more complex grammatical forms. Intended for students having no minimum prior understanding of Japanese phrases and simple sentence structure.

JPN 112 First-Year Japanese II

5 credit hours

Prerequisite: JPN 111

Emphasizes conversational ability, while introducing complex grammatical structures, colloquial forms and more "kanji" characters. Intended for students who have a good understanding of Japanese sentence structure, vocabulary and the writing system.

JPN 211 Second-Year Japanese I

3 credit hours

Prerequisite: JPN 112

Introduces complex grammatical structures, emphasizes development of conversational ability and stresses additional reading/writing skills for students who have a good understanding of Japanese sentence structure, vocabulary and the writing system.

Journalism

JOU 105 Introduction to Mass Media

3 credit 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

Examines the basic principles of print media reporting. Designed for journalism students and for other students interested in learning to write clearly, succinctly and accurately.

Literature

LIT 115 Introduction to Literature

3 credit hours

Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading.

LIT 150 The Bible as Literature

3 credit hours

Prerequisite: ENG 121 or instructor consent
Introduces various Biblical texts and exegetical methods of reading and interpreting such texts. Emphasizes the aesthetics and multiplicity of meaning in Biblical literature through the discussion of various Biblical writings, published academic exegeses and student interpretation.

LIT 201 Masterpieces of Literature I

3 credit hours

Prerequisite: ENG 121

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

LIT 202 Masterpieces of Literature II

3 credit hours

Prerequisite: ENG 121

Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

LIT 225 Introduction to Shakespeare

3 credit hours

Prerequisite: ENG 121 or instructor consent
Provides guided reading and interpretation of Shakespeare's most popular plays. Examines their cultural background, as well as their significance to contemporary society.

LIT 235 Science Fiction

3 credit hours

Examines the techniques and issues of science fiction through a close reading of a variety of writers in the genre.

Machine and CNC Tool Operator

MTO 130 Introduction to Machine Shop

2 credit hours

Provides basic instruction on the use of bench tools, power saws, drill presses, pedestal grinders, lathes, mills, heat-treat equipment, belt sanders and hardness-testing equipment.

MTO 131 Machine Math and Prints I

3 credit hours

Provides instruction for basic math and blueprints for machine tool operation. Includes whole numbers, fractions, decimals, direct and computer measure, English and metric measure, blueprint fundamentals, drawing views and tolerances.

MTO 132 Mills I

4 credit hours

Prerequisite: MTO 130

Introduces the parts and functions of horizontal and vertical mills, including feeds and speeds settings, cutter selection and identification, vise usage, and edge locator and indicator uses.

MTO 133 Engine Lathes I

4 credit hours

Prerequisite: MTO 130

Introduces the student to the engine lathe, including how to use and mount the three-jaw chuck on the spindle of the lathe; how to set lathe tools on center drill; and drill, ream, knurl, tap and chamfer.

MTO 140 Metrology

2 credit hours

Introduces the student to English and metric measurements by using outside, inside, depth and internal micrometers, scales, combination square set, protractors, vernier gauges, sine bar, gauge blocks, indicators, inspection devices, optical comparator, and telescoping and small hole gauges.

MTO 141 Mills II

4 credit hours

Prerequisite: MTO 132

Develops advanced skills and knowledge of horizontal and vertical mills, including rotary table operation, computation of coordinate locations for hole circles, slots and angles, and the selection of metals.

MTO 142 Machine Math and Prints II

1 credit hour

Prerequisite: MTO 131

Provides advanced machine shop math; includes decimal fractions, speed and feed calculations for cylindrical tools, taper calculations, equations, print sketching, geometric tolerancing, datums, ANSI symbols and numerical control drawing fundamentals.

MTO 143 Engine Lathes II

3 credit hours

Prerequisite: MTO 133

Provides the knowledge and skills required to perform lathe operations at tolerances of plus/minus .005". Includes single point external and internal threads holding tolerances of class 2 and 3, and use of the taper attachment and "radius" forming.

MTO 150 Machine Shop Lab

1-5 credit hours

Allows students to practice on basic machine equipment for the purpose of upgrading job skills.

MTO 221 Engine Lathes III

2 credit hours

Prerequisite: MTO 143

Provides advanced skills and knowledge on the engine lathe, holding to .002" and .0005" tolerances.

MTO 223 Job Shop Machining I

2-3 credit hours

Prerequisite: MTO 221

Covers the fabrication process. Students will produce machine parts and machinist tools from an already prepared shop blueprint, write process sheets, select metal and estimate machining time to performance level expected in industry.

MTO 250 AutoCAD I

3 credit 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

Prerequisite: MTO 221

Provides introductory skills in the use of CNC digital readouts and the operations of a CNC vertical mill and CNC lathe.

MTO 252 CNC Principles

4 credit hours

Prerequisite: MTO 141, 221

Provides skills and knowledge on preparatory functions and operations of a CNC milling machine and a CNC lathe. Includes safety, system start up, and use of pre-written programs as well as macros.

MTO 253 CNC Mathematics I

2 credit hours

Prerequisite: MTO 142

Provides skill in calculations and mathematical operations used in the operation of CNC mills and lathes: includes circles, polygons, angles, geometric figures, trigonometry and numerical control fundamentals.

MTO 261 DOS and Windows for CNC

1 credit hour

Provides an overview of the basic use of the Disk Operating System.

MTO 262 CNC Office 97 Word

1 credit hour

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

Prerequisite: MTO 251, 252, 253

Provides beginning instruction, using BOSS 10, on programming for the CNC, including word processing skills, language, blocks, coordinate words, and functions of G Codes and M Codes.

MTO 264 AutoCAD II

3 credit hours

Prerequisite: MTO 250

Provides advanced instruction in the use of AutoCAD software and DXF files.

MTO 265 CNC Programming II

3 credit hours

Prerequisite: MTO 261, 263

Provides advanced instruction in CNC programming. Includes Z-Axis canned cycles, canned milling cycles, cutter diameter compensation, feed functions, auxiliary machine control functions and CAD/CAM EZ feature mill 3D.

Magnetic Resonance Imaging**MRI 274 Clinical Applications of Magnetic Resonance Imaging I**

1 credit hour

Prerequisite: Program acceptance

Corequisite: 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 in fall semester, and is presented in a self-study/self-paced format.

MRI 276 Physics and Instrumentation of Magnetic Resonance Imaging

2 credit hours

Prerequisite: Program acceptance

Corequisite: 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

Prerequisite: Program acceptance

Corequisite: 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

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

Prerequisite: MRI 277

Corequisite: MRI 287

Expands upon 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

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/or 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

Prerequisite: 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 Ethics of Touch

2 credit hours

Examines historical, societal and personal views surrounding appropriate and respectable behavior in professions that cross the normal boundaries of touch. In-depth study of legal and professional implications of using touch in the profession. Students explore their own history of touch through an autobiography and journal.

MST 203 Pathophysiology for Massage Therapists

2 credit hours

Corequisite: MST 201

Enables students to recognize the major characteristics of diseases and injuries and to understand how massage therapy would be beneficial or detrimental when applied. Students will be able to communicate with clients and health care professionals intelligently and accurately about disease and its response to massage therapy.

MST 211 Deep Tissue/Sports Massage

3 credit 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 214 Massage for the Elderly

2 credit hours

Examines techniques that massage professionals use to help those with special needs in the geriatric and chronically/critically ill populations.

MST 222 Advanced Massage Therapies

3 credit hours

Prerequisite: MST 201, 211

Explores a variety of related treatment modalities and physical-based therapies.

MST 285 Massage Therapy Internship (Capstone)

5 credit hours

Prerequisite: MST 201, 211 and 222

Students will demonstrate their academic and clinic skills under the direction of certified instructors. This is a capstone course for the Massage therapy certificate.

Mathematics**MAT 013 Basic Operations I**

1-12 credit hours

Provides review of basic math through multiplication.

MAT 014 Basic Operations II

1-12 credit hours

Provides review of multiplication, place values, long division and word problems.

MAT 030 Operations of Whole Numbers, Decimals and Percents

3 credit 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

1-10 credit 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

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

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

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

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

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

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

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

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

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

Prerequisite: MAT 121 or MAT 124

Includes derivatives, integrals and their applications, with attention restricted to algebraic, exponential and logarithmic functions. For business, life science and/or social science majors.

MAT 135 Introduction to Statistics

3 credit hours

Prerequisite: 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

Prerequisite: MAT 121, 122

Corequisite: MAT 122

Introduces single variable calculus and analytic geometry.

MAT 202 Calculus II

5 credit hours

Prerequisite: MAT 201

Extends and further develops concepts of single variable calculus and analytic geometry studies as found in MAT 201. Emphasis on applications of differentiation, integration, and techniques of integration and infinite series.

MAT 203 Calculus III

4 credit hours

Prerequisite: MAT 202

Completes the traditional subject matter of single variable calculus not covered in MAT 201 and MAT 202 and introduces vector analysis, multi-variable calculus, solid analytic geometry and dimensional vector space.

MAT 226 Computer Applications for Statistical Procedures

1 credit hour

Prerequisite: MAT 105

Corequisite: MAT 135

Includes computer applications of statistical procedures such as correlation and chi-square analysis. Data analysis is done using commercially prepared computer software. Laboratory course.

MAT 265 Ordinary Differential Equations

3 credit 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 101 Introduction to Multimedia**

3 credit hours

Prerequisite: MUM 100, and GRD 103 or instructor consent

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

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

Prerequisite: GRD 103 or instructor consent and MUM 100

Corequisite: GRA 109

Introduces 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

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

Prerequisite: GRD 103 or instructor consent, 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

Prerequisite: GRD 103 or instructor consent, MUM 100, 101

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

Prerequisite: 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 225 Web Page Design

3 credit hours

Prerequisite: GRD 103

Introduces and explains concepts of Web page design, then assigns relevant laboratory projects for designing and creating Web pages using the latest Web page design software. Features hands-on computer experience.

MUM 230 Advanced PhotoShop

3 credit hours

Prerequisite: GRD 220

Introduces students to the advanced functions of PhotoShop for image manipulation, Web page design and multimedia applications. Designed to include both lecture and hands-on computer experience.

MUM 285 Multimedia Portfolio Preparation

3 credit hours

Prerequisite: GRD 103, MUM 104

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

Prerequisite: GRD 103 or instructor consent, 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

Provides each student with a working knowledge of musicianship and includes the study of melody, harmony and rhythm.

MUS 101 Music Theory I

3 credit hours

Corequisite: MUS 111

Reviews music fundamentals and emphasizes diatonic, four-part harmony, analysis, ear training and keyboard harmony.

MUS 102 Music Theory II

3 credit hours

Prerequisite: MUS 101

Corequisite: MUS 112

Continues the study of harmony from MUS 101 and the study of diatonic harmony in the area of common practice.

MUS 111 Ear Training and Rhythm Drill I

2 credit 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

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

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

Studies the various periods of music history with regard to the composers, aesthetics, forms and genres of each period. Considers music from the Middle Ages through the classical period.

MUS 122 Introduction to Music History II

3 credit hours

Continues Introduction to Music History I with a study of music from the early romantic movement to the present.

MUS 131 Performance Class I (Guitar, Piano or Voice)

2 credit hours

Prerequisite: 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

Prerequisite: MUS 100, audition

Emphasizes practical skills and information relevant to performing and includes the study of techniques and repertoire. 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

Prerequisite: MUS 141

Emphasizes practical skills and information relevant to performing and intensifies the study of technique and repertoire. 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

Prerequisite: MUS 142

Emphasizes practical skills and information relevant to performing and intensifies the study of technique and repertoire. 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

Prerequisite: MUS 143

Emphasizes practical skills and information relevant to performing and intensifies the study of technique and repertoire. 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

Provides students with an understanding of career opportunities and survival skills within the music industry and an understanding of the relationship of music to the media world.

MUS 201 Music Theory III

3 credit hours

Prerequisite: MUS 102 and 116

Presents chromatic and harmonic materials, form, and analysis and modulation formulae.

MUS 202 Music Theory IV

3 credit hours

Prerequisite: MUS 102, 116

Presents 20th century composition techniques.

MUS 211 Performance (Ear Training and Rhythm Drill) III

2 credit hours

Prerequisite: 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

Prerequisite: 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

Acquaints the student with the fundamentals of writing music on the personal computer, including sequencing and music engraving.

Nursing

NUR 100 Nurse Aide Procedures and Patient Care

1-9 credit hours

Demonstrates and provides practice of clinical skills essential for five nurse aide roles. 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

Prerequisite: BIO 201, 202, ENG 121, MAT 100 or higher, PSY 235, NUT 100 or 101, acceptance into LPT or NUR programs or instructor consent

Corequisite: NUR 109, 111, 113 for NUR students; BIO 114, HSE 113, LPT 110, NUR 109 for LPT students

Introduces core concepts of pharmacology, including basic principles of drug actions and dosage calculations, with an emphasis on developing communication and critical thinking skills when administering medications within a caring health care environment.

NUR 103 Pharmacology for Nursing

2 credit hours

Prerequisite: NUR 101, 109, 111 and 113

Corequisite: NUR 112 and 114

Continues the concepts and ethical/legal implications of pharmacology from NUR 101, including the nursing process and biopsychosocial aspects of medication administration. Emphasis is also placed on caring as the core of nursing practice while developing skills of critical thinking, communication and health care education.

NUR 109 Basic Nursing Skills

3 credit hours

Prerequisite: BIO 201, 202, ENG 121, MAT 100 or higher, NUT 100, PSY 235 and acceptance into NUR or LPT program

Corequisite: NUR 101 and 111 for Nursing students; NUR 101, BIO 114, HSE 113 and LPT 110 for Psychiatric Technician students

Demonstrates and provides practice of clinical skills essential for the nursing role of care provider, including maintenance of a safe, effective clinical environment, skill preparation, implementation and documentation. Emphasizes using caring, critical thinking and communication while delivering nursing skills.

NUR 111 Nursing Concepts and Issues

5 credit hours

Prerequisite: BIO 201, 202, ENG 121, ENG 121, MAT 100 or higher, NUT 100, PSY 235 and admission into the Nursing program

Corequisite: NUR 101, 109

Introduces concepts and behaviors of nursing roles within the context of the nursing process, holistic health care and the health care industry. Emphasizes caring as the core of nursing practice while developing 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

Prerequisite: NUR 114

Corequisite: NUR 103

Provides theory and practice of nursing care for the hospitalized client, while maintaining a safe environment and protecting physiological and psychosocial integrity. Includes causes, pathology, treatment, potential ethical dilemmas and practical nursing care of commonly occurring diseases. Encourages caring while developing skills of critical thinking, communication and health education.

NUR 113 Nursing Care of the Older Adult

3 credit hours

Prerequisite: NUR 111

Corequisite: NUR 101 and 109

Provides theory and practice of nursing care for the elderly client with emphasis on caring, communication skills and critical thinking when providing a safe environment and protecting physiological and psychosocial integrity. Includes causes, pathology, treatment, rehabilitation, ethical dilemmas and practical nursing care of some common diseases in the elderly.

NUR 114 Family-Centered Nursing I

5 credit hours

Prerequisite: NUR 101, 109, 113

Corequisite: NUR 103

Presents concepts of and provides practice for the nursing care of growing families, including obstetrical care, growth and development across the life span, common health problems in children, and health promotion and maintenance of the entire family. Caring, effective communication, critical thinking and nursing roles are emphasized.

NUR 126 Nursing Process Concepts and Skills

2 credit hours

Prerequisite: BIO 201 and 202, MAT 100 or higher

Corequisite: ENG 121, PSY 235 and BIO 205 if not already completed

Prepares the advanced placement student to enter the Nursing program through orientation to the program, introduction to the nursing process and exploration of the role change from practical to professional nurse. Reviews practical nursing concepts of communication, mental health, basic nursing skills, care of the hospitalized adult and family-centered nursing.

NUR 208 Nursing Assessment and Diagnosis

3 credit hours

Prerequisite: BIO 205 and acceptance into Level II of Nursing program

Corequisite: NUR 210 and 211

Develops skills of nursing assessment of the health client across the life span using effective communication, interviewing and examination. Develops critical thinking skills of data analysis to identify actual or potential health needs or nursing diagnoses. Reinforces concepts of the caring environment, health promotion, and maintenance of physiologic and psychosocial integrity.

NUR 210 Family-Centered Nursing II

6 credit hours

Prerequisite: NUR 211

Corequisite: NUR 208

Provides theory and practice in the nursing care of families facing health concerns in clinical and community settings. Includes family theory concepts, issues of contraception, infertility, unwanted pregnancy, teen pregnancy, and disturbances of psychosocial and physiologic integrity of family members. Emphasizes caring, communication, critical thinking and health teaching.

NUR 211 Principles of Psychiatric Nursing

5 credit hours

Prerequisite: BIO 205 and acceptance into Level II of the Nursing program

Corequisite: NUR 208

Develops introductory concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families. Heavy emphasis in communication and caring through the use of the therapeutic relationship and nursing process. Critical thinking skills are applied throughout course work in classroom and clinical exercises.

NUR 212 Nursing Care of the Hospitalized Client II

8 credit hours

Prerequisite: NUR 210

Corequisite: NUR 214

Presents causes, pathology and collaborative treatment of complex illnesses of adults requiring hospitalization. Provides clinical practice of professional nursing care while maintaining a safe environment and protecting physiological and psychosocial integrity. Emphasizes caring nursing practice while developing skills of critical thinking, communication and health care education.

NUR 214 Leadership and Management in Nursing

2 credit hours

Prerequisite: NUR 210

Corequisite: NUR 212 and 285

Examines basic principles of leadership and management, including creation of a caring environment, effective communication, leadership styles, management issues, professional responsibilities and critical thinking in decision making.

NUR 285 Comprehensive Nursing Internship

3 credit hours

Prerequisite: NUR 212

Corequisite: NUR 214

Facilitates transition from student to graduate nurse through application of nursing principles and skills. Faculty, preceptor and student design an internship to individualize student's learning needs and prepare for job readiness. Reviews nursing theory while applying test-taking skills. Competencies emphasize caring, critical thinking and communicating during nursing care.

NUR 295 Nursing Review for Licensure Exam

3 credit hours

Prerequisite: NUR 208, 211, 212

Corequisite: NUR 210, 214 and 285, or instructor consent

Reviews nursing concepts, information and clinical competencies expected of the professional nursing graduate to prepare for licensure examination.

Nutrition

NUT 100 Foundations of Nutrition

3 credit hours

Prerequisite: ENG 100, REA 090, MAT 105

Introduces basic nutrition with emphasis on personal nutrition. Satisfies the nutrition requirement for students entering the health care professions. Attendance at first session is required.

NUT 101 Nutrition as Therapy

2 credit hours

Prerequisite: NUR 100

Provides the student with an understanding of the ways in which modifications of the normal diet can assist in attaining or maintaining total well-being of the individual. Suggestions for specific interventions and client teaching will be provided for such conditions as arthritis, diabetes and heart disease.

NUT 250 Human Nutrition

3 credit hours

Prerequisite: BIO 201, CHE 101 or higher

Corequisite: BIO 202

Provides the student with an understanding of the fundamental concepts of human nutrition, including digestion, absorption, metabolism and function of macro- and micro-nutrients as they relate to maintenance of cellular homeostasis, human health and disease.

Operating Room Nurse

ORN 220 Perioperative Nursing I

6 credit 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

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

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

Introduces basic area of law dealing with civil wrongs, with emphasis in negligence, defamation and products liability.

PAR 109 Property

3 credit hours

Emphasizes substantive legal rules related to property law with added emphasis in real estate law practice.

PAR 115 Domestic Relations

3 credit hours

Emphasizes substantive legal rules related to domestic relations law with an emphasis in dissolution of marriage.

PAR 121 Introduction to Paralegal

3 credit hours

Introduces students to the paralegal field including, but not limited to, legal terminology and scope of paralegal skills and responsibilities, vis-à-vis the practice of law.

PAR 124 Legal Research

3 credit hours

Introduces basic concepts and methods of legal research, emphasizing practical applications by the preparation of two case opinion briefs and two memorandums.

PAR 126 Creditor/Debtor/Bankruptcy

3 credit hours

Gives students basic understanding of bankruptcy law covering the various types of bankruptcy cases with emphasis on the documentation used in such cases.

PAR 185 Paralegal Synthesis I (Capstone)

3 credit hours

Prerequisite: PAR 124, 221, 222

Emphasizes a synthesis of the information and skills that students have learned throughout their paralegal studies.

PAR 201 Business Organizations

3 credit hours

Emphasizes substantive legal rules related to corporations, partnerships, agency and securities law.

PAR 205 Probate

3 credit hours

Emphasizes the drafting of wills, settling estates and the creation of trusts, plus the impact of tax law in these areas.

PAR 207 Legal Research Seminar I

3 credit hours

Prerequisite: PAR 124

Introduces students to computer-assisted legal research. Students will draft legal memorandums and a trial court brief.

PAR 208 Legal Research Seminar II

3 credit hours

Prerequisite: PAR 124, 207

Continues from Legal Research Seminar I with computer-assisted legal research used in drafting appeals and court briefs.

PAR 214 Administrative Law

3 credit hours

Introduces administrative and regulatory agencies, their jurisdiction, rule-making and decision-making processes and how the paralegal can work within the legal context.

PAR 221 Civil Procedures

3 credit hours

Provides students with an introduction to civil procedural rules and their application by use of a trial notebook assignment and other related exercises.

PAR 222 Evidence

3 credit hours

Introduces the student to the basic concepts and terminology of evidence as they apply in Colorado courts and to the basic methods of marshaling evidence and investigative procedures.

PAR 223 Computers and the Law

3 credit hours

Prerequisite: CIS 120, 140

Introduces students to computer-assisted litigation support systems. Computer software programs taught include dBase III, Litidex and time-management systems.

PAR 231 Investigation

3 credit hours

Prerequisite: Instructor consent

Introduces general techniques of investigation of cases pertaining to a wide variety of law situations, civil and criminal.

PAR 239 Criminal Law

3 credit hours

Introduces basic concepts of criminal law and criminal procedure, including Colorado and procedural rules related to this area.

PAR 241 Environmental Law

3 credit hours

Emphasizes federal and Colorado regulations and their application in environmental cases.

PAR 252 Constitutional Law

3 credit hours

Introduces basic concepts of constitutional law, including information relating to Federal government structure and powers and individual liberties granted under the U.S. Constitution.

PAR 258 Contracts

3 credit hours

Introduces basic terminology and concepts in contract law as applied in Colorado and a basic system for contract preparation.

PAR 280 Paralegal Internship

6 credit hours

Prerequisite: To be taken in student's last semester in program

Introduces students to an "on-site" experience as an "Intern in Training" in a wide variety of law situations.

PAR 285 Paralegal Synthesis II (Capstone)

3 credit hours

Prerequisite: All required courses in Certificate and AAS degree programs

Emphasizes a synthesis of the information and skills that students learned throughout their paralegal studies.

Personal Growth and Development**PGD 091 Parenting**

1-3 credit 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

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

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

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

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

Introduces students to the concepts predominant in religions originating in the Middle East, which became major religions of the Western Hemisphere. Includes sociological, political, psychological and philosophical aspects of a variety of belief systems.

PHI 116 World Religions — East

3 credit hours

Introduces students to the variety of Eastern beliefs and social practices. Philosophical concepts such as fate, free will, moral accountability, the problem of evil, and reincarnation will be analyzed. The application and relevance of such beliefs to contemporary society and the human condition will be emphasized.

Photography

PHO 101 Fundamentals of Photography

3 credit hours

Covers basic black and white photographic craft. Places special emphasis on approaching photography as a visual language. Includes the language of photography, the camera, film exposure and processing, printing, print finishing and photographic criticism.

PHO 102 Fundamentals of Color Photography

3 credit hours

Introduces color theory, the nature of light and light sources, the reproduction of color, color films and processing. Emphasizes building individual experiences with color transparency films and potential expressions through color photography.

PHO 107 History of Photography

3 credit hours

Surveys the history of photography from its beginnings to the present. Emphasizes individual photographers who have made significant contributions to the field. Includes technical, artistic, commercial and social development of photography as a form of visual communication.

PHO 109 Photo Lab

1 credit hour

Corequisite: One or more courses from the CCD PHO courses

Introduces operations, lab safety, and proper operation of equipment to beginning and advanced students as a corequisite for taking one or more courses from the CCD Photography Department.

PHO 111 Intermediate Black and White Photography

3 credit hours

Prerequisite: PHO 101, 102

Familiarizes the student with the basic principles of the Zone System for black and white photography: use of mathematics in photography; basic sensitometry and film analysis; data plotting, graphing and interpretation; testing procedures; light metering techniques; controlling film exposure and development; and visualization for expressive black and white prints.

PHO 112 Intermediate Color Photography

3 credit hours

Prerequisite: PHO 101, 102

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

Prerequisite: 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

Prerequisite: PHO 101, 102

Provides each student with an introduction to the visual aesthetics of photographic images and light, making use of hands-on photographic experience with the 4x5 camera. Covers theory of lenses, depth-of-field practice and sheet film exposure/processing techniques.

PHO 202 Studio Lighting

3 credit hours

Prerequisite: PHO 101, 111, 112

Introduces basic concepts and principles needed to produce personally expressive photographs with studio lighting equipment, especially flash. Includes working with a variety of camera formats, from 35 mm to 4x5 view camera.

PHO 203 The Fine Print

3 credit hours

Prerequisite: PHO 101, 102, 111, 112

Introduces and refines advanced skills of the student interested in producing professional quality black and white prints. Integrates concepts of zone system with tone reproduction.

PHO 204 Introduction to Digital Imaging

3 credit hours

Prerequisite: PHO 101, 111

Introduces digital imaging to students who have no previous computer 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

Prerequisite: PHO 101, 111

Explores a variety of digital imaging printing methods from scanned photographs and image files. Includes an introduction to color separation, halftone screens, and photographic style printing by electronic means.

PHO 211 Portrait Photography

3 credit hours

Prerequisite: PHO 101, 111

Explores personal style of portraiture, history of the field, and portraiture as visual language and creative expression.

PHO 212 Landscape Photography

3 credit hours

Prerequisite: PHO 101, 102

Introduces basic concepts in landscape photography, including an overview of the history of landscape photography, artistic and technical aspects of final prints, landscape photography as creative expression, criticism and production of portfolio.

PHO 213 Creative Process

3 credit hours

Prerequisite: PHO 101, 111

Integrates creative expression and photographic craft—two sides of the same coin. Encourages students to produce inner-directed work.

PHO 285 Seminar in Photography

3 credit hours

Prerequisite: PHO 111, 112

Provides an opportunity to compile a professional portfolio as a preparation for job entry. Provides the advanced student with an opportunity to receive personal attention from the photography faculty in her/his specific area of professional expertise.

Physics

PHY 105 Conceptual Physics

4 credit 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

Prerequisite: 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

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

Prerequisite: MAT 201

Studies mechanics and heat. Includes laboratory experience.

PHY 212 Physics: Calculus-Based II

5 credit hours

Prerequisite: PHY 211

Studies wave motion, electricity and magnetism and light. Includes laboratory experience.

PHY 281 Modern Physics

3 credit hours

Prerequisite: 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

Surveys political science, including political philosophy and ideology, democratic and nondemocratic governments and processes and international relations.

POS 111 American Government

3 credit 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

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

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

Analyzes critical issues in Political Science. Topics determined each term.

Psychiatric Technician**LPT 100 Fundamental Concepts and Clinical Applications**

2 credit hours

Prerequisite: NUR 109

Corequisite: 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

Prerequisite: Admission to LPT program

Introduces the concepts of the nursing process and critical thinking for the advanced placement psychiatric technician. Reviews medication administration, emphasizing fundamental skills, ethical/legal and biopsychosocial implications, and providing practice of parenteral medication administration and dose calculations.

LPT 111 Principles of Psychiatric Nursing

7 credit hours

Prerequisite: BIO 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

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

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 109 Career Development

1-3 credit hours

Explores individual interests, abilities, personality types, values and decision-making techniques. Examines tools that help access current labor market information and market trends to match career options with the realities of the current labor market. Develops professional goals that assist in strategically managing professional development.

PSY 115 Psychology of Adjustment

1-3 credit hours

Studies how individuals act, react, cope and interact with the surrounding environment. Teaches the development of interpersonal skills and focuses on a practical application of psychological theory and principle.

PSY 201 Health Psychology

3 credit hours

Prerequisite: HWM 101

Provides systematic introduction to explore the psychological procedures in prevention, diagnosis and treatment of such medical problems as cardiovascular disorders, headaches, obesity, asthma and chronic pain. Explores psychological factors that contribute to promotion and maintenance of good health and to recovery from existing illness.

PSY 227 Death and Dying

3 credit hours

Prerequisite: GNT 201 or PSY 101 or SOC 101

Examines concepts, relationships, organizations and statistics as they relate to the American experience of death and dying. Attention is given to cross-cultural and historical influences on the American attitude toward death. Health care systems' response to death, the political economy and right-to-die and euthanasia issues also will be examined.

PSY 235 Psychology of Human Growth and Development

3 credit hours

Surveys human development from conception to death, emphasizing physical, cognitive, emotional and psychosocial factors.

PSY 249 Abnormal Psychology

3 credit hours

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

Prerequisite: Program admission, instructor consent, GNT 201

Studies adult development and aging. Contrasts existing myths about adult development with the best available scientific data in order to separate fact from fiction. Identifies important questions for the existing scientific or empirical data.

PSY 265 Violence and Culture

3 credit 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

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.

Radiography**RTR 102 Radiographic Imaging I**

3 credit hours

Prerequisite: ENG 121, MAT 103 or higher, BIO 119 or BIO 201 and 202, PSY 101 or SOC 101

Corequisite: 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

Prerequisite: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101

Corequisite: 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

Prerequisite: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101

Corequisite: 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

Prerequisite: ENG 121, MAT 100 or higher, BIO 201, 202, PSY 101, SOC 101

Corequisite: 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

Prerequisite: RTR 102, 103, 104, 105

Corequisite: 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 bony thorax.

RTR 113 Radiographic Equipment II

3 credit hours

Prerequisite: RTR 102, 103, 104, 105

Corequisite: 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

Prerequisite: RTR 102, 103, 104, 105

Corequisite: 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

Prerequisite: RTR 102, 103

Corequisite: 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 120 Radiography Limited Scope Internship

3 credit hours

Prerequisite: RTR 102, 103, 104, 105, 112, 113, 114 and 115

Corequisite: RTR 185

Applies knowledge learned in the classroom and previous internship experience to the practice of radiography in the private medical office.

RTR 124 Radiographic Internship III

7 credit hours

Prerequisite: RTR 112, 113, 114, 115

Reinforces the basic concepts of Internships I and II.

RTR 185 Radiography Limited Scope Capstone

2 credit hours

Prerequisite: RTR 102, 103, 104, 105, 112, 113, 114 and 115

Corequisite: RTR 120

Introduces the concepts of radiobiology necessary to practice radiation safety. Prepares the student for job search and provides a comprehensive review of the State of Colorado Limited Scope Radiography Exam.

RTR 202 Radiographic Imaging III

3 credit hours

Prerequisite: RTR 124

Corequisite: 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

Prerequisite: RTR 124

Corequisite: 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

Prerequisite: RTR 124

Corequisite: 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

Prerequisite: 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

3 credit hours

Prerequisite: RTR 202, 203, 204

Corequisite: RTR 214

Prepares the student for a job search and emphasizes the five major areas covered during the two-year study program, prior to the student sitting for the National Registry Examination.

Reading

REA 020 Basic Reading Skills

1-5 credit 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

3 credit 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

1-5 credit hours

Provides instruction in spelling, reading, comprehension and writing skills.

REA 041 Building Reading Skills II

1-5 credit hours

Provides instruction in spelling, vocabulary, comprehension, getting meaning from selections and following directions.

REA 060 Foundations of Reading

1-6 credit hours

This course is designed for students who want to improve reading skills by interacting with text in a computer-assisted environment. A diagnosis of reading levels and subsequent computerized learning activities guides students through the reading curriculum. Feedback is given after learning activity and progress is reported regularly.

REA 090 College Preparatory Reading

3 credit 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

3 credit 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

3 credit 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

3 credit 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

1-3 credit 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

3 credit hours

Prerequisite: 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. Strategies covered may include test-taking strategies, listening techniques, time management, concept development, memory devices, textbook reading strategies, note-taking methods, and concentration.

REA 151 College Reading

3 credit 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

3 credit hours

Prerequisite: 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 201 Introduction to Recreational Leisure**

3 credit 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 Recreation and Leisure in Special Populations

3 credit hours

Prerequisite: RAE 201

Corequisite: RAE 204, 285

Examines and analyzes each of six recreational processes and models (e.g. medical, long-term care, youth centers, recreational centers, etc.) from the perspective of the Recreational Assistant, Recreational Therapist, private business manager, and recipient of recreational services. Open only to Recreational Assistant program students.

RAE 203 Introduction to Therapeutic Recreation

3 credit hours

Corequisite: RAE 201, 205

Introduces the field of Therapeutic Recreation. Topics include an overview, communication skills in special populations, facilitating special needs, practical applications in public and private facilities, and choices and opportunities as an assistant in recreational therapy. Open only to Recreational Assistant program students.

RAE 204 Health and Safety in Recreation and Leisure

3 credit hours

Prerequisite: RAE 201, 202, 205, SOC 103

Corequisite: RAE 203, 285

Provides instruction and practice in recognition, prevention and treatment of medical emergencies. Topics include an overview, practical applications in public and private facilities, and facilitating special needs. Open to Recreational Assistant program students only.

RAE 215 Recreational Assistant Externship I

4 credit hours

Prerequisite: RAE 201 and 202

Corequisite: RAE 203

Provides the opportunity to practice basic skills in services and care-giving in three different field settings. Open only to Recreational Assistant program students.

RAE 285 Recreational Assistant Externship II (Capstone)

5 credit hours

Prerequisite: RAE 201, 202, 205, SOC 103

Corequisite: RAE 203, 204

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

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

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

Prerequisite: 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

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

Prerequisite: 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

Prerequisite: 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

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

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

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

Prerequisite: 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

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

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

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

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

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

Prerequisite: 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

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

Prerequisite: RAC 116

Examines procedures in troubleshooting systems and servicing components of air conditioning systems.

Science

SCI 285 Critical Thinking (Capstone)

3 credit hours

Prerequisite: AS core courses, minimum of 45 credit hours

Shows interconnections among the various courses required for CCD's AA, AS and AGS degrees. Focuses on the common and unique properties of courses in the sciences, arts, humanities and social sciences. Activities foster 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

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

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

Introduces the social issues in the health care industry to include medical ethics, law, the cultural perspective, client communication aspects, integrative healing practices and professionalism. Explores the array of career opportunities available in health care with a 15-hour service-learning project in a health care setting.

SOC 201 Introduction to Gerontology

3 credit hours

Prerequisite: 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

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

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

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

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

Prerequisite: 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

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

Prerequisite: 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

Prerequisite: GNT 201 or PSY 101 or SOC 101

Examines concepts, relationships, organizations and statistics as they relate to the American experience of death and dying. Attention is given to cross-cultural and historical influences on the American attitude toward death. Health care systems' response to death, the political economy and right-to-die and euthanasia issues also will be examined.

SOC 260 Sociology of Deviance

3 credit 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

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.

Spanish**SPA 101 Conversational Spanish I**

3 credit hours

Introduces the student to basic vocabulary, grammar, sentence structure, expressions, and practical communication skills used in daily situations and travel.

SPA 102 Conversational Spanish II

3 credit hours

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

Introduces a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the Spanish language.

SPA 112 First-Year Spanish II

5 credit hours

Prerequisite: SPA 111 or instructor consent
Continues Spanish I in the development of functional proficiency in listening, speaking, reading and writing the language.

SPA 211 Second-Year Spanish I

3 credit hours

Prerequisite: SPA 111, 112

Reviews and reinforces skills and abilities gained in first-year Spanish courses. Emphasis will be on conversation, culture, reading of short stories and writing of compositions. The goal is to expand functional proficiency in speaking, reading, writing and listening to the language.

SPA 212 Second-Year Spanish II

3 credit hours

Prerequisite: SPA 211

Reviews and reinforces skills and abilities gained in first-year Spanish courses. Emphasizes reading, discussing and producing written responses to Spanish language literature. The goal is to expand functional proficiency in speaking, reading, writing and listening to the language.

Special Learning Support Program (SLSP)

All SLSP courses are designed 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

Corequisite: SLS 005

Develops techniques to improve spelling strategies and to increase basic spelling skills. Includes structured word analysis, rule analysis and word attack for words not governed by rules.

SLS 002 Process and Procedures in Mathematics I

3 credit hours

Provides special learning techniques and compensatory strategies, including retention of math facts, organization of materials and conceptualization of principles. Emphasizes alternative approaches to basic operations on whole numbers, decimals, fractions and percentages.

SLS 004 Reading, Writing and Study Skills

6 credit hours

Provides special learning techniques for students with learning disabilities to develop and integrate oral communication, reading and writing skills and reasoning ability.

SLS 005 Learning and Skills Development

1 credit hour

Emphasizes compensatory strategies for attention and concentration, organization skills, memorization, following directions and instructions, problem solving and time management. Serves students with learning disabilities and other special learning needs.

SLS 011 Spelling Strategies II

3 credit hours

Corequisite: SLS 005

Reviews skills introduced in SLS 001 and develops advanced strategies for 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

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

Combines the basic theory of speech communication with public speech performance skills. Emphasizes speech delivery, preparation, organization, support and audience analysis.

SPE 125 Interpersonal Communication

3 credit hours

Introduces students to the theory and practices of interpersonal communication. The course will teach students to observe and analyze basic interpersonal communication concepts in family, social and organizational settings.

SPE 205 Voice and Diction

3 credit hours

Studies the physiological production of the speaking voice and methods for improving the quality of the spoken word in general American speech.

SPE 216 Principles of Speech Communication II

3 credit hours

Prerequisite: SPE 115

Emphasizes the intensification of ideas and styles with a focus on persuasive speaking. Includes additional studies in rhetorical analysis and oral interpretation of speeches.

SPE 219 Group Dynamics

3 credit hours

Prerequisite: SPE 115

Examines group communication theories with an emphasis on leadership and group behaviors. Provides opportunities for group participation.

Surgical Technology

STE 100 Introduction to Surgical Technology

5 credit hours

Prerequisite: 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

Prerequisite: STE 100

Explores chemical therapy utilized pre-operatively, intraoperatively and postoperatively for the patient undergoing surgical intervention. Emphasizes drug types, effects/side effects, principles of administration and appropriate personnel actions.

STE 106 Operating Room Skills

7 credit hours

Prerequisite: STE 100, BIO 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

Prerequisite: STE 100, HWE 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

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

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

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 111 The Human Body

4 credit hours

Explores the human body through a systems approach. Presents human anatomy, physiology and pathology.

THA 151 Technical Procedures

3 credit 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

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

Prerequisite: 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

Prerequisite: 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

Prerequisite: 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

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

Prerequisite: 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

Prerequisite: 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

Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory.

THE 106 Cross-Cultural Storytelling

4 credit hours

Prerequisite: Instructor consent

Offers international students and American students the opportunity to share ethnic/cultural experiences by using the theatre techniques of story telling, improvisation, mime, verbal and non-verbal language, scripting and staging techniques resulting in performance projects.

THE 111 Acting I

3 credit hours

Introduces fundamentals of stage acting. The course helps students develop technique, write and analyze scripts, evaluate performances, and develop a personal aesthetic sense through rehearsal, performance, readings, exercises and observations.

THE 112 Acting II

3 credit hours

Helps students refine basic techniques, develop character vision, orchestrate performances, project character and develop a personal aesthetic sense through rehearsal, performance, readings, exercises and constructive criticism.

THE 116 Practicum in Stage Acting

1-3 credit hours

Prerequisite: Instructor consent

Offers credit to students who gain hands-on experience in theatre by researching, rehearsing and performing roles in college theatre productions.

THE 118 Practicum in Technical Theatre

1-3 credit hours

Prerequisite: Instructor consent

Offers credit to students who gain hands-on experience in college productions in areas of the technical capacities, including settings, lighting, sound, costumes, properties, house management or stage management.

THE 206 Oral Interpretation

3 credit hours

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 the Theatre I

3 credit hours

Traces the evolution of the theatre in the western world from primitive rites in prehistoric times through theatre of the European Renaissance. Emphasizes historical developments and major plays written in key periods.

THE 212 Development of the Theatre II

3 credit hours

Traces the evolution of the theatre of the Western world from the neo-classic period through modern drama. Emphasizes historical development and major plays written in key periods.

THE 218 Readers Theatre

3 credit hours

Prerequisite: SPE 205 and THE 206, or instructor consent

Studies ensemble interpretation of literature—poetry, prose and drama—primarily through the medium of the spoken word.

Welding and Fabrication

WEF 100 Oxyacetylene Welding I

3 credit hours

Provides the student with a thorough technical understanding of oxyacetylene welding, flame cutting and brazing fundamentals, and welding safety.

WEF 102 Air Arc Gouging

2 credit hours

Prerequisite: WEF 100

Provides the student with the fundamentals of carbon air arc cutting and gouging, including equipment set-up operations.

WEF 108 SMAW Set Up and Padding

4 credit hours

Provides the student with a thorough technical understanding of arc welding fundamentals, welding safety, arc welding machines, electrode classifications and selection.

WEF 109 SMAW Welding I

4 credit hours

Prerequisite: WEF 108

Continues WEF 108, SMAW Set Up and Padding. Provides reinforcement on safety and health in welding and practical application of arc welding fundamentals.

WEF 110 SMAW Welding II

4 credit hours

Prerequisite: WEF 109

Continues WEF 109, SMAW Welding I. Provides review in health and safety for welding, practical application of welding techniques and an introduction to structural welding.

WEF 111 SMAW Structural Welding I

4 credit hours

Prerequisite: WEF 110

Continues WEF 110, SMAW Welding II. Provides review of major health and safety issues and continues development of application skills necessary to produce quality welds.

WEF 112 SMAW Structural Welding II

3 credit hours

Prerequisite: WEF 111

Continues WEF 111, SMAW Structural Welding I. Provides continued practical application of welding skills and ways to recognize destructive testing and non-destructive testing.

WEF 114 Welding Math and Blueprints

3 credit 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

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 GMAW welds in all positions on mild steel using short circuit transfer.

WEF 150 Welding Lab

1-5 credit hours

Allows students to practice on all welding skills to prepare for certification tests for upgrading job skills.

WEF 203 Pipe Welding

3 credit hours

Prerequisite: WEF 110

Corequisite: WEF 102, 111, 112, 130, 205, 207 and 208

Designed to prepare students to weld pipe using SMAW, Oxyfuel, GTAW and GMAW processes.

WEF 205 GMAW Thin Gauge and Structural

3 credit hours

Prerequisite: WEF 140

Provides the student with a thorough technical understanding of welding safety and gas metal arc welding of aluminum, including basic fundamentals, types of equipment and metal transfers.

WEF 207 GTAW Set Up

2 credit hours

Prerequisite: WEF 130

Provides the student with a thorough technical understanding of gas tungsten arc welding fundamentals, preparation for welding pipe and pipe-welding defects.

WEF 208 GTAW Thin Gauge and Alloy

3 credit hours

Prerequisite: WEF 130

Provides training to develop the manual skill necessary to make high-quality gas tungsten arc welds in all positions on 16- and 11- gauge mild steel, 16-gauge stainless and 11-gauge aluminum, using both direct and alternating current.

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Payroll Officer

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Subsystems Manager

Jerri Dahl
Accountant

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General Ledger

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Business Office

Bill Klamm
Accounts Payable

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Accounts Payable Supervisor

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Case Manager Coordinator

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Enemoto, Gene
Utility Worker I

Espinoza, Elma
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Associate Professor, English

Kathryn Thompson, BS, AAS
Associate Professor, Administrative Health
Assistant

Karen Thies-McWilliams, MSW, BSW
Assistant Professor/Coordinator, Behavioral
Sciences

Julia A. Tipton, MS, BS
Assistant Professor, Nursing

Peggy Valdez-Ferguson, MA, BA
Professor, English

Ernesto Vigil, BA
Assistant Professor, Basic Skills

Abraham Walo, BS
Assistant Professor, Basic Skills

James Weber, PhD, MS, BS
Professor, Mathematics

Kathleen (Smith) Whalen, MN, BSN
Associate Professor, Nursing

Ray Whiting, MFA, BFA
Professor, Photography

Leonard Winograd, MFA, MA, BA
Professor, English

Ron Wohlauer, MA, MA, BA
Professor, Photography

Ann Wolf, EdD, MA, BA
Assistant Professor, Reading

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Community College of Denver

Campus Box 201
P.O. Box 173363
Denver, CO 80217-3363
(303) 556-2430

Application for Admission



Responses to items marked by an asterisk () are voluntary, 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.

EASE INDICATE THE YEAR AND TERM YOU WISH TO ENROLL 19/20 SUMMER FALL SPRING

PLEASE PRINT LEGIBLY

--

Student ID / Social Security Number

MR MS OR LIST OTHER: _____

BIRTHDATE
--
MO. DAY YR

Gender
 (M) Male
 (F) Female

LAST NAME

FIRST NAME

MIDDLE NAME

Marital Status
(S) Single
(D) Divorced
(M) Married/ Separated
 (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

PREVIOUS NAME

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) and copy of parent(s) if you are under the age of 23.

Office Use Only

VISA
 RESIDENCY
 LOCAL COUNTY

CITY ADDRESS

COUNTY OF LOCAL ADDRESS

LOCAL COUNTY

CITY

--

STATE ZIP CODE COUNTRY (AREA) RESIDENCE PHONE NUMBER

PERMANENT ADDRESS (IF DIFFERENT FROM ABOVE)

E-MAIL ADDRESS

CITY

--

STATE ZIP CODE COUNTRY (AREA) BUSINESS PHONE NUMBER

STUDENT GOALS

Goal 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

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

Are you enrolling at this college for job or career reasons?

- (Y) Yes (N) No

Please indicate planned length of study at this institution:

- (1) semester (3) 2 years
 (2) 1 year (4) More than 2 years

Program/Major area of study:

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 19/20
 (G) G.E.D. - Year Received 19/20
 (C) Currently enrolled in High School
Expected Graduation Date 19/20
 (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 additional 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 or
LEGAL GUARDIAN
(if you are under 23)**

Dates of continuous physical presence in Colorado.....

to
 mo day yr mo day yr

to
 mo day yr mo day yr

List the last two years Colorado income taxes have been filed.....

and
 yr yr

and
 yr yr

List the last two years of employment or source of income.

Employer State to
 mo yr mo yr

Employer State to
 mo yr 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.....

and
 mo yr mo yr

and
 mo yr mo yr

Dates of extended absences from Colorado during the last two years.....

to
 mo yr mo yr

to
 mo yr 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.

Student Signature

AND Parent or Legal Guardian 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.

THANK YOU FOR YOUR INTEREST IN OUR COLLEGE