# 2019-2020 Undergraduate Programs

# **Undergraduate Areas of Study**

# 3D Graphics and Animation Emphasis, Fine Arts BFA

### Introduction

Please click here to see general Visual Arts information.

The 3D graphics and animation emphasis is a competitive and rigorous four-year curriculum focused on preparing students to work in a wide variety of fields that use animated digital computer graphics (CG), including entertainment, film and television, gaming, medicine, and science.

# **Program Delivery**

- This is an on-campus program.
- The 3D graphics and animation emphasis courses (DACD 2810-4820 below) are billed at a different rate than the standard course tuition due to the state-of-the-art technology used in the classroom. For more information regarding this rate, contact the College of Arts & Media at <a href="CAM@ucdenver.edu">CAM@ucdenver.edu</a>.

# **Declaring This Major**

- Click here to go to information about declaring a major.
- Students who are applying for entrance into the 3D graphics and animation emphasis
  must submit a portfolio, as described below. The 3D graphics and animation emphasis
  accepts applications only once per year. Students who meet the requirements and are
  accepted will be able to register for advanced 3D animation courses.

#### **ELIGIBILITY**

Students are eligible to apply to the 3D graphics and animation emphasis after completing the following courses with a grade of C (2.0) or better each and a minimum overall animation course GPA of 2.8:

- FINE 1810 PREDAC: 3D Foundations
- FINE 1820 PREDAC: Animation Foundations

Please note that FINE 1810 and FINE 1820 are billed at regular tuition rates.

#### PORTFOLIO APPLICATION REQUIREMENTS

The student's application must be submitted electronically no later than the **last Friday of May**. Detailed instructions are provided during the spring semester in either FINE 1810 or FINE 1820. Students can also contact the Director of the Digital Animation Center (Associate Professor Dane Webster at <a href="mailto:dane.webster@ucdenver.edu">dane.webster@ucdenver.edu</a>) if they have additional questions. Selection for entrance into the 3D graphics and animation emphasis is a competitive process (by faculty review) that requires:

- Submission by the candidate of a "Portfolio Demo Reel". The reel must include original works from FINE 1810 3D Foundations and FINE 1820 Animation Foundations as well as representative works created in other visual arts courses completed during the first year of the program. The Portfolio Demo Reel must be turned in as a .mov (Quicktime, H.264, 1280x720 minimum frame size, 16:9 aspect ratio). Still work should be a component of the reel and should be on screen for at least 3 seconds but no more than 10 seconds. Name and contact information should appear at the beginning and end of the reel. The reel should not be greater in length than 1.5 minutes.
- A "breakdown sheet": the run time at which the work occurs, and which describes what
  work is included on the submission reel, and, if collaborative in nature, what aspect of
  the work shown was created by the applicant. Turn in a PDF file only please.
- A one page double-spaced written statement regarding the applicant's aspirations as a
  productive and contributing member of the 3D graphics and animation cohort and the
  CG community as a whole. Turn in a PDF file only please.

Students should show only their best work and show the very best work first. Students should be selective since reels may only be 3.5 minutes long. Music is not recommended for professional reels, but if music is used, students should choose wisely.

For more portfolio information, please see the College of Arts & Media 3D graphics and animation website and the Digital Animation Center website, or contact the College of Arts & Media at CAM@ucdenver.edu

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

1. A minimum of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a

- major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by Department of Visual Arts faculty.
- At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
- 4. At least 24 semester hours of total visual arts courses must be upper-division.

Take all of the following Pre-Portfolio courses:

- FINE 1810 PREDAC: 3D Foundations
- FINE 1820 PREDAC: Animation Foundations

Take **all** of the following 3D Graphics and Animation Emphasis courses (available only to students accepted to emphasis via portfolio review):

- DACD 2810 DAC: Surface Modeling
- DACD 2820 DAC: Texturing and Shading
- DACD 2830 DAC: Lighting and Rendering
- DACD 2850 DAC: Character Creation
- DACD 3810 DAC: Environment Production
- DACD 3820 Character Rigging & Animation
- DACD 3846 DAC: Preproduction for LookDev
- DACD 3850 DAC: Dynamic Simulation
- Either DACD 3830 Advanced Character Animation or
- DACD 3831 Character FX
- DACD 4810 DAC: Production I
- DACD 4820 DAC: Production II

Take **all** of the following courses:

- ENGL 2250 Introduction to Film
- FINE 1100 Drawing I
- FINE 1400 Two-Dimensional Design
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II
- FINE 4990 Contemporary Art: 1960 to Present

Take three semester hours of Pre-20th Century Art History elective.

Take **twelve** semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses. Take at least **one** of the following Visual Arts courses:

- FINE 2822 DAC: Digital Cinematography
- FINE 3814 Digital 3D Methods: Motion Graphics for Animators
- FINE 3815 Storyboarding for Cinema and Game Previsualization
- FINE 3845 DAC: Preproduction for Story
- FINE 4825 Architectural Visualization

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# Accounting Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

- Public Accounting: auditing, consulting, and tax compliance and planning
- Accounting in Industry: all industries, including energy, financial, manufacturing, retail
- Accounting in Government and Nonprofits
- Academics: teaching and research in accounting areas of financial reporting, managerial accounting, auditing, accounting information systems, and taxation

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

1. A grade of C or higher must be earned in all courses that are used as prerequisites. These are noted with an asterisk.

Take **all** of the following required courses:

- ACCT 3220 Intermediate Financial Accounting I \*
- ACCT 3230 Intermediate Financial Accounting II
- ACCT 3320 Intermediate Cost Accounting
- ACCT 4054 Accounting Information Systems
- (Replaces ISMG 3000 in Business Core)
- ACCT 4410 Fundamentals of Federal Income Tax
- ACCT 4620 Auditing Theory

Take **one** of the following courses:

- ACCT 4240 Advanced Financial Accounting
- ACCT 4370 International Accounting
- ACCT 4420 Taxation of Business Entities
- ACCT 4800 Accounting for Government and Nonprofit Organizations
- Or any other 4000-level ACCT course

**Note:** Students should note that all finance, risk and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

#### **Notes**

- Students also have the option to complete an Accounting major with a specialization in Information Systems. Click <u>here</u> to view this option.
- Students also have the opportunity to continue their education with an MS in Accounting.
  The Accounting 4+1 program allows students to potentially complete the BS and MS
  degrees in as little as five years through substituting two graduate courses for two
  undergraduate courses. The graduate courses count towards both the BS and MS degrees.
- If you are considering this 4+1 program, contact your advisor immediately so that you can appropriately plan your coursework. Email <u>undergrad.advising@ucdenver.edu</u>
- If you are considering pursuing a CPA, talk to the accounting department about the best courses to take.

# Accounting Major - BS in Business Administration with specialization in Information Systems

#### Introduction

Please click here to see Business School information.

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

- Public Accounting: auditing, consulting, and tax compliance and planning
- Accounting in Industry: all industries, including energy, financial, manufacturing, retail
- Accounting in Government and Nonprofits
- Academics: teaching and research in accounting areas of financial reporting, managerial accounting, auditing, accounting information systems, and taxation

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Within the Accounting curriculum, students can specialize in Information Systems to compliment their individual interest.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- Business School Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

1. A grade of C must be earned in all accounting courses that are used as prerequisites. These are noted with an asterisk.

Take **all** of the following courses:

- ACCT 3220 Intermediate Financial Accounting I \*
- ACCT 3230 Intermediate Financial Accounting II
- ACCT 3320 Intermediate Cost Accounting
- ACCT 4054 Accounting Information Systems
- (Replaces ISMG 3000 in Business Core)
- ACCT 4410 Fundamentals of Federal Income Tax
- ACCT 4620 Auditing Theory
- ISMG 4780 Accounting and Information Systems Processes and Controls
- Choose two upper division ISMG electives

**Note:** Students should note that all finance, risk, and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the major or specialization

#### **Notes**

Students also have the opportunity to continue their education with an MS in Accounting. The Accounting 4+1 program allows students to potentially complete the BS and MS degrees in as little as five years through substituting two graduate courses for two undergraduate courses. The graduate courses count towards both the BS and MS degrees.

If you are considering this 4+1 program, contact your advisor immediately so that you can appropriately plan your coursework. Email <a href="mailto:undergrad.advising@ucdenver.edu">undergrad.advising@ucdenver.edu</a>

If you are pursuing a CPA, talk to the accounting department about the best courses to take.

# **Anthropology BA**

#### Introduction

Please click here to see Anthropology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

• This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 40 ANTH credit hours.
- 2. Students must complete a minimum of 24 upper division (3000-level and above) ANTH credit hours. Most upper division courses have lower division pre-requisites.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.

- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.
- 5. Students must complete a minimum of 21 credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

1. Anthropology majors are advised to take MATH 2830 for their CU Denver Core Curriculum Mathematics requirement.

Take **all** of the following required courses:

- ANTH 1302 Introduction to Archaeology
- ANTH 1303 Introduction to Biological Anthropology
- ANTH 2102 Culture and the Human Experience

Take **three** of the following courses:

- ANTH 3101 Foundations of Cultural Anthropology
- ANTH 3121 Language, Culture, and Communication
- ANTH 3301 World Prehistory
- ANTH 3512 Human Evolution

Take **20 elective credit hours** from the Anthropology Department.

# **Architecture BS**

### Introduction

Please click here to see Architecture department information.

The College of Architecture and Planning offers a Bachelor of Science in Architecture degree exclusively on the downtown Denver campus. The city of Denver provides a rich environment to explore a diverse historic and cultural world that includes multiple approaches to solving urban and building problems. The degree is a "pre-professional" degree, which can provide graduating students advanced standing and a reduction in course requirements for the accredited Master of Architecture degree. This degree provides an education in the sciences and humanities in design theory of the built world and its practice. Our graduates will have significant grounding in the science of building and the practice of architecture in a rapidly evolving profession. Our educational goal is to engender active and creative making of architecture along with critical thinking skills. Our graduates will have employment options in entry-level architectural practices or related fields of urban design, historic preservation, design-build, construction, and even urban planning; or the opportunity to enter any accredited graduate program in the country.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

· Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Architecture and Planning Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

Students must earn at least a C- grade in required architecture and math courses.
 Architecture and math courses must be repeated if the student earns less than a C-grade.

Take all of the following required Design Studies courses:

- ARCH 2110 Design Studio I
- ARCH 3110 Design Studio II
- ARCH 3120 Design Studio III
- ARCH 4110 Design Studio IV
- ARCH 4120 Design Studio V

Take **all** of the following Cultural Studies courses:

- ARCH 1110 Introduction to Architecture
- ARCH 2230 Architectural History I
- ARCH 3230 Architectural History II

Take all of the following Technical Studies courses:

- ARCH 3130 Construction Practices: Material and Structural Systems
- ARCH 3430 Construction Practices: Building Envelope
- ARCH 3330 Building Systems I
- ARCH 4440 Building Systems II
- ARCH 3340 Theory of Structures I
- ARCH 4340 Theory of Structures II

Take **one** of the following Math courses/sets:

- MATH 1110 College Algebra and
- MATH 1120 College Trigonometry
- Or one of the following:
- MATH 1130 Precalculus Mathematics
- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- Note: also applies to the Core Math requirement

Take **both** of the following Physics courses:

- PHYS 2010 College Physics I
- PHYS 2030 College Physics Lab I
- Note: also applies to the Core Biological and Physical Sciences requirement

Take eighteen hours of Architecture electives.

Additional General elective hours may be needed to reach the required 120 hours for the BS Architecture degree.

**Note:** Required math and physics courses may apply toward General electives if not already applied toward Core Math and Biological and Physical Sciences requirements.

# **Art History Emphasis, Fine Arts BA**

#### Introduction

Please click here to see general Visual Arts information.

The art history emphasis familiarizes students with a range of developments in the history of art while developing skills in critical thinking, writing, research and the study of visual culture. After a two-semester introduction to the foundations of art and architectural history, students choose from an array of advanced courses on specific topics. This curriculum concludes with capstone seminars on the methods of art historical scholarship as well as a thesis project.

# **Program Delivery**

• This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major.
- Consult the College of Arts & Media at CAM@ucdenver.edu for more information.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by Department of Visual Arts faculty.
- 3. At least 21 semester hours of all visual arts credits (at any level) must be taken at CU Denver.
- 4. At least 18 semester hours of total visual arts courses must be upper-division.

Take **all** of the following Studio Arts courses:

- FINE \_\_\_\_\_ 2-dimensional Studio Arts course (3 semester hours)
   FINE \_\_\_\_\_ 3-dimensional Studio Arts course (3 semester hours)
- FINE Studio Arts Elective (3 semester hours)

Take **one** of the following English courses:

- ENGL 2070 Grammar, Rhetoric and Style
- ENGL 4180 Argumentation and Logic
- ENGL 4280 Proposal and Grant Writing

Take all of the following Art History courses (entry level):

- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II

Take a minimum of three semester hours of Pre-20th Century Art History elective.

Take an additional **eighteen** semester hours of upper-division (3000/4000-level) Art History electives (six courses).

Take **all** of the following Art History Capstone courses:

- FINE 4790 Methods in Art History
- FINE 4951 Bachelor of Art Thesis

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved studio arts courses and art history electives, as well as more information about this emphasis.

# **Art Practices Emphasis, Fine Arts BFA**

#### Introduction

Please click <u>here</u> to see general Visual Arts information.

The Art Practices emphasis provides students with a comprehensive education in visual art practices, which includes creative influences, ideas, materials, tools and skills, as well as theory and art history, with an emphasis on current trends in contemporary art. Art Practices is designed for students whose creative ideas move across media and who are looking for a more comprehensive critical approach to developing their art practice. Art Practices provides students with focused professional skills in two self-selected areas of studio art, whereby the student can develop a fully formed and thoughtful body of work with conceptual impact.

The emphasis is a focused degree program that provides students with greater knowledge and tools to make them competitive in the professional world of contemporary art. The work of contemporary artists is a dynamic combination of materials, methods, concepts, and subjects that challenge traditional assumptions and definitions. Contemporary artists give voice to the varied and changing landscapes of identity, values, and beliefs in the increasingly global culture of our diverse and technologically advancing world. Artists today explore ideas, concepts, questions, and practices that examine the past, describe the present, and imagine the future. This program is designed to address the needs of students looking to become successful emerging artists with the skills to become active individuals in the art world through multiple outlets- both exhibition/sales routes, as well as arts education and business employment.

Students may choose from two areas for their primary concentration: Painting and Drawing OR Transmedia Sculpture. They then select a secondary concentration- different from their primary concentration from the following: Painting and Drawing, Illustration, Transmedia Sculpture or Photography. Students take 21 semester hours in their primary concentration and 15 semester hours in their secondary concentration.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

- 1. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by Department of Visual Arts faculty.
- 3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
- 4. At least 24 semester hours of total visual arts courses must be upper-division.

Take **all** of the following Arts Foundation courses:

- FINE 1100 Drawing I
- FINE 1400 Two-Dimensional Design
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II

Note: Students should choose a main and secondary concentration before continuing with upper-division (3000/4000-level) studio courses. Any 1000/2000-level course may be taken prior to making concentration selections.

Take **all** of the Main Studio Concentration courses from ONE of the following categories (Transmedia Sculpture OR Painting and Drawing):

#### Transmedia Sculpture

- FINE 2500 Bronze Casting
- FINE 2510 Wood and Metal Sculpture
- FINE 3510 Mold Design & Casting
- FINE 3555 Concepts in Sculpture
- FINE 4505 Sculptural Drawing
- FINE 4215 Advanced Art Practices
- FINE 4515 Interdisciplinary Studio

#### Painting and Drawing

- FINE 2030 Life Drawing
- FINE 2200 Painting I
- FINE 3030 The Media of Drawing
- FINE 3200 Intermediate Painting and Drawing
- FINE 3556 Concepts in Painting and Drawing
- FINE 4215 Advanced Art Practices
- FINE 4515 Interdisciplinary Studio

## **Secondary Studio Concentrations**

Take **all** of the Secondary Studio Concentration courses from ONE of the following categories (Transmedia Sculpture or Painting and Drawing or Illustration or Photography). Note that the Secondary Concentration must be different from the Main Concentration.

#### Transmedia Sculpture

- FINE 2500 Bronze Casting
- FINE 2510 Wood and Metal Sculpture
- FINE 3510 Mold Design & Casting
- FINE 3555 Concepts in Sculpture
- FINE 4505 Sculptural Drawing

#### Painting and Drawing

- FINE 2030 Life Drawing
- FINE 2200 Painting I

- FINE 3030 The Media of Drawing
- FINE 3200 Intermediate Painting and Drawing
- FINE 3556 Concepts in Painting and Drawing

#### Illustration

- FINE 2405 Introduction to Digital Design
- FINE 2010 The Graphic Novel Workshop
- FINE 3010 Illustration I: Spatial Thinking
- FINE 3300 Painting, Drawing and the Printed Image
- FINE 3410 Illustration II: Digital Media

#### Photography

- FINE 1150 Introduction to Darkroom Photography
- FINE 3161 The Silver Fine Print
- FINE 3162 The Digital Fine Print
- FINE 3171 Concepts and Processes in Photography
- FINE 4195 Advanced Photography I

Take **all** of the following Visual Arts courses:

- FINE 3405 Introduction to Digital Video
- FINE 3500 Installation Art
- FINE 4990 Contemporary Art: 1960 to Present

Take **three semester hours** of Pre-20th Century Art History elective.

Take **three semester hours** of upper-division Art History elective.

Take **nine semester hours** of Visual Arts electives. These may include studio, lecture, internship or art history courses.

Take the following Capstone course:

- FINE 4950 Studio BFA Thesis
- Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# **Biochemistry BS**

#### Introduction

Please click here to see Chemistry department information.

Biochemistry is the chemistry of life - the molecules, reactions, and energy transformations that underlie structure and function in all living organisms. The study of biochemistry combines knowledge from chemistry, biology, physics, and mathematics (and sometimes other disciplines) to understand how life works at the molecular level. This integrated scientific knowledge will be essential for understanding the future of human health, sustainable energy, and the environment.

The BS Biochemistry program at CU Denver strongly emphasizes connections between basic science and human health. Required coursework covers much of the foundational knowledge and skills for graduate and health professions entrance exams. Several courses explore connections between cutting-edge biochemical research and different diseases. Students are encouraged to take advantage of undergraduate research opportunities in biochemistry and related fields either at CU-Denver or on the nearby Anschutz Medical campus. Graduates learn skills in critical thinking, problem solving, and scientific communication for careers in the health and natural sciences.

A BS in Biochemistry stands out as a premiere accomplishment in applications for professional degree programs, including pharmacy, medicine, nursing, dentistry, medical technology, and many others.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Qualified majors are strongly urged to participate in directed research and departmental honors programs. We also strongly encourage Biochemistry majors to participate in the Chemistry department by serving as learning assistants or teaching assistants.

The chemistry department offers two options for a chemistry degree. A BS Chemistry and a BS Biochemistry. Students may also double major in Biochemistry and Chemistry. Students interested in the Biochemistry major should consult regularly with the Biochemistry Majors Advisor, Dr. Vanessa Fishback.

## **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 80 credit hours, including a minimum of 45 CHEM credit hours and a minimum of 35 credit hours in ancillary coursework.
- 2. Students must complete a minimum of 16 upper-division (3000-level and above) CHEM credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to the major, including ancillary courses.
- 4. Students must complete all major courses taken at CU Denver and all transfer courses applying to the major requirements, including ancillary courses, with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 14 credits hours with CU Denver faculty including CHEM 4518 or CHEM 4538 or CHEM 4548.

# **Program Restrictions, Allowances and Recommendations**

- A student who has declared a Biochemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate Biochemistry advisor. No more than 3 additional hours of such preapproved transfer credits will be allowed.
- 2. All courses applied to the Biochemistry major need to be taken within ten years of the graduation date.

Take **all** of the following required courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or

- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory
- CHEM 3411 Organic Chemistry I or
- CHEM 3481 Honors Organic Chemistry I
- CHEM 3418 Organic Chemistry Lab I or
- CHEM 3488 Honors Organic Chemistry Laboratory I
- CHEM 3421 Organic Chemistry II or
- CHEM 3491 Honors Organic Chemistry II
- CHEM 3498 Honors Organic Chemistry Laboratory II
- CHEM 4810 General Biochemistry I or
- CHEM 5810 Graduate Biochemistry I
- CHEM 4828 Biochemistry Lab
- CHEM 4521 Physical Chemistry: Quantum and Spectroscopy or
- CHEM 4511 Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4538 Physical Chemistry Laboratory: Molecular Structure or
- CHEM 4518 Physical Chemistry Laboratory: Reaction Analysis or
- CHEM 4548 Physical Biochemistry Laboratory

Take **three** of the following advanced biochemistry electives:

- BIOL 4125 Molecular Biology Laboratory
- CHEM 4815 Structural Biology of Neurodegenerative Diseases
- CHEM 4820 General Biochemistry II
- CHEM 4825 Biochemistry of Metabolic Disease
- CHEM 4835 Biochemistry of Gene Regulation and Cancer
- <u>CHEM 4880 Directed Research</u> (For faculty-mentored research projects related to biochemistry. Major credit for this course requires prior approval from the Biochemistry majors advisor and the research mentor. Major credits do not count toward departmental Honors requirements.)
- CHEM 4845 Molecular Modeling and Drug Design
- CHEM 4600/ CHEM 5600 Graduate Topics in Chemistry (certain topics, with permission from the Biochemistry Advisor)
- CHEM 5830 Graduate Biochemistry II

Take **two** molecular science electives not previously selected as a required course or advanced biochemistry elective course:

• CHEM 4121 - Instrumental Analysis

- CHEM 4421/ CHEM 5421 Cannabis Chemistry
- CHEM 4511 Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4521 Physical Chemistry: Quantum and Spectroscopy
- CHEM 4700 Environmental Chemistry
- CHEM 4880 Directed Research
- BIOL 3124 Introduction to Molecular Biology
- BIOL 3225 Human Physiology
- BIOL 3611 General Cell Biology
- BIOL 3654 General Microbiology
- BIOL 3763 Biostatistics
- BIOL 3804 Developmental Biology
- BIOL 3832 General Genetics
- BIOL 4024 Introduction to Biotechnology
- BIOL 4064 Cell Biology of Disease
- BIOL 4165 Neurobiology
- BIOL 4550 Cell Signaling
- MATH 3511 Mathematics of Chemistry
- PHYS 3452 Biophysics of the Cell NM
- PSYC 3832 Neural Basis of Learning

#### Take **all** of the following Ancillary courses:

- BIOL 2051 General Biology I or
- BIOL 2095 Honors General Biology I
- BIOL 2071 General Biology Laboratory I or
- BIOL 2096 Honors General Biology Lab I
- BIOL 2061 General Biology II or
- BIOL 2097 Honors General Biology II
- BIOL 2081 General Biology Laboratory II or
- BIOL 2098 Honors General Biology Lab II
- MATH 1401 Calculus I
- MATH 2411 Calculus II

Take **one** of the following sequences:

#### Seguence A

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II
- MATH 3511 Mathematics of Chemistry or
- CHEM 4500 Foundations of Physical Chemistry

#### -OR-

#### Sequence B

- PHYS 2010 College Physics I
- PHYS 2030 College Physics Lab I
- PHYS 2020 College Physics II
- PHYS 2040 College Physics Lab II
- CHEM 4500 Foundations of Physical Chemistry

# **Bioengineering BS**

#### Introduction

Please click here to see Bioengineering department information.

The undergraduate program at CU Denver is a highly rigorous program instilling competencies in biomedical science, engineering, and mathematics and biomedical design, while emphasizing the professional competencies of leadership, communication, presentation and critical problem solving. Our mission is to improve human health through the application of engineering principles, ideas, methods and inventions to solve important clinical problems. Bioengineering is a highly interdisciplinary field that brings together: (1) biological, chemical and physical sciences; (2) engineering and mathematics; and (3) clinical medicine. The undergraduate bioengineering program provides training at both the Denver campus and the Anschutz Medical Campus.

Graduates of the undergraduate program in bioengineering are expected to attain at least one of the following objectives within a few years after graduation:

- 1. Be employed as a professional in the biomedical engineering field or related industry using knowledge and skills obtained in the program.
- 2. Be progressing toward an advanced degree in: a) health sciences or medical school; b) graduate school; c) business or law school, or other advanced professional programs.

Program Educational Objectives (PEOs) can be found on the department's website.

# **Program Delivery**

- This is an on-campus program.
- Upper-division major courses will be taught at the Anschutz Medical Campus.

# **Declaring This Major**

- Click <u>here</u> to go to information about declaring a major.
- Students applying to the program must select bioengineering (pre-major) as their "Field of Study" in the online application. If you are admitted to the pre-major program you will enroll in pre-major courses, which are offered at the Denver campus. Students in the pre-major must apply to advance to major status in bioengineering. Admittance to the major in bioengineering will be granted to students who have successfully completed all pre-major courses and who meet the program's selection criteria. Upper-division courses will be taught at the Anschutz Medical Campus.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Engineering, Design and Computing Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

The bioengineering major requirements include three different types of courses: pre-major courses, upper-division bioengineering courses and track electives.

#### **Pre-Major Courses**

Students must complete all of these courses before they may apply for bioengineering major status. Credit for some of these courses may be achieved through high school Advanced Placement (AP) course work and exams, International Baccalaureate (IB) coursework and exams, as well as transfer credit.

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3195 Linear Algebra and Differential Equations

Take **all** of the following Biology courses:

- BIOL 2051 General Biology I
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II
- BIOL 2081 General Biology Laboratory II

#### Take **all** of the following Chemistry courses:

- CHEM 2031 General Chemistry I
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II
- CHEM 2068 General Chemistry Laboratory II
- CHEM 3411 Organic Chemistry I
- CHEM 3418 Organic Chemistry Lab I

#### Take **all** of the following Physics courses:

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II

#### Take **all** of the following Bioengineering courses:

- BIOE 1010 Bioengineering Design and Prototyping I
- BIOE 1020 Bioengineering Design and Prototyping II
- BIOE 2010 Introduction to Programming for Bioengineers
- BIOE 2020 Introduction to Computational Methods for Bioengineers

#### **Upper-division Bioengineering Courses**

All students admitted into the Bioengineering major must take the following upperdivision major bioengineering courses regardless of their chosen track. Upper-division major classes will be taught at the Anschutz Medical Campus. These classes build upon pre-major courses and provide the next level of instruction in bioengineering.

- BIOE 3010 Bioinstrumentation
- BIOE 3020 Introduction to Biomechanical Analysis
- BIOE 3030 Introduction to Biomaterials
- BIOE 3040 Physiology for Bioengineering
- BIOE 3050 Cell & Molecular Bioengineering
- BIOE 3051 Cell & Molecular Bioengineering Lab
- BIOE 3060 Biostatistics, Measurement and Analysis
- BIOE 3070 Bioengineering Lab I
- BIOE 3071 Bioengineering Lab II
- BIOE 3090 Introduction to BioDesign
- BIOE 4035 Undergraduate BioDesign II

#### BIOE 4045 - BioDesign III

#### **Track Electives**

In addition to the upper-division Bioengineering courses, students must take a minimum of twelve additional semester hours to meet Bioengineering track elective requirements. Of these twelve semester hours, a minimum of six semester hours must be upper-division (3000- or 4000-level) and taught within the Department of Bioengineering.

Students' tracks and related course selections must be approved prior to registration.

# **Biology BS**

#### Introduction

Please click here to see Integrative Biology department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum

- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a total of 67-69 credit hours, including a minimum of 36 BIOL credit hours and 31-33 credit hours in ancillary coursework.
- Students must complete a minimum of 18 upper division (3000- level and above) BIOL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements, including ancillary courses.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 18 BIOL credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation.
- Students cannot use courses taken to fulfill the Biology minor requirements toward fulfilling requirements in the Biology major or in other science majors, minors or certificates.

Take **all** of the following Biology core courses:

- BIOL 2051 General Biology I or
- BIOL 2095 Honors General Biology I
- BIOL 2071 General Biology Laboratory I or
- BIOL 2096 Honors General Biology Lab I
- BIOL 2061 General Biology II or
- BIOL 2097 Honors General Biology II
- BIOL 2081 General Biology Laboratory II or
- BIOL 2098 Honors General Biology Lab II
- BIOL 3411 Principles of Ecology
- BIOL 3611 General Cell Biology
- BIOL 3832 General Genetics
- BIOL 3445 Introduction to Evolution

Take an additional **15** semester hours of upper-division biology, including:

- At least one upper division biology lab course
- BIOL 3020 will not satisfy this requirement
- At least one 3 credit hour 4000+ biology lecture course taken in residence from CU Denver Biology faculty (<u>BIOL 4125</u>, <u>4840</u>, <u>4880</u> and <u>4990</u> do not satisfy this requirement, but can apply as biology electives).

**Note:** Biochemistry (CHEM 3810-4 or 4820-3) may be counted as biology elective hours.

**Note:** A maximum total of six credit hours of Individually Structured courses, including Independent Study (<u>BIOL 3840/4840</u>), Directed Research (<u>BIOL 4880</u>) and Internship (<u>BIOL 3939</u>), may be counted toward the upper-division biology electives.

Take **all** of the following Ancillary Core courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or
- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory
- CHEM 3411 Organic Chemistry I or
- CHEM 3481 Honors Organic Chemistry I
- PHYS 2010 College Physics I or
- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2030 College Physics Lab I or
- PHYS 2321 General Physics Lab I or
- PHYS 2351 Applied Physics Lab I
- PHYS 2020 College Physics II or
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2040 College Physics Lab II or
- PHYS 2341 General Physics Lab II or
- PHYS 2361 Applied Physics Lab II

Take **one** of the following Ancillary Math courses or sets:

#### **OPTION ONE**

MATH 1401 - Calculus I

**OPTION TWO** 

- BIOL 3763 Biostatistics and
- MATH 1110 College Algebra or
- MATH 1120 College Trigonometry or
- MATH 1130 Precalculus Mathematics

**OPTION THREE** 

- MATH 4830 Applied Statistics and
- MATH 1110 College Algebra or
- MATH 1120 College Trigonometry or
- MATH 1130 Precalculus Mathematics

# **Chemistry BS**

# Introduction

Please click <u>here</u> to see Chemistry Department information.

A Chemistry degree can prepare you for a meaningful career in:

- Developing renewable energy solutions for climate change
- Ensuring safe and pure air and drinking water
- Discovering materials for new devices using nanotechnology
- Analyzing medical samples to detect rare and dangerous diseases
- Contributing to Colorado's and America's mining and petroleum industries
- Contributing to Colorado's emerging natural products and pharmaceuticals industries.

A BS in Chemistry also stands out as a premiere accomplishment in applications for professional degree programs, including pharmacy, medicine, nursing, dentistry, medical technology, and many others. Previous BS Chemistry graduates from CU-Denver have gone on to medical, dental, and pharmacy schools; to Ph.D. programs in chemistry and biomedical sciences; and to productive careers in the biotech, pharmaceutical, and medical technology industries.

The Chemistry Department offers two options for a chemistry degree: a BS Chemistry or a BS Chemistry ACS Certified. Students interested in the chemistry major should consult regularly with the chemistry major advisor, Dr. Marta K. Maroń (<a href="mailto:marta.maron@ucdenver.edu">marta.maron@ucdenver.edu</a>). The Advisor can help you select the track that best fits your future goals. A complete description of

the chemistry major programs may be obtained in the Department of Chemistry office or Department website.

Qualified majors are strongly urged to participate in directed research with a research faculty member and in the departmental honors program. We also strongly encourage chemistry majors to participate in the Department by serving as graders, learning assistants, and/or teaching assistants.

#### American Chemical Society (ACS) Certified Degree.

The ACS Certified degree requires a more thorough background than the minimum requirements for a Chemistry BS degree. Students planning on going into industry upon completing their Bachelor of Science are at an advantage completing the ACS Certified degree option.

- The ACS certified degree is open to all Chemistry majors regardless of future plans.
- Chemistry and Biochemistry double majors earn an ACS Certified degree in Chemistry automatically. For more information see the major advisor.
- See the ACS certified degree program page for additional coursework.

These Degree requirements are subject to periodic revision by the Academic Department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- <u>CU Denver Core Curriculum</u>
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 67 credit hours, including a minimum of 45 CHEM credit hours and a minimum of 22 credit hours in ancillary coursework.
- 2. Students must complete a minimum of 16 upper-division level (3000-level and above) CHEM credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements, including ancillary courses.
- 4. Students must complete all major courses taken at CU Denver and all transfer courses applying to the major requirements, including ancillary courses, with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 14 CHEM credit hours with CU Denver faculty, including CHEM 4128, 4518 or 4538.

# **Program Restrictions, Allowances and Recommendations**

- A student who has declared a Chemistry major at CU Denver may not take additional chemistry courses outside of the Department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate Chemistry/Biochemistry advisor. No more than 3 additional hours of such pre-approved transfer credits will be allowed.
- 2. All courses applied to the Chemistry major need to be taken within ten years of the graduation date.

Take **all** of the following required courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or
- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory
- CHEM 3111 Analytical Chemistry
- CHEM 3118 Analytical Chemistry Laboratory
- CHEM 3411 Organic Chemistry I or
- CHEM 3481 Honors Organic Chemistry I
- CHEM 3418 Organic Chemistry Lab I or
- CHEM 3488 Honors Organic Chemistry Laboratory I

- CHEM 3421 Organic Chemistry II or
- CHEM 3491 Honors Organic Chemistry II
- CHEM 3498 Honors Organic Chemistry Laboratory II
- CHEM 4521 Physical Chemistry: Quantum and Spectroscopy
- CHEM 4538 Physical Chemistry Laboratory: Molecular Structure
- CHEM 4511 Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4518 Physical Chemistry Laboratory: Reaction Analysis
- CHEM 3011 Inorganic Chemistry
- CHEM 4121 Instrumental Analysis
- CHEM 4128 Instrumental Analysis Laboratory

Take **one** of the following courses:

- CHEM 3018 Inorganic Chemistry Laboratory
- CHEM 4828 Biochemistry Laboratory

Note: CHEM 4828 requires additional prerequisites other than the courses listed above.

Take **all** of the following Ancillary courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II

Take **one** of the following sequences:

Sequence A

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II
- MATH 3511 Mathematics of Chemistry or
- MATH 2421 Calculus III or
- CHEM 4500 Foundations of Physical Chemistry

#### Sequence B

- PHYS 2010 College Physics I
- PHYS 2030 College Physics Lab I
- PHYS 2020 College Physics II
- PHYS 2040 College Physics Lab II
- CHEM 4500 Foundations of Physical Chemistry

# **Chemistry BS, ACS Certified**

### Introduction

Please click here to see Chemistry Department information.

The Chemistry Department offers two options for a chemistry degree: a BS Chemistry or a BS Chemistry ACS Certified. Students interested in the chemistry major should consult regularly with the chemistry major advisor, Dr. Marta K. Maroń (<a href="mailto:marta.maron@ucdenver.edu">marta.maron@ucdenver.edu</a>). The Advisor can help you select the track that best fits your future goals. A complete description of the chemistry major programs may be obtained in the Department of Chemistry office or Department website.

Qualified majors are strongly urged to participate in directed research with a research faculty member and in the departmental honors program. We also strongly encourage chemistry majors to participate in the Department by serving as graders, learning assistants, and/or teaching assistants.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society (ACS) for the professional training of chemists. The ACS certification requires students following the BS program of study take foundation courses in the five sub-disciplines of chemistry: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry. In addition, students take an in-depth (second semester) course in four out of the five sub-disciplines and are required to complete 400 hours of laboratory work post General Chemistry Laboratories. Laboratory work has to encompass four of the five sub-disciplines. General Chemistry I and II with laboratories are considered introductory courses and are prerequisites to foundation courses. No chemistry course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with the undergraduate chemistry major Advisor for details.

These Degree requirements are subject to periodic revision by the Academic Department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a total of 67 credit hours, including a minimum of 45 CHEM credit hours and 22 credit hours in ancillary coursework.
- 2. Students must complete a minimum of 16 upper division level (3000-level and above) CHEM credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements, including ancillary courses.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all ancillary and transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 14 CHEM credit hours with CU Denver faculty, including CHEM 4128, 4518 or 4538.

# **Program Restrictions, Allowances and Recommendations**

- A student who has declared a chemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. No more than 3 additional hours of such pre-approved transfer credits will be allowed.
- 2. All courses applied to the chemistry major need to be taken within ten years of the graduation date.

Take **all** of the following required courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or
- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory
- CHEM 3111 Analytical Chemistry or
- CHEM 3118 Analytical Chemistry Laboratory
- CHEM 3411 Organic Chemistry I or
- CHEM 3481 Honors Organic Chemistry I
- CHEM 3418 Organic Chemistry Lab I or
- CHEM 3488 Honors Organic Chemistry Laboratory I
- CHEM 3421 Organic Chemistry II or
- CHEM 3491 Honors Organic Chemistry II
- CHEM 3498 Honors Organic Chemistry Laboratory II
- CHEM 4521 Physical Chemistry: Quantum and Spectroscopy
- CHEM 4538 Physical Chemistry Laboratory: Molecular Structure
- CHEM 4511 Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4518 Physical Chemistry Laboratory: Reaction Analysis
- CHEM 3011 Inorganic Chemistry
- CHEM 4121 Instrumental Analysis
- CHEM 4128 Instrumental Analysis Laboratory
- CHEM 4810 General Biochemistry I or
- CHEM 3810 Biochemistry

#### Take **one** of the following courses:

- CHEM 3018 Inorganic Chemistry Laboratory
- CHEM 4828 Biochemistry Lab

#### Take **one** of the following lecture courses:

- <u>CHEM 4700</u> <u>Environmental Chemistry</u>
- CHEM 4820 General Biochemistry II
- CHEM 4835 Biochemistry of Gene Regulation and Cancer

- CHEM 5010 Advanced Inorganic Chemistry
- CHEM 5550 Applications of Group Theory in Chemistry

or

 <u>CHEM 4600 - Advanced Topics in Chemistry</u> (With permission from course instructor and undergraduate major advisor. The course must fulfill either the biochemistry or inorganic chemistry area.)

Take all of the following Ancillary courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II

Take one of the following sequences: Sequence A

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II
- MATH 3511 Mathematics of Chemistry or
- MATH 2421 Calculus III or
- CHEM 4500 Foundations of Physical Chemistry

#### Or Sequence B

- PHYS 2010 College Physics I
- PHYS 2030 College Physics Lab I
- PHYS 2020 College Physics II
- PHYS 2040 College Physics Lab II
- CHEM 4500 Foundations of Physical Chemistry

# **Civil Engineering BS**

### Introduction

Please click here to see Civil Engineering department information.

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineering offers an interesting and challenging career in the design, construction, and maintenance of buildings and urban infrastructure; in transportation systems, including highways, airports, rapid transit lines, railroads, and harbor facilities; in the development of water resources, including reservoirs for storage, canals for irrigation, dams for power generation, stormwater management for drainage, groundwater recharge for contamination prevention, wastewater treatment for environmental protection, and water purification for drinking purposes; in the construction industry; including foundations, bridges, concrete and steel structures, in problems concerned with environmental preservation; and in the sustainable development of cities. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. CU Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Engineering, Design and Computing Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
- 2. Students must maintain a minimum 2.0 GPA in all CVEN courses attempted.

Take **all** of the following Civil Engineering courses:

- CVEN 1025 Civil Engineering Graphics and Computer Aided Design
- CVEN 1067 Introduction to Civil Engineering
- CVEN 2121 Analytical Mechanics I
- CVEN 2200 Computing Methods in Civil Engineering
- CVEN 2212 Engineering Surveying
- CVEN 3111 Analytical Mechanics II
- CVEN 3121 Mechanics of Materials
- CVEN 3141 Introduction to Structural Materials
- CVEN 3313 Fluid Mechanics
- CVEN 3323 Hydrosystems Engineering
- CVEN 3401 Introduction to Environmental Engineering
- CVEN 3414 Water Supply and Distribution Systems
- CVEN 3505 Structural Analysis
- CVEN 3602 Transportation Engineering
- CVEN 3718 Geotechnical Engineering I
- CVEN 4000 Senior Seminar
- CVEN 4067 Senior Design Projects
- CVEN 4230 Construction Engineering Systems
- CVEN 4728 Geotechnical Engineering II

#### Take **four** of the following Design Electives courses:

- CVEN 4427 Storm Water System Design
- CVEN 4565 Timber Structure Design
- CVEN 4575 Structural Steel Design
- CVEN 4585 Reinforced Concrete Design
- CVEN 4602 Highway Engineering
- CVEN 4738 Intermediate Foundation Engineering

#### Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3195 Linear Algebra and Differential Equations
- CVEN 3611 Engineering Statistics

Take the following Chemistry course:

ENGR 1130 - Chemistry for Engineers

Take **all** of the following Physics courses:

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based

Take **one** of the following courses:

- CVEN 4025 Autocad Civil 3d & Advanced Civil Engineering Graphics
- CVEN 4077 Engineering Economy
- CVEN 4087 Engineering Contracts

Take **three** elective courses: Any 4000-level or higher CVEN courses or any approved 3000-level math, science or engineering courses.

**Note:** Up to two 5000-level CVEN courses taken at CU Denver for the BSCE can be applied to a CE Masters degree at CU Denver if relevant to the student's Masters degree emphasis as determined by the students Masters degree advisor.

# **Communication BA**

#### Introduction

Please click here to see Communication department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This program is offered both on-campus and online.

#### **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 39 COMM credit hours.
- Students must complete a minimum of 18 upper-division (3000-level and above) COMM credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 18 COMM credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. Communication majors may complete up to 6 credit hours of internship (COMM 3939).
- 2. A maximum of 6 credit hours of independent study courses may be applied to the major.
- 3. No more than 56 Communication credit hours can count toward graduation.
- 4. Students may transfer in up to 21 COMM credits.
- 5. In addition to required Communication courses, students are required to take eight elective courses (24 hours), which may consist of classes chosen from any combination of Pathway and Critical Toolbox Courses.
- community service and public affairs
- global and intercultural communication
- health communication
- inquiry and analysis
- media and cultural studies
- strategic communication

Take all of the following Communication courses:

- COMM 1011 Fundamentals of Communication
- COMM 1021 Introduction To Media Studies
- COMM 2020 Communication, Citizenship, and Social Justice

Take **one** of the following courses:

- COMM 1001 Presentational Speaking
- COMM 2050 Business and Professional Speaking

Take eight Communication (COMM) electives

Take **one** of the following exit courses:

- COMM 3939 Internship
- COMM 4040 Communication, Prisons, and Social Justice
- COMM 4051 Advanced Strategic Communication
- COMM 4430 Communication, China, and the US
- COMM 4500 Health Communication
- COMM 4525 Health Communication and Community
- COMM 4550 Rhetorics of Medicine & Health
- COMM 4558 Digital Health Narratives
- COMM 4660 Queer Media Studies
- COMM 4688 Senior Seminar: Transitioning from College to Career
- COMM 4700 Writing Practicum
- COMM 4995 Global Study Topics (Travel Study)

Exit courses include a High Impact Practice, such as: experiential and service learning, collaborative learning, writing-intensive assignments, global education, a focus on diversity and inclusion, and/or a project-based capstone class.

# Computer Science BS

#### Introduction

Please click here to see Computer Science department information.

Undergraduate computer science students at CU Denver are able to tailor their degree to their interests and goals. Students are exposed to the breadth of the field including machine learning & data science, computer graphics & game design, programming, software engineering, systems, scientific computing, secure computing, theory and cyber-physical systems.

The computer science bachelor of science program is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org.

The educational objectives of the computer science undergraduate program are to produce graduates who:

- Advance professionally as productive, practicing professionals in computer science and related careers through the continued development of their expertise and skills.
- Further develop their knowledge, skill set, and career opportunities through graduate education and/or professional studies.
- Function effectively as part of a team to succeed in their professional careers.

#### **Measurable Outcomes**

The BS-CS program must enable its students to attain, by the time of graduation:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- <u>CU Denver Core Curriculum</u>
- College of Engineering, Design and Computing Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

 Students must maintain a minimum 2.0 GPA in all courses applying to major requirements. 2. Students must maintain a minimum 2.0 GPA in all CSCI courses attempted.

The BS Computer Science degree requires 128 credits including: 24 credits of CU Denver Core Curriculum, 12 credits of Mathematics, 10 Credits of Physical Science and 82 credits of Computer Science.

Take 82 credits of Computer Science Courses including:

Take all (25 credits) of the following Computer Science courses:

- CSCI 1410 Fundamentals of Computing
- CSCI 1411 Fundamentals of Computing Laboratory
- CSCI 2312 Object Oriented Programming
- CSCI 2421 Data Structures and Program Design
- CSCI 2511 Discrete Structures
- CSCI 3287 Database System Concepts
- CSCI 3412 Algorithms
- CSCI 3508 Introduction to Software Engineering
- CSCI 4034 Theoretical Foundations of Computer Science

Take all (21 credits) of the following Computer Science Core courses:

- CSCI 1510 Logic Design
- CSCI 2525 Assembly Language and Computer Organization
- CSCI 3415 Principles of Programming Languages
- CSCI 3453 Operating System Concepts
- CSCI 3761 Introduction to Computer Networks
- CSCI 4551 Parallel & Distributed Systems
- CSCI 4591 Computer Architecture

Take **two** (6 credits) of the following Capstone courses:

- CSCI 4738 Senior Design I
- CSCI 4739 Senior Design II

Take **one** (3 credits) of the following Data Science courses:

- CSCI 4455 Data Mining
- CSCI 4580 Data Science
- CSCI 4930 Machine Learning
- CSCI 4931 Deep Learning

• CSCI 4951 - Big Data Systems

Take **one** (3 credits) of the following Computer Science courses:

- CSCI 3560 Probability and Computing
- CSCI 4650 Numerical Analysis I
- CSCI 4110 Applied Number Theory

Take **one** (3 credits) of the following Secure Computing courses:

- CSCI 4741 Principles of Cybersecurity
- CSCI 4742 Cybersecurity Programming and Analysis
- CSCI 4743 Cyber and Infrastructure Defense

Take **two** (6 credits) of the following System Software courses:

- CSCI 3511 Hardware-Software Interface
- CSCI 4287 Embedded Systems Programming
- CSCI 4565 Introduction to Computer Graphics

Take **five** courses (15 credits) of any 3000-level or above Computer Science (CSCI) course that is not applied to the above 67 credits.

 Exception: up to two of the following may be taken to satisfy computer science electives before taking CSCI 3000-level courses: CSCI 2930, CSCI 2940, CSCI 2941, CSCI 2942. Students at advanced stage of their study (CSCI 3000-level courses and above) may not take 2000-level CSCI elective courses to satisfy the program requirements.

Take **all** of the following Mathematics (12 credits) courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 3195 Linear Algebra and Differential Equations
- Note: Students can substitute both MATH 3191 and MATH 3200 for MATH 3195

Take ten credits of Science (Two course sequence with lab) of either:

Choice 1: (8 credits\*)

- BIOL 2051 General Biology I
- BIOL 2061 General Biology II
- BIOL 2071 General Biology Laboratory I
- BIOL 2081 General Biology Laboratory II

OR Choice 2: (9 credits\*)

- CHEM 2031 General Chemistry I
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II
- CHEM 2068 General Chemistry Laboratory II

OR Choice 3: (10 Credits)

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II

\*Additional credits needed to reach 10 may come from an advanced science course beyond CHEM 2061 or BIOL 2061, an additional CS elective, math beyond CALC II, or one of the engineering disciplines (not GEN-ED. courses).

# **Criminal Justice BA**

#### Introduction

Please click here to see School of Public Affairs information.

The School of Public Affairs' Bachelor of Arts program in Criminal Justice (BACJ) is interdisciplinary and combines course work in criminology and criminal justice with a liberal arts focus. The Criminal Justice degree prepares students for occupations within criminology and criminal justice agencies by providing them with the critical thinking, writing, and presentation

skills necessary for career advancement or graduate study. The course work explores the complex nature of crime causation; the history, framework, and operations of criminal justice organizations; the implications of public policies related to crime and justice; and the intricacies of many substantive aspects of criminology and criminal justice, including capital punishment, victimology, race and crime, and community corrections. Further our program integrates research methods and statistics to help students critically consume information, determine how to ask important questions, and carry out research, should they choose to do so. Our program is designed to ensure that graduates adapt to the evolving nature of criminology and criminal justice.

As with all undergraduate degrees, students must complete the requirements of the CU Denver core curriculum. The CU Denver core curriculum draws heavily on social and natural sciences, as well as liberal arts, offering students the benefit of a well-rounded education. The BACJ program will not only provide a direct line to employment in the growing fields of criminology and criminal justice, but it also will facilitate the transition of outstanding students into the School of Public Affairs' MCJ and PhD graduate programs. Students will be well-prepared with respect to substantive knowledge, critical thinking and analytic skills, research methods, and participating in diverse and inclusive environments to pursue advanced degrees in Criminology, Criminal Justice, and related fields.

#### **Program Delivery**

This is an on-campus and online program.

# **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Public Affairs Graduation Requirements
- Click <u>here</u> for information about Academic Policies

# **Program Requirements**

- Students must receive a minimum C- grade in each undergraduate course applied to satisfy major or minor degree requirements and must maintain a 2.0 GPA overall in major or minor courses.
- 2. The Bachelors of Arts in Criminal Justice degree requires 36 credit hours of coursework.
- 3. Students must complete a minimum of 45 upper-division credit hours, 21 of which must be Criminal Justice credit hours.

4. A maximum of 15 transfer credit hours may be applied to the major. Transfer Criminal Justice credit hours above the 15 credit hours already applied to the major will count as general electives. CRJU courses taken from the University of Colorado Colorado Spring are not subject to this transfer credit limit for the major.

Take **all** of the following required courses:

- CRJU 1000 Criminology and Criminal Justice: An Overview
- CRJU 2041 Criminological Theory
- CRJU 3100 Research Methods
- CRJU 3150 Statistics for Criminal Justice \*
- CRJU 4042 Corrections
- CRJU 4043 Law Enforcement
- CRJU 4044 Courts and Judicial Process
- SOCY 1001 Introduction to Sociology \*\*

\*Students must successfully pass CRJU 3100 Criminal Justice Research Methods with a C- or better before taking CRJU 3150 Statistics for Criminal Justice

\*\*This class also fulfills a Social Science requirement of the CU Denver core curriculum

Take **fifteen** credit hours of electives, **nine** of which must be Criminal Justice courses offered by the School of Public Affairs, and **six** of which may be taken from the approved list of other department courses.

Criminal Justice Electives:

Any 3000 or 4000 level CRJU course not already required for the major may count as a Criminal Justice major elective.

- CRJU 4939 Internship \*
- The internship CRJU 4939 is required as one of the electives for the major unless
  officially waived by the BACJ Program Director. Students whose internship is approved
  will take a 3 credit hour Criminial Justice elective in place of a 3 credit hours internship.
  Students should direct questions and concerns to their Academic Advisor. See <a href="SPA">SPA</a>
  Graduation Requirements for more information.

Other electives: \*\*

- ANTH 4090 Drug Syndemic
- CHEM 1494 Forensic Science
- COMM 4040 Communication, Prisons, and Social Justice
- COMM 4265 Gender and Communication
- COMM 4750 Legal Reasoning and Writing
- HIST 3231 Famous U.S. Trials
- HIST 4308 Crime, Policing, and Justice in American History
- ECON 3300 Economics of Crime and Punishment
- PSCI 3034 Race, Gender, Law and Public Policy
- PSCI 4124 Denver Politics
- PSCI 4185 Corruption in the U.S. and Abroad
- PSCI 4237 American National Security
- PSCI 4240 International Security
- PSCI 4280 The Politics of War Law
- PSCI 4427 Law, Politics and Justice
- PSCI 4437 Coercion and the State
- PSCI 4477 Constitutional Law I
- PSCI 4487 Constitutional Law II
- PSCI 4494 Judicial Politics
- PSCI 4545 Immigration Politics
- PSCI 4837 Contemporary Issues in Civil Liberties
- PSYC 3205 Human Development I: Child Psychology
- PSYC 3215 Human Development II: Adolescence and Adulthood
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3305 Abnormal Psychology
- PSYC 3505 Psychology and the Law
- PSYC 3610 Psychological Trauma
- PSYC 3612 Domestic Abuse
- SOCY 2462 Introduction to Social Psychology
- SOCY 3020 Race and Ethnicity in the U.S.
- SOCY 3040 Drugs, Alcohol & Society
- SOCY 3490 Criminology
- SOCY 3700 Sociology of the Family
- SOCY 4340 Juvenile Delinguency
- SOCY 4440 Poverty and Social Inequality
- SOCY 4460 Hate Groups and Group Violence
- SOCY 4700 Sociology of Law
- SOCY 4770 Advanced Topics in Sociology (Women & Crime)
- SOCY 4780 Violence in Relationships
- · See advisor for recent additions to the list
- \*\*Students must comply with departmental prerequisites.

# Criminal Justice BA, Law Enforcement Concentration

#### Introduction

Please click here to see School of Public Affairs information.

The undergraduate concentration in Law Enforcement provides a detailed, comprehensive, and advanced education in the field of law enforcement. The CJLE program is designed to meet the needs of students who wish to work in law enforcement or who are currently working in the field and would like to enrich their professional development.

The CJLE program applies a multi-faceted approach to higher education that:

Enhances analytical thinking and inclusive, relevant approaches to learning and the development of professional skills; and

Focuses on specific, yet comprehensive, substantive areas of law enforcement that students can apply to their current or future careers in the field.

Students completing the CJLE concentration will have the knowledge and skills to evaluate and respond to a variety of situations in law enforcement professions that require technical, analytic, substantive, and ethical decision-making. They will understand the different environments and contexts in which law enforcement carry out their responsibilities.

Students interested in obtaining a concentration in CJLE within the Bachelor of Arts in Criminal Justice program must apply and enroll in the BACJ program within the School of Public Affairs (SPA) and must adhere to all of the degree program requirements.

# **Program Delivery**

This is an on-campus and online program.

# **Declaring This Concentration**

Please see your advisor.

### **General Requirements**

- To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

# **Certificate Requirements**

- 1. A concentration in Law Enforcement requires 12 semester hours of course work.
- 2. No more than 6 credit hours of transfer coursework may apply to the concentration.

3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the concentration.

#### **Program Core Courses:**

CRJU 4540 - Evidence-Based Approaches in Law Enforcement

#### **Program Electives:**

There are two elective categories, Topic Area and Professional Setting. The Topic Area electives allows the student to explore a different aspect of law enforcement. The Professional Skills elective allows the student to hone skills related to law enforcement.

#### **Topic Area** (students take two of the following)

- CRJU 3310 Contemporary Issues in Law Enforcement
- CRJU 3320 Police-Community Relations
- CRJU 3520 Juvenile Justice
- CRJU 3530 Juvenile Delinquency
- CRJU 4410 Criminal Law and Constitutional Procedures
- CRJU 4430 Law and Society
- CRJU 4450 Homeland Security
- HIST 4380 Crime, Policing and History
- PSCI 4427 Law, Politics and Justice
- SOCY 4340 Juvenile Delinquency
- SOCY 4700 Sociology of Law
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable.

#### Professional Skills (students take one of the following)

- ANTH 3550 Forensic Anthropology
- CRJU 4310 Leadership Roles in Criminal Justice
- CSCI 1001 Computer Forensics I
- GEOG 4080 Introduction to GIS
- <u>CRJU 4939 Internship</u> (only for Certificate or Minor and must be related to Law Enforcement and be pre-approved)
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

# Criminal Justice BA, Victims and Victim Studies Concentration

#### Introduction

Please click here to see School of Public Affairs information.

The undergraduate concentration in Victims and Victim Studies provides a detailed, comprehensive, and advanced education in fields related to victims and victim services. The CJVS program is designed to meet the needs of students who wish to work fields related to victim services or who are currently working in this field and would like to enrich their professional development.

The CJVS program applies a multi-faceted approach to higher education that:

Enhances analytical thinking and inclusive, relevant approaches to learning and the development of professional skills; and

Focuses on specific, yet comprehensive, substantive areas of victims and victim services that students can apply to their current or future careers in the field.

Students completing the CJVS concentration program will have the knowledge and skills to evaluate, manage, and respond to a variety of situations and issues that professionals in fields related to victims and victim services face. Specifically, they will possess technical, analytic, substantive, and ethical proficiencies that will facilitate their professional interactions and development. They will understand the different environments and contexts in which victim advocates and other professionals in this field and related ones carry out their responsibilities.

Students interested in obtaining a concentration in CJVS within the Bachelor of Arts in Criminal Justice program must apply and enroll in the BACJ program within the School of Public Affairs (SPA) and must adhere to all of the degree program requirements.

# **Program Delivery**

This is an on-campus and online program.

#### **Declaring This Concentration**

Please see your advisor.

# **General Requirements**

- To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. A concentration in Victim and Victim Studies requires 12 semester hours of course work.
- 2. No more than 6 credit hours of transfer coursework may apply to the CJVS certificate.
- 3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the certificate requirements.

#### **Program Core Courses:**

- CRJU 4170 Victimology
- CRJU 3290 Capital Punishment

#### **Program Electives:**

There are two elective categories, Violence Focus and Professional Setting. The Violence Focus electives allows the student to learn about an area of violence in a more in-depth capacity. The Professional Setting elective allows the student to hone skills related to service delivery.

- CRJU 3250 Violence in Society
- CRJU 3280 Trauma Among Correctional Populations
- CRJU 4140 Domestic Violence and Crime
- ETST 2115 Genocide in the 21st Century: Darfur and Beyond
- PSCI 4807 Political Violence
- SOCY 4460 Hate Groups and Group Violence
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable

**Professional Setting** (students take one of the following)

HDFR 4090 - Helping Profession Skills in HDFR

- PUAD 4009 Human Service Organizations
- PUAD 3003 Introduction to Nonprofit Organizations
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable

# Digital Design Emphasis, Fine Arts BFA

#### Introduction

Please click here to see general Visual Arts information.

The digital design emphasis integrates aesthetic, creative and critical thought with expertise in electronic media and graphic design. Configured as an interdisciplinary arts and design laboratory, digital design offers a hands-on education combining new art technologies and design research to promote an understanding of the cultural impact and use of digital technology to solve human, social and business problems. Through this interdisciplinary approach combining arts and communication, digital design strives to produce artists and designers who will use technology in innovative ways in both commercial and artistic spheres.

# **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

- Click here to go to information about declaring a major
- Students who are applying for entrance into the digital design emphasis must submit
  a portfolio, as described below. The digital design emphasis accepts applications only
  once a year. Students who meet the requirements and are accepted will be able to
  register for upper-division digital design courses.

#### **ELIGIBILITY**

The student has completed, or is in the process of completing, the following courses with a grade of C (2.0) or better in each:

- FINE 2105 PRE-DIGD Human-Centered Design, Innovation and Prototyping
- FINE 2405 Introduction to Digital Design

#### • FINE 2415 - Typography Studio

FINE 2405 and 2415 are both offered in the fall at CU Denver.

#### PORTFOLIO APPLICATION REQUIREMENTS

To properly prepare the application, refer to the digital design website for detailed instructions. Applications are due by **November 1 at 5:00pm (Mountain Time)** or on the following business day if the deadline falls on a weekend or holiday.

Applications are only accepted online via the Canvas course portal and must be formatted to the specifications listed on the <u>digital design website</u>. The portfolio samples should consist of images and video links. Written work should be integrated into the submission. It is VERY important for students to visit the submission page early and begin uploads two weeks before the due date. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

#### **Application Portfolio**

Your portfolio must include a <u>Design Project</u> and 5 additional examples of your work. The Design Project asks for multiple images and writing, these do not count towards your 5 examples of your work. Details about choosing those 5 images are below.

Your complete application must be comprised of the following:

Follow all instructions to complete the <u>Design Project</u>. Writing is important, make sure that you include the required written elements of the design project (no more than 400 to 500 words in length). Your writing should demonstrate your critical thinking skills regarding your work, process, design choices and your ability to address the assignment in a notable way. Refer to the <u>Digital Design Portfolio Rubric</u> on the <u>Evaluation Process</u> page for requirements, guidance, and criteria.

1 project or exercise from FINE 2405 Introduction to Digital Design (or equivalent for a transfer student). Label the image with the project/exercise name and class.

2 projects or exercises from FINE 2415 Typography (or equivalent for transfer students). Label the image with the project/exercise name and class.

2 additional creative works. They can be your original design, drawing, sculpture, photography, installation, painting, video (no longer than 2 minutes in length), freelance design work or additional projects/exercises from design or other courses. All pieces will need to be in digital format.

#### **Portfolio Submission**

Current CU Denver students must submit their portfolio application through the <u>Canvas course</u>. Transfer students will submit by emailing a multipage PDF to Bryan Leister,

at <u>bryan.leister@ucdenver.edu</u> by the <u>Application Deadline</u>. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

For more portfolio information, please contact <u>CAM@ucdenver.edu</u>, Visual Arts Chair, Michelle Carpenter at <u>michelle.carpenter@ucdenver.edu</u> or Associate Chair, Bryan Leister at bryan.leister@ucdenver.edu

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- <u>CU Denver Core Curriculum</u>
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by Department of Visual Arts faculty.
- 3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
- 4. At least 24 semester hours of total visual arts courses must be upper-division.

Take all of the following Pre-Portfolio courses:

- FINE 2105 PRE-DIGD Human-Centered Design, Innovation and Prototyping
- FINE 2405 Introduction to Digital Design
- FINE 2415 Typography Studio

Take **all** of the following Digital Design Emphasis courses (available only to students accepted to emphasis via portfolio review):

- FINE 3414 Motion Design I
- FINE 3415 Design Studio I
- FINE 34— Typography II
- FINE 3424 Interactive Media
- FINE 3434 3D Motion Design
- FINE 3444 Interactive Media II
- FINE 3454 Motion Design II
- FINE 3464 Design Studio II

- FINE 4400 Design Studio III
- FINE 4480 Design Thesis Research
- FINE 4495 Design Studio IV: Thesis

Take **all** of the following Visual Arts courses:

- FINE 1100 Drawing I
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II
- FINE 4600 History of Modern Design:Industrial Revolution-Present

Take **three** semester hours of Pre-20th Century Art History elective.

Take **six** semester hours of Studio Arts electives.

Take **nine** semester hours of Visual Arts/IWKS electives. These may include studio, lecture, internship, or art history courses and up to one IWKS course (must be a course other than <a href="IWKS 2100">IWKS 2100</a> - Human-Centered Design, Innovation and Prototyping).

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# **Economics BA**

#### Introduction

Please click here to see Economics department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to

consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 40 ECON credit hours.
- Students must complete a minimum of 18 upper division (3000-level and above) ECON credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 33 ECON credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

- 1. A minimum of 12 of the 18 upper division credit hours required must be completed with 4000 level and above courses.
- One D- in one ECON elective is allowed.
- 3. Only courses taken at CU Denver will apply in the GPA calculation.
- 4. All courses other than ECON 2012 and ECON 2022 require written department approval to be transferred in as satisfying major requirements.
- 5. Any courses taken in Economics may satisfy the elective requirement, other than internships and independent studies which require the approval of the department chair.
- 6. (MATH 2411 Calculus II or MATH 2421 Calculus III with a grade of B or higher will satisfy the ECON 3801 requirement. If a student completes ECON 3801, and then subsequently or concurrently completes before completing MATH 2411, with a grade of B or higher, ECON 3801 will be counted as an Economics 3000-level elective but will not

be used as an elective for evaluation of Honors. However, if a student has already completed MATH 2411 with a B or better, then ECON 3801 taken subsequently cannot be counted as an elective.)

Take **all** of the following required courses:

- ECON 2012 Principles of Economics: Macroeconomics
- ECON 2022 Principles of Economics: Microeconomics
- ECON 3801 Introduction to Mathematical Economics (See restrictions above)
- ECON 3811 Statistics with Computer Applications
- ECON 4071 Intermediate Microeconomic Theory
- ECON 4081 Intermediate Macroeconomic Theory
- ECON 4811 Introduction to Econometrics

Take **six** three-credit hour courses in economics; **four** of them must be at the 4000-level. Any courses taken in Economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

# Education and Human Development, Early Childhood Education BA -Licensure Track

#### Introduction

Please click here to see School of Education & Human Development information.

The Early Childhood Education (ECE) track in the Education and Human Development major has a strong focus on engaging Colorado's rapidly diversifying student and family population. It combines cutting-edge research with real classroom experiences. You'll learn with innovative faculty members who are locally and nationally recognized for their research in early childhood education. They will provide you with a robust knowledge base and relevant learning experiences in children's thinking, culturally responsive education, supporting dual language learners, inclusive and engaging classroom and curricular design and assessment and documentation of young children's learning. At the same time, you will benefit from strong school and community partnerships that are unmatched in the state. All ECE track students have the opportunity to take all required courses to fulfill the State of Colorado's Director qualifications and become leaders in the field of early learning.

The ECE track has two options: Licensure and Non-licensure.

#### Licensure track

Students who select the 126 credit hour licensure track fulfill all requirements for a license to teach children Birth-Age 8 in Colorado's school districts and community-based early childhood centers. This track prepares students to become teachers of children up through third grade. Field-based experiences take place in the School of Education's Professional Development network of partner schools.

## **Program Delivery**

• This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

#### **Declaring This Major**

Click here to go to information about declaring a major

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum total of 126 semester hours for the EDHD Early Childhood Education Track.
- 2. Students must pass the appropriate Praxis Exam prior to beginning their final semester of their Professional Year. It is recommended students complete the exam in the year prior to their Professional Year.
- 3. Application to the last year of the program, the Professional Year, is required. After successfully completing all other Core, major, and elective courses, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)
- 4. A minimum GPA of 2.0, grade of C or better, is required for all major courses applying to EDHD Early Childhood Education requirements unless otherwise specified.
- 5. Students must complete and maintain a 3.0 minimum grade point average in Professional Year coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
- 6. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **all** of the following Education and Human Development - Early Childhood Education (licensure track) major courses, a grade of C or better is required:

Note: courses marked with an asterisk require a grade of B- or better

- CLDE 2000 Foundations of Culturally & Linguistically Diverse Education
- ECED 4650 Dual Language Learners Learning and Development
- ECED 4060 Working with Families, Professionals, and Communities
- EDFN 1000 Equality, Rights & Education
- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education \*
- HDFR 2110 Child Ecology or HDFR 3050 Children's Thinking and Assessment
- INTE 2000 Digital Teaching and Learning
- LCRT 3720 Introduction to Writing Development and Teaching
- LCRT 4710 Primary Literacy for Diverse Learners: Pre K-3rd Grade
- MTED 3040 Mathematics for Elementary Teachers \*
- ECED 2000 Early Childhood Education as a Profession
- ECED 4030 Nutrition, Health, and Safety
- ECED 4102 Developmentally Appropriate Curriculum Methods and Techniques
- ECED 4040 Administrative Seminar
- ECED 4070 Development and Education of Infant and Toddlers
- ECED 4200 Assessment for Early Childhood Classrooms
- ECED 4202 Child Guidance and Classroom Community
- EDHD 1930 Community Based Field Experience & Seminar \*
- ECED 2930 Infant & Toddler Field Experience & Seminar \*
- EDHD 2930 Learning & Development Field Experience & Seminar \*

Take **all** of the following Professional Year courses (a grade of B- or better is required in each course):

- ECED 4300 Exceptional Learners in the Early Childhood Classroom or SPED 4030 Understanding (dis)Ability in Contemporary Classrooms
- LCRT 4000 Elementary Literacy Instruction and Assessment Part 1
- ECED 4010 Inquiry and the Disciplines
- ECED 4020 Science for P-2 Classrooms or

SCED 4004 - Elementary Science Teaching

- MTED 4002 Elementary Mathematics Teaching I
- ECED 4931 Internship I & Collaborative Learning Community
- ECED 4932 Internship II & Collaborative Learning Community
- ECED 4933 Internship III & Collaborative Learning Community (taken for a total of 6 credits)
- ECED 4050 Early Childhood Education Capstone: Planning, Instruction & Assessment
   or

UEDU 4050 - Elementary Capstone: Planning, Instruction & Assessment

Additional General Electives hours may be needed to reach the required 126 hours for the BA.

#### Non-Licensure track

A 120 credit hour track is ideal for students who currently and/or intend to work in community-based early childhood environments that serve children from infancy-age five years is also available.

# Education and Human Development, Early Childhood Education BA - Non-Licensure Track

#### Introduction

Please click here to see School of Education & Human Development information.

The Early Childhood Education (ECE) track in the Education and Human Development major has a strong focus on engaging Colorado's rapidly diversifying student and family population. It combines cutting-edge research with real classroom experiences. You'll learn with innovative faculty members who are locally and nationally recognized for their research in early childhood education. They will provide you with a robust knowledge base and relevant learning experiences in children's thinking, culturally responsive education, supporting dual language learners, inclusive and engaging classroom and curricular design and assessment and documentation of young children's learning. At the same time, you will benefit from strong school and community partnerships that are unmatched in the state.

#### Non-Licensure track

This 120 credit hour track is ideal for students who currently and/or intend to work in community-based early childhood environments that serve children from infancy-age five years. Courses include field-based experiences that can take place in settings where students currently work.

#### **Program Delivery**

• This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

#### **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a total of 120 semester hours for the EDHD Early Childhood Education Non-Licensure Track
- 2. A minimum GPA of 2.0, grade of C or better, is required for all courses applying to EDHD Early Childhood non-licensure requirements unless otherwise specified.
- 3. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **all** of the following courses:

- ECED 2000 Early Childhood Education as a Profession
- ECED 4030 Nutrition, Health, and Safety
- ECED 4040 Administrative Seminar
- ECED 4060 Working with Families, Professionals, and Communities
- ECED 4102 Developmentally Appropriate Curriculum Methods and Techniques
- ECED 4202 Child Guidance and Classroom Community
- ECED 4300 Exceptional Learners in the Early Childhood Classroom or

#### SPED 4030 - Understanding Disability

- ECED 4650 Dual Language Learners Learning and Development
- ECED 4010 Inquiry and the Disciplines
- ECED 4070 Development and Education of Infant and Toddlers
- ECED 4200 Assessment for Early Childhood Classrooms
- EDFN 1000 Equality, Rights & Education
- INTE 2000 Digital Teaching and Learning
- HDFR 2110 Child Ecology or
- HDFR 3050 Children's Thinking and Assessment
- CLDE 2000 CLDE Foundations
- MTED 3040 Mathematics for Elementary Teachers
- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education
- LCRT 4710 Primary Literacy for Diverse Learners: Pre K-3rd Grade
- EDHD 1930 Community Based Field Experience & Seminar
- EDHD 2930 Learning & Development Field Experience & Seminar
- ECED 2930 Infant & Toddler Field Experience & Seminar
- <u>ECED 4933 Internship III & Collaborative Learning Community</u> (taken twice for a total of 8 credits total)

Take **two** of the following courses:

- HDFR 3020 Black and Latino Children in Families and Schools
- HDFR 4001 Families and Parenting
- HDFR 4010 Family and Cultural Diversity
- HDFR 4040 Latino Families in School and Communities
- HDFR 4260 Family Systems and Social Justice

Additional General Electives hours may be needed to reach the required 120 hours for the BA.

An ECE Licensure track is also available for students interested in fulfilling the State of Colorado's ECE licensure requirements.

Students who select the 126 credit hour licensure track fulfill all requirements for a license to teach children Birth-Age 8 in Colorado's school districts and community-based early childhood centers. This track prepares students to become teachers of children up through third grade. Field-based experiences take place in the School of Education's Professional Development network of partner schools. Please see Early Childhood Education BA - Licensure Track for more information.

# Education and Human Development, Elementary Education BA - Rural Partnership with Otero Junior College

#### Introduction

Please click <u>here</u> to see School of Education & Human Development information.

The Education and Human Development major focuses on engaging Colorado's rapidly diversifying student and family population. It combines cutting-edge research with real classroom experiences. You'll learn from innovative faculty members who are locally, nationally and internationally recognized for their research in elementary education. They will provide you with a robust knowledge base and relevant learning experiences in children's thinking, culturally responsive education, and supporting English language learners, as well as technology as it relates to teaching children in grades kindergarten through sixth grade. You'll engage in powerful classroom experiences and benefit from our rich 20-year history of partnerships with local school districts.

We will prepare you to become a highly effective, innovative and compassionate elementary teacher skilled in improving student performance and reaching the needs of today's diverse learners in a variety of school settings. You will have the skills to be a teacher leader. CU Denver graduates often go on to acquire positions in educational leadership as their careers progress.

This program is a rural partnership with Otero Junior College (OJC) in La Junta, Colorado. Students complete the first two years of the program at OJC to complete an Associate of Arts degree and then transfer to CU Denver to complete their final two years to complete the BA - EDHD Elementary Education degree. During the final two years, students complete CU Denver coursework remotely from La Junta and are not required to travel to Denver. Advising is provided during all four years of the program, whether students are OJC or CU Denver students. Coursework is delivered in a variety of ways, including online, video conferencing, in-person in La Junta, and fieldwork in rural Colorado in and around La Junta.

#### **Program Delivery**

• This is an on-campus program in La Junta with a variety of delivery options for many of our courses including hybrid, evening, weekend, and online courses.

# **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum total of 126 semester hours for the EDHD Elementary Education Track.
- 2. Students must pass the appropriate Praxis Exam prior to beginning their final semester of their Professional Year. It is recommended students complete the exam in the year prior to their Professional Year.
- 3. Application to the last year of the program, the Professional Year Residency is required. After successfully completing all other Core, major, and elective courses, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)
- 4. A minimum GPA of 2.0, grade of C or better, is required for all courses applying to EDHD Elementary Education requirements unless otherwise specified.
- 5. Students must complete and maintain a 3.0 minimum grade point average in Professional Year coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
- 6. Transfer courses must be approved by faculty and/or advisor to apply to the major.
- Students will receive transfer credit for **all** of the following major requirements:

Note: Courses marked with an asterisk require a grade of B- or better; all other courses require a grade of C or better. Students who do not have a B- or better in the specified

courses must consult with their advisors about a plan to retake the course or complete additional work.

- EDHD 1930 Community Based Field Experience & Seminar \*
- HDFR 2110 Child Ecology
- EDFN 1000 Equality, Rights & Education
- INTE 2000 Digital Teaching and Learning
- SPED 4030 Understanding (dis)Ability in Contemporary Classrooms \*

Take **all** of the following Education and Human Development - Elementary Education major courses:

Note: courses marked with an asterisk require a grade of B- or better; all other courses require a grade of C or better.

- EDHD 2930 Learning & Development Field Experience & Seminar (2 credits)
- LCRT 3720 Introduction to Writing Development and Teaching
- LCRT 4710 Primary Literacy for Diverse Learners: Pre K-3rd Grade
- CLDE 2000 CLDE Foundations
- EDHD 3930 Diverse Learners Field Experience & Seminar \*
- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education \*
- CLDE 3830 Culturally and Linguistically Responsive Teaching through STEM
- SPED 4300 Family, Professional, and Community Collaboration
- CLDE 4020 Responsive Classroom Communities \*
- MTED 3040 Mathematics for Elementary Teachers \*
- SPED 4400 Universal Design for Learning (UDL)

Take **all** of the following Professional Year courses (a minimum grade of B- is required in each course):

- LCRT 4000 Elementary Literacy Instruction and Assessment Part 1
- LCRT 4001 Elementary Literacy Instruction and Assessment Part 2
- MTED 4002 Elementary Mathematics Teaching I
- MTED 4003 Elementary Mathematics Teaching II
- SCED 4004 Elementary Science Teaching
- <u>UEDU 4040 Planning for Learning</u>
- UEDU 4050 Elementary Capstone: Planning, Instruction & Assessment
- UEDU 4931 Internship & Lrng Comm I
- UEDU 4932 Internship & Lrng Comm II

# Education and Human Development, Elementary Education BA with CLDE Added Endorsement

#### Introduction

Please click <u>here</u> to see School of Education & Human Development information.

The Education and Human Development major focuses on engaging Colorado's rapidly diversifying student and family population. It combines cutting-edge research with real classroom experiences. You'll learn from innovative faculty members who are locally, nationally and internationally recognized for their research in elementary education. They will provide you with a robust knowledge base and relevant learning experiences in children's thinking, culturally responsive education, and supporting English language learners, as well as technology as it relates to teaching children in grades kindergarten through sixth grade. You'll engage in powerful classroom experiences and benefit from our rich 20-year history of partnerships with local school districts.

We will prepare you to become a highly effective, innovative and compassionate elementary teacher skilled in improving student performance and reaching the needs of today's diverse learners in a variety of school settings. You will have the skills to be a teacher leader. CU Denver graduates often go on to acquire positions in educational leadership as their careers progress.

A unique feature of this pathway is that you will be able to add a Culturally Linguistically Diverse Education, CLDE, endorsement to your credentials. Essentially, you will leave this program with both the Elementary Education License and CLDE Endorsement. This means you are prepared to teach K-6 and culturally & linguistically diverse students, making you highly employable and desirable to schools!

#### **Program Delivery**

• This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend, and online courses.

# **Declaring This Major**

Click here to go to information about declaring a major

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum total of 126 semester hours for the EDHD Elementary Education Track.
- Students must pass the appropriate Praxis Exam prior to beginning their final semester of their Professional Year. It is recommended students complete the exam in the year prior to their Professional Year.
- 3. Application to the last year of the program, the Professional Year Residency is required. After successfully completing all other Core, major, and elective courses, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)
- 4. A minimum GPA of 2.0, grade of C or better, is required for all major courses applying to EDHD Elementary Education requirements unless otherwise specified.
- 5. Students must complete and maintain a 3.0 minimum grade point average in Professional Year coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
- 6. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **all** of the following Education and Human Development - Elementary Education major courses:

Note: courses marked with and asterisk require a grade of B- or better; all other courses require a grade of C or better.

- CLDE 2000 CLDE Foundations
- CLDE 3680 Spanish for Educators
- CLDE 3830 Culturally and Linguistically Responsive Teaching through STEM
- CLDE 4020 Responsive Classroom Communities \*
- CLDE 4700 Social Studies for Multilingual Learners
- EDFN 1000 Equality, Rights & Education
- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education \*

- HDFR 2110 Child Ecology or HDFR 3050 Children's Thinking and Assessment
- INTE 2000 Digital Teaching and Learning
- LCRT 3720 Introduction to Writing Development and Teaching
- LCRT 4710 Primary Literacy for Diverse Learners: Pre K-3rd Grade
- MTED 3040 Mathematics for Elementary Teachers \*
- SPED 4030 Understanding (dis)Ability in Contemporary Classrooms \*
- SPED 4300 Family, Professional, and Community Collaboration
- SPED 4400 Universal Design for Learning (UDL)
- EDHD 1930 Community Based Field Experience & Seminar \*
- EDHD 2930 Learning & Development Field Experience & Seminar \*
- EDHD 3930 Diverse Learners Field Experience & Seminar \*

Take **all** of the following Professional Year courses (a minimum grade of B- is required in each course):

- LCRT 4000 Elementary Literacy Instruction and Assessment Part 1
- LCRT 4001 Elementary Literacy Instruction and Assessment Part 2
- MTED 4002 Elementary Mathematics Teaching I
- MTED 4003 Elementary Mathematics Teaching II
- SCED 4004 Elementary Science Teaching
- UEDU 4040 Planning for Learning
- UEDU 4050 Elementary Capstone: Planning, Instruction & Assessment
- UEDU 4931 Internship & Lrng Comm I
- UEDU 4932 Internship & Lrng Comm II
- UEDU 4933 Internship & Lrng Comm III

Embedded into the program is the coursework for a added endorsement in CLDE. In order to earn the LCDE endorsement, students must complete each of the courses below with a minimum grade of B-, as well as assemble a CLDE portolio.

- CLDE 2000 Foundations of CLDE
- o CLDE 3680 Spanish for Elementary Educators
- o CLDE 3830 Culturally and Linguistically Responsive Teaching in STEM
- o CLDE 4700 Social Studies for Multilingual Learners
- o EDHD 2930 Learning and Development Field Experience and Seminar
- o LCRT 4710 Primary Literacy for Diverse Learners: Pre K-3rd Grade
- o CLDE 4020 Reponsive Classroom Communities
- LCRT 4000 Elementary Literacy Instruction and Assessment Part 1
- o LCRT 4001 Elementary Literacy Instruction and Assessment Part 2

Additional General Electives hours may be needed to reach the required 126 hours for the BA

# Education and Human Development, Special Education BA with Elementary Education Endorsement

#### Introduction

Please click here to see School of Education & Human Development information.

The need for highly qualified, culturally and linguistically responsive special education teachers is on the rise in Colorado and the nation. According to the United States Bureau of Labor Statistics, it is estimated that nearly 280,000 special education teaching positions will need to be filled over the next decade (2016). The Special Education track of CU Denver's bachelor's degree in Education and Human Development prepares students to step into these roles and address the exceptional learning needs of individuals ages five to 21.

The Special Education program combines cutting-edge research with real classroom experiences. You will learn from faculty who are locally, nationally and internationally recognized for their research and innovation. They will provide you with critical knowledge and interventions to teach students with exceptional learning needs. You will be able to apply your new knowledge through frequent, powerful hands-on classroom experiences, and benefit from the advantage of our rich 20-year history of school and community partnerships.

The program is designed to enhance your ability to effectively support diverse, urban students with disabilities in K-12 public schools and alternative settings. Faculty members will foster your growth as a teacher and educational leader who promotes inclusion and equity for all. This program strives to help you:

- Gain a holistic understanding of special education
- · Collaborate with schools and communities
- Engage in culturally and linguistically responsive teaching and leadership\

A unique feature of this pathway is that you will be able to add the Colorado Department of Education's elementary endorsement to your credentials. Essentially, you'll leave this program with both the Special Education License **and** Elementary Education Endorsement through the Colorado Department of Education. This means you are prepared to teach Special Education AND K-6, making you highly employable and desirable to schools!

# **Program Delivery**

• This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

# **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn this 126 credit hour BA, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements. Students should declare their intent to pursue this degree as early as possible to avoid taking classes that not count toward their degree.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 126 semester hours for the Education and Human Development, EDHD, BA Special Education Track
- 2. Students must take the appropriate Praxis Test during their Junior year to complete licensure requirements.
- 3. An application process is required to continue into your last year/Professional Year. After successfully completing the first 3 years of the program, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)
- 4. A minimum GPA of 2.0, grade of C or better, is required for all major courses applying to EDHD BA Special Education.
- 5. Students must complete and maintain a 3.0 minimum grade point average in Professional Year coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
- 6. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **all** of the following EDHD - BA Special Education major courses, a grade of C or better is required:

Note: Courses with an asterisk require a grade of B- or better

- CLDE 4020 Responsive Classroom Communities \*
- EDFN 1000 Equality, Rights & Education
- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education \*
- HDFR 2110 Child Ecology or HDFR 3050 Children's Thinking and Assessment
- INTE 2000 Digital Teaching and Learning
- LCRT 3720 Introduction to Writing Development and Teaching
- LCRT 4710 Primary Literacy for Diverse Learners: Pre K-3rd Grade
- MTED 3040 Mathematics for Elementary Teachers\*
- SPED 4030 Understanding (dis)Ability in Contemporary Classrooms \*
- EDHD 1930 Community Based Field Experience & Seminar \*
- EDHD 2930 Learning & Development Field Experience & Seminar \*
- EDHD 3930 Diverse Learners Field Experience & Seminar \*
- SPED 4151 Slashing Stigmas: Promoting Positive Behaviors
- SPED 4300 Family, Professional, and Community Collaboration
- SPED 4400 Universal Design for Learning (UDL)
- SPED 4740 Intersections of Literacy, Culture, & Exceptionality or
- CLDE 3830 Culturally and Linguistically Responsive Teaching through STEM
- SPED 4780 Literacy Intervention for Exceptional Learners

Take **all** of the following Professional Year courses (a grade of B- or better is required in each course):

- LCRT 4000 Elementary Literacy Instruction and Assessment Part 1
- MTED 4002 Elementary Mathematics Teaching I
- MTED 4003 Elementary Mathematics Teaching II
- SPED 4010 Intentional Interventions for Exceptional Learners
- SPED 4140 Assessment: Inquiry, Instruction, & Intervention
- SPED 4500 Transition and Secondary Methods in Special Education
- UEDU 4040 Planning for Learning
- SPED 4931 Internship & Learning Community I
- SPED 4932 Internship & Learning Community II
- SPED 4933 Internship & Learning Community III

Additional General Electives hours may be needed to reach the required 126 hours for the EDHD - BA Special Education.

# **Electrical Engineering BS**

#### Introduction

Please click here to see Electrical Engineering department information.

#### **Program Objectives**

The educational objectives of the electrical engineering undergraduate program are to produce graduates who, within a few years of graduation, will:

- Demonstrate professional advancement as productive practicing engineers who continuously develop their technical expertise, as demanded by the rapidly changing technologies.
- Attain enhanced and broadened knowledge via graduate education in either engineering or other fields such as science, mathematics, business, medicine, and law.

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering, Design and Computing and reflective of the mission of the Department of Electrical Engineering.

#### **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Engineering, Design and Computing Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout.
- 2. A graduation agreement should be requested by each student before completing registration for his/her last semester.

- 3. All electrical engineering students must satisfactorily complete ELEC 4309, Senior Design Project I, and ELEC 4319, Senior Design Project II, in consecutive semesters.
- Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
- 5. Students must maintain a minimum 2.0 GPA in all ELEC courses attempted.

Take **all** of the following Electrical Engineering courses:

- ELEC 1201 Introduction to Electrical Engineering
- ELEC 1510 Logic Design
- ELEC 1520 Embedded Systems Engineering I
- ELEC 2132 Circuit Analysis I
- ELEC 2142 Circuit Analysis II
- ELEC 2520 Embedded Systems Engineering 2
- ELEC 2531 Logic Laboratory
- ELEC 2552 Sophomore Circuits Laboratory
- ELEC 3133 Electromagnetic Fields
- ELEC 3164 Energy Conversion
- ELEC 3215 Electronics I
- ELEC 3225 Electronics II
- ELEC 3316 Linear Systems Theory
- ELEC 3651 Digital Hardware Design
- ELEC 3715 Electronics Laboratory
- ELEC 3724 Energy Conversion Laboratory
- ELEC 3735 Junior Laboratory
- ELEC 3817 Engineering Probability and Statistics
- ELEC 4309 Senior Design Project I
- ELEC 4319 Senior Design Project II
- Note: Effective Spring 2020: Senior Design I will be offered only during fall semesters;
   Senior Design II will be offered only during spring semesters.
- ENGR 3400 Technology and Culture

Take **two** Professional Elective courses. Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.

Take **one** of the following Engineering Science Elective courses:

- MECH 3012 Thermodynamics
- ELEC 4678 Quantum Electronics

Take **seventeen** semester hours from the following lists. At least **two** laboratories with an associated lecture course must be completed.

#### Control Systems

- ELEC 4136 Control Systems Analysis
- ELEC 4276 Digital Control Systems
- ELEC 4406 Control Systems Laboratory
- ELEC 4466 Adaptive Control System Design

#### Micro-electronics and VLSI

- ELEC 4005 IC Design
- ELEC 4025 Device Electronics
- ELEC 4225 Advanced Electronics
- ELEC 4435 Advanced Electronics Laboratory
- ELEC 4555 VLSI Circuit Simulation

#### Communications

- ELEC 4247 Communication Theory
- ELEC 4248 Digital Communication Systems

#### Fields, Waves and Optics

- <u>ELEC 4133 Advanced Electromagnetic Fields</u>
- ELEC 4134 Introduction to Microwave Circuit Design
- ELEC 4333 Introduction to Computational Electromagnetics
- ELEC 4373 Optical Engineering
- ELEC 4423 Radio Frequency Laboratory
- ELEC 4678 Quantum Electronics

#### Computer Engineering and Embedded System Design

- ELEC 4501 Microprocessor Based Design
- ELEC 4511 Hardware-Software Interface
- ELEC 4521 Microprocessor Laboratory
- ELEC 4561 Hardware-Software Lab
- ELEC 4723 High Performance Computer Architecture

#### Energy and Power Systems

- ELEC 4164 Electric Drive Systems
- <u>ELEC 4170 Electric Drive Systems Laboratory</u>
- ELEC 4174 Power Electronic Systems
- ELEC 4184 Power Systems Analysis
- ELEC 4444 Power Systems Laboratory
- ELEC 4474 Power Electronics Laboratory

#### Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3195 Linear Algebra and Differential Equations or
- MATH 3191 Applied Linear Algebra and
- MATH 3200 Elementary Differential Equations

#### Take **all** of the following Science courses:

- ENGR 1130 Chemistry for Engineers
- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II (optional)

# English Writing, Rhetoric, and Technology BA

#### Introduction

Please click here to see English department information.

The English Writing, Rhetoric and Technology major asks students to take one of two introductory courses, a multi-media course (two course options), a language theory/sociolinguistics course, and two advanced topics courses (with a range of options). The remainder of the degree is seven courses chosen from a long list, which can include two courses outside the English Writing focus (such as creative writing workshops, film courses, or courses in related majors). For all the details, please review the advising sheets for the English

Writing, Rhetoric and Technology. Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

• This is an on-campus and online program. You can take the English Writing, Rhetoic and Technology Major fully online or fully on-campus. Most of our students, however, end up taking a mix of online and on-campus courses in order to juggle changing work schedules and busy lives. You can decide what's best for you.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 36 ENGL credit hours.
- 2. Students must complete a minimum of 30 upper division (3000-level and above) ENGL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 upper division (3000-level and above) credits hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

ENGL 1010, 1020 and 2030 do not count toward the major, nor does CLEP or AP credit.

- 2. Students may not count more than 56 credit hours of ENGL credit toward the major; double majors in English Writing and English are exempt and are required to complete 63 credits of ENGL credit hours.
- A maximum of 6 credit hours of Internship/cooperative education courses may be counted toward the major for students who have completed 60 or more credits. Internships count as upper division level electives.
- 4. Courses may not be used more than once between the Required Course Areas and electives. The exception is English 4190. Two 4190s are required in the Required Course Areas, and one additional 4190 can count below as an Elective Courses. A maximum of three 4190s may count, in total and all must have different topics in order to count.
- 5. Courses toward the major may not be counted toward an English minor (Literature, Writing, Creative Writing or Film Studies).
- 6. At least 15 upper division level ENGL credit hours must be taken with CU Denver faculty.

Take **one** of the following courses:

- ENGL 2060 Introduction to Writing & Digital Studies
- ENGL 2070 Grammar, Rhetoric and Style

Take **one** the following Multimedia courses:

- ENGL 3084 Multimedia Composition
- ENGL 4701 Multimedia in the Community

Take **one** of the following Language Study courses:

- ENGL 3160 Language Theory
- ENGL 4601 Principles and Practices of Second Language Acquisition
- ENGL 4651 Second Language Writing

Take **both** of the following Advanced Writing Experience courses (must be with different topics):

- ENGL 4190 Advanced Topics in Writing & Digital Studies
- ENGL 4190 Advanced Topics in Writing & Digital Studies

Take **21 hours** (seven courses) of Elective Courses in Writing, Rhetoric, and Digital Studies:

\*\*A course does not count here and in the Required Course Areas above. The exception is English 4190. Two 4190s are required in the above section (A: Required Course Areas), and one additional 4190 can count below (in B: Elective Courses), if elected. (A maximum of three 4190s, in total.)

- ENGL 2060 Introduction to Writing & Digital Studies
- ENGL 2070 Grammar, Rhetoric and Style
- ENGL 3084 Multimedia Composition
- ENGL 3154 Technical Writing
- ENGL 3160 Language Theory
- ENGL 3170 Business Writing
- ENGL 3405 Topics in Writing
- ENGL 3416 Magazine Writing
- ENGL 3939 Internship
- ENGL 4175 Writing in the Sciences
- ENGL 4180 Argumentation and Logic
- ENGL 4190 Advanced Topics in Writing & Digital Studies
- ENGL 4280 Proposal and Grant Writing
- ENGL 4601 Principles and Practices of Second Language Acquisition
- ENGL 4651 Second Language Writing
- ENGL 4740 Honors in Writing
- ENGL 4995 Senior Writing Project
- Up to two courses that are either 3000- or 4000-level courses in the English Department (such as creative writing workshops, film courses, or literature courses), or up to two writing courses in other departments (prior approval from an advisor required for courses outside of English).

# **English, Creative Writing Option BA**

#### Introduction

Please click here to see English department information.

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing and to produce it. Students who complete the program in English are expected to have mastered the ability to express their ideas in creative work.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major
- Students planning to major in English must consult with an advisor as soon as possible.
- Students may choose only one of the three options in the English major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 39 ENGL credit hours.
- 2. Students must complete a minimum of 27 upper division (3000-level and above) ENGL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

- 1. ENGL 1010, 1020 and 2030 do not apply to the major.
- 2. Internship/cooperative education courses may be counted toward the major for students who have junior standing or higher.
- 3. Students are not to exceed 56 English credit hours (any level).
- 4. Double majors in English and English Writing are exempt from the 56-hour rule and must complete 63 hours total for both majors.
- 5. The English Department also offers a minor in Literature, Writing, Creative Writing and Film Studies. Courses counted in a minor cannot be counted toward the major.
- At least 15 upper division level ENGL credit hours must be taken with CU Denver faculty.
- 7. Latin Honors may be earned by participating in the Department's Honors Program. You are encouraged to begin the program in your junior year. The program requires

additional coursework and affords you the opportunity to work individually with the professor of your choice. Handouts are available in the English office.

#### Take the following **required** course:

ENGL 2450 - Introduction to Literature

Complete the following **poetry or fiction** section:

#### **Poetry Track**

Take all of the following courses:

- ENGL 3020 Poetry Workshop
- ENGL 3050 Fiction Workshop
- ENGL 4025 Advanced Poetry Workshop
- ENGL 4160 Poetics
- ENGL 4820 Senior Poetry Workshop

#### Take **one** of the following courses:

- ENGL 4080 History of English Language
- ENGL 4166 History of American Poetry
- ENGL 4320 History of Poetry in English
- ENGL 4800 Special Topics in Creative Writing (emphasis in poetry)

#### **Fiction Track**

Take **all** of the following courses:

- ENGL 3020 Poetry Workshop
- ENGL 3050 Fiction Workshop
- ENGL 4055 Advanced Fiction Workshop
- ENGL 4610 Narrative: Form and Theory
- ENGL 4850 Senior Fiction Workshop

#### Take **one** of the following courses:

- ENGL 4200 Survey of the English Novel to 1900
- ENGL 4230 The American Novel

- ENGL 4236 The American Short Story
- ENGL 4800 Special Topics in Creative Writing (emphasis in fiction)

#### **Electives**

Take **six** upper-division English electives. Any 3000 or 4000 level course will count unless previously taken. These courses must not repeat. The courses below indicate those especially recommended.

- \* ENGL 3001 Critical Writing
- \* ENGL 3106 Writing for Print Media
- \* ENGL 3416 Magazine Writing
- \* ENGL 4800 Special Topics in Creative Writing
- \* ENGL 4810 Literary Editing Practicum

# **English, Film Studies Option BA**

#### Introduction

Please click here to see English department information.

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major
- Students planning to major in English must consult with an advisor as soon as possible.
- Students may choose only one of the three options in the English major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 39 ENGL credit hours.
- 2. Students must complete a minimum of 27 upper division (3000-level and above) ENGL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. ENGL 1010, 1020 and 2030 are not included in the major.
- 2. Internship/cooperative education courses may be counted toward the major for students who have junior standing or higher.
- 3. Students are not to exceed 56 English credit hours (any level).
- 4. Double majors in English and English Writing are exempt from the 56-hour rule and must complete 63 hours total for both majors.
- 5. Production courses must be taken through the College of Arts & Media (CAM). Equivalent screenwriting courses may also be taken through CAM.
- 6. Courses marked by an asterisk are repeatable if taken as a different genre/director/topic.
- 7. The English Department also offers a minor in Literature, Writing, Creative Writing and Film Studies. Courses counted in a minor cannot be counted toward the major.
- 8. At least 15 upper division level ENGL credit hours must be taken with CU Denver faculty.
- 9. Latin Honors may be earned by participating in the Department's Honors Program. You are encouraged to begin the program in your junior year. The program requires additional coursework and affords you the opportunity to work individually with the professor of your choice. Handouts are available in the English office.

Take all of the following courses:

- ENGL 2250 Introduction to Film
- ENGL 3200 From Literature to Film

- ENGL 3070 Film History
- ENGL 3080 Global Cinema
- ENGL 4420 Film Theory and Criticism
- (note: students should complete 3070 or 3080 prior to enrolling in 4420)

#### Take **eight** of the following courses:

\*Students may take courses in all areas. \*Repeatable if a different genre/director/topic.

#### -Critical Studies-

- ENGL 1601 Storytelling: Literature, Film, and Television
- ENGL 2450 Introduction to Literature
- ENGL 3001 Critical Writing
- ENGL 3075 Film Genres \*
- ENGL 3085 Film Directors \*
- ENGL 3300 Topics in Film \*
- ENGL 4190 Advanced Topics in Writing & Digital Studies \*
- ENGL 4770 Topics in English: Film and Literature \*
- ENGL 4990 Senior Writing Project in Creative Writing or Film Studies
- Any 3000- or 4000-level literature course with ENGL prefix

# -Screenwriting- Equivalent screenwriting courses may be taken through the College of Arts & Media

- ENGL 2390 Writing the Short Script
- ENGL 2415 Introduction to Movie Writing
- ENGL 3415 Screenwriting Workshop
- ENGL 4990 Senior Writing Project in Creative Writing or Film Studies

# -Production- Production courses must be taken through the College of Arts & Media.

- FITV 1035 Introduction to Filmmaking
- FITV 1040 Lighting, Grip, and Sound Introductory Workshop
- FITV 1050 Production I Basics of Film and Television
- FITV 2050 Production II Film and Television Techniques

# **English, Literature Option BA**

#### Introduction

Please click here to see English department information.

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major
- Students planning to major in English must consult with an advisor as soon as possible.
- Students may choose only one of the three options in the English major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click <u>here</u> for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 39 ENGL credit hours.
- 2. Students must complete a minimum of 27 upper division (3000-level and above) ENGL credit hours.

- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. ENGL 1010, 1020 and 2030 are not included in the major.
- 2. Internship/cooperative education courses may be counted toward the major for students who have junior standing or higher.
- 3. Students are not to exceed 56 English credit hours (any level).
- 4. Double majors in English and English Writing are exempt from the 56-hour rule and must complete 63 hours total for both majors.
- 5. At least 15 upper division level ENGL credit hours must be taken with CU Denver faculty.
- 6. The English Department also offers a minor in Literature, Writing, Creative Writing and Film Studies. Courses counted in a minor cannot be counted toward the major.
- 7. Latin Honors may be earned by participating in the Department's Honors Program. You are encouraged to begin the program in your junior year. The program requires additional coursework and affords you the opportunity to work individually with the professor of your choice. Handouts are available in the English office.
- 8. Any course in the following can be taken more than once, if the topic/title differs:
- Any film or film theory course (Film History, director course, Lit. to Film, global etc.)
- Any 3300 or 3355 post-1900 topic (e.g. Lit. of the City, Detective Lit., Science Fiction, Memoir)
- Any 4770 Topic post-1900 (e.g. Philosophy and Lit., Mental Health in Lit., Environmental Lit.)
- And 4000 Major Author or other major author course post-1900 (e.g. Nobel Laureates, Cather, Joyce)
- Any women's lit. and/or feminist theory (e.g. 3450 Cont. Women Writers, 4306 Survey of Feminist Thought, Woolf)
- Any ENGL ethnic lit. course (e.g. 3798 International Perspectives, 4440 African Am. Lit., Asian Am. Lit.)
- Any ENGL identity course (e.g. LQBT Lit., Queer Theory)

Take **one** of the following courses:

- ENGL 1600 Storytelling
- ENGL 2600 Literary Classics

Take **all** of the following courses:

- ENGL 2450 Introduction to Literature
- ENGL 3001 Critical Writing

Take **one** of the following American Literature courses:

- ENGL 3700 American Literature to the Civil War
- ENGL 3750 American Literature after the Civil War
- ENGL 4166 History of American Poetry
- ENGL 4230 The American Novel
- ENGL 4236 The American Short Story
- ENGL 4350 History of American Drama
- Any 4000 Major Author Am. Lit. (e.g. Hawthorne. Faulkner, Cather)
- Any 3300 Topic 4770 Topic in Am. Lit. (e.g. Lit. of the West, Harlem renaissance)

#### Take **two** of the following Pre-1650 courses:

- ENGL 3661 Shakespeare
- ENGL 4500 Medieval Literature
- ENGL 4510 Whores and Saints: Medieval Women
- ENGL 4520 English Renaissance
- ENGL 4730 Chaucer
- Any ENGL 3300 Topic or 4770 Topic before 1650 (e.g. Early European Witchcraft)
- Any 4000 Major Author before 1650 (e.g. Gawain-poet)

Take **two** of the following 1650-1900 courses:

- ENGL 3700 American Literature to the Civil War
- ENGL 4200 Survey of the English Novel to 1900
- ENGL 4300 History of British Drama
- ENGL 4530 Milton
- ENGL 4560 English Romanticism
- ENGL 4580 The Victorian Age
- Any 4000 Major Author between 1650-1900 (e.g. Austen, Shelley, Dickens)
- Any 3300 Topic or 4770 Topic between 1650-1900 (e.g. Gothic, Restoration)

Take **three** of the following Modern Literature and Culture courses:

• ENGL 3480 - Modern Drama

- ENGL 3750 American Literature after the Civil War
- ENGL 4250 Twentieth Century Fiction
- ENGL 4460 Contemporary World Literature
- ENGL 4600 Modernism

Take two ENGL elective courses at any level.

# Entrepreneurship Major - BS in Business Administration

#### Introduction

The Jake Jabs Center's entrepreneurship curriculum incorporates instruction, mentoring, and support from outstanding Business School faculty, as well as from outside professionals with expertise in new business development. This major explores legal issues, social sector initiatives, new venture design, finance structuring, strategic web development, leadership, new product development and business plan creation. Students learn from case studies, classroom instruction, and guest lectures featuring successful entrepreneurs and renowned business leaders.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- Take all of the following required courses:
- ENTP 3200 Essentials in Entrepreneurship
- ENTP 3230 Small Business Accounting and Finance
- ENTP 3299 Business Model Development & Planning

Take **three** 3000 or 4000-level ENTP electives.

# **Ethnic Studies BA**

#### Introduction

Please click here to see Ethnic Studies department information.

The skills and knowledge that students gain while pursuing a BA degree with a Major in Ethnic Studies at CU Denver are transferable to a variety of careers. In common with other liberal arts graduates, those with a degree in ethnic studies will be trained in creative and critical thinking, complex reasoning, and effective communication. In addition, ethnic studies graduates will have cultural competency skills that are highly valued by employers, who serve increasingly diverse clientele. Other occupations that employ many ethnic studies graduates include: law, teaching, journalism, marketing, community organizing and social work. Ethnic studies graduates also find work in non-profit agencies and in federal, state, and local government agencies.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program with some courses offered online.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 33 credits in ETST coursework.
- 2. Students must complete a minimum of 16 upper division (3000-level and above) ETST credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.

Take **all** of the following required courses:

- ETST 2000 Introduction to Ethnic Studies
- ETST 2155 African American History
- ETST 3108 Chicano/a and Latino/a History
- ETST 3297 Social History of Asian Americans
- ETST 3396 History of the American Indian
- ETST 4960 Capstone in Ethnic Studies

Take the following capstone course:

• ETST 4000 - Research Methods in Ethnic Studies

Take **four** Ethnic Studies Electives, courses include:

- ETST 2024 Race and Ethnic Relations
- ETST 2105 African American Contemporary Social Issues
- ETST 2115 Genocide in the 21st Century: Darfur and Beyond
- ETST 2125 The Bi-Racial Family
- ETST 2145 The Gullah in Novel and Film
- ETST 2165 Cultural Diversity Awareness in the Workplace
- ETST 2294 Race and the Media
- ETST 2400 Issues in Chicano/a Education

- ETST 2496 American Indian Literature
- ETST 2606 The American Indian Experience
- ETST 2840 Independent Study: ETST
- ETST 2939 Internship
- ETST 3002 Ethnicity, Health and Social Justice
- ETST 3010 Conference Participation
- ETST 3110 Indigenous Studies
- ETST 3129 Contemporary Latin American Literature
- ETST 3211 Hip Hop Music & Culture
- ETST 3216 Federal Law and American Indians
- ETST 3224 U.S. Middle East Culture and Religion
- ETST 3230 African American Family
- ETST 3254 Race and Ethnicity in the Inner City
- ETST 3272 Global Media
- ETST 3274 Power, Poverty, Culture
- ETST 3300 Shamanic Traditions
- ETST 3307 Selected Topics: Asian Americans
- ETST 3350 Colonial Latin America
- ETST 3357 Asian American Literature
- ETST 3365 Aztlan in the United States: Chicano History from 1821
- ETST 3394 Literature of Social Protest from an Ethnic Perspective
- ETST 3408 Social Psychology of Latinos/as
- ETST 3567 Asian American Women
- ETST 3574 Topics in Ethnic Studies
- ETST 3616 Selected Topics: American Indians
- ETST 3697 Contemporary Asian American Experience
- ETST 3704 Culture, Racism and Alienation
- ETST 3794 Ethnicity and Race in Contemporary American Culture
- ETST 3838 History of the Mexican American in Colorado
- ETST 3840 Independent Study: ETST
- ETST 3842 Independent Study: ETST
- ETST 3939 Internship
- ETST 3995 Global Study Topics
- ETST 4000 Research Methods in Ethnic Studies (if not taken above)
- ETST 4144 Indigenous Political Systems
- ETST 4146 Indigenous Politics
- ETST 4156 The Arab-Israeli Peace Process
- ETST 4220 African-American Literature
- ETST 4411 Modern Mexico
- ETST 4515 The African American in Politics
- ETST 4555 International Women's Resistance
- ETST 4558 Chicano and Latino Politics
- ETST 4574 Special Topics
- ETST 4616 Selected Topics: Chicanos/as and Latinos/as
- ETST 4726 North American Indian Art
- ETST 4730 Peoples and Cultures of Sub-Saharan Africa
- ETST 4768 Chicano/Chicana Narrative and Social History
- ETST 4827 Women and the Law
- ETST 4840 Independent Study: ETST
- ETST 4995 Global Study Topics

# Film and Television Emphasis, Film and Television BFA

#### Introduction

Please click here to see general Film & Television information.

The Department of Film & Television offers a Bachelor of Fine Arts (BFA) in Film and Television. This BFA emphasis provides training at a professional skill level, culminating in a comprehensive review that requires successful completion of numerous film/TV projects, varying in styles from fiction to documentary. The emphasis is designed so that students will progress through the semesters as a cohort group. Undergraduates will not only work on their own projects but also will assist on group projects such as our episodic web series. Students will graduate with both a theoretical and historical perspective, as well as a hands-on experience in film and television production. This prepares students to begin their careers with entry-level positions in film or television, start their personal creative work or continue their studies in a graduate program. Consult the College of Arts & Media at <a href="CAM@ucdenver.edu">CAM@ucdenver.edu</a> for more information.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major.
- Students seeking this BFA emphasis should apply to the university and be accepted
  under the Film & Television BFA program. The Department of Film & Television strongly
  encourages fall admission and requires a secondary departmental application. Please
  contact <a href="David.Walter@ucdenver.edu">David.Walter@ucdenver.edu</a> for application information. Given the cohort nature
  of the program, students should be aware that failing to take courses in order and/or
  failing to earn the minimum required grade in any course may delay their graduation
  date.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. At least 24 of the major semester hours must be earned at CU Denver.

Take all of the following Film and Television Emphasis courses:

- FITV 1001 Fundamentals of Film and Television
- FITV 1040 Lighting, Grip, and Sound Introductory Workshop
- FITV 1550 Scriptwriting 1 Fiction
- FITV 1050 Production I Basics of Film and Television
- FITV 1200 The Culture of Television
- FITV 1600 Writing Short Film:Non-Fiction
- FITV 1110 Production Design: Theatre, Film and Video
- FITV 2040 Introduction to Digital Effects
- FITV 2090 Production Management for Film and Television
- FITV 2220 Acting for Film and Television
- FITV 2650 Sound for Film and TV
- FITV 2050 Production II Film and Television Techniques
- FITV 2055 Documentary Production
- FITV 2670 Cinematography
- FITV 3050 Junior Project Production
- FITV 3570 Directing for Film and Television
- FITV 3200 Film History 1
- FITV 3500 Writing for Episodic Television
- FITV 3060 Junior Project Post Production
- FITV 3300 Film History 2

- Either FITV 3040 TV Studio Production or FITV 3090 Producing Episodic Television
- FITV 4000 Senior Thesis Production
- FITV 4010 Senior Thesis Post-Production

Take **three** semester hours of upper-division Film and Television elective.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates, a list of approved electives, and more information about this emphasis.

# Finance Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

The principal areas of study in finance are financial management in small and large businesses, investments, financial institutions, and international finance. The study of finance is intended to provide an understanding of fundamental theory and practice pertaining to finance, to make sound financial decisions. Students are taught to think logically about financial problems, so that they can formulate and implement value maximizing decisions and policies for the business. For this purpose, it is necessary to understand the importance of finance in the economy and the functions and purposes of monetary systems, credit, prices, money markets and financial institutions. Emphasis is placed on financial policy, management, control, analysis, and decision making.

The finance major provides students with the skills to succeed in all areas of finance. Numerous job opportunities exist in the field of business finance and with financial institutions, mutual funds, securities firms, personal wealth management firms, and financial planning firms including positions involving an understanding and sale of securities.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students following this major must take <u>FNCE 4370</u> as their international studies course.
- 2. A grade of C or higher must be earned in all courses that are used as prerequisites. These are noted with an asterisk.

Take all of the following required courses:

- FNCE 3500 Management of Business Capital \*
- FNCE 3600 Financial Markets and Institutions
- FNCE 3700 Investment and Portfolio Management \*
- FNCE 4500 Corporate Financial Decisions \*
- FNCE 4382 Survey of Financial and Commodity Derivatives
- FNCE 4424 Mergers and Acquisitions
- FNCE 4950 Special Topics

Take one FNCE, CMDT or RISK elective

# Financial Management Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

The financial management major provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The major provides a solid finance and accounting background for other business positions as well.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click <u>here</u> for information about Academic Policies

# **Program Requirements**

- Financial Management students must complete <u>FNCE 4370 International Financial</u> <u>Management</u>, to fulfill the International Studies requirement.
- 2. All courses with an asterisk must be completed with a C or higher.
- ACCT 3220 Intermediate Financial Accounting I \*
- ACCT 3230 Intermediate Financial Accounting II
- ACCT 4054 Accounting Information Systems \* (Replaces ISMG 3000 in Business Core)
- ACCT 4410 Fundamentals of Federal Income Tax
- FNCE 3500 Management of Business Capital \*
- FNCE 3600 Financial Markets and Institutions
- FNCE 3700 Investment and Portfolio Management \*
- FNCE 4500 Corporate Financial Decisions \*
- RISK 3809 Introduction to Risk Management

**Note:** Students should note that all finance, risk and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

#### **Note**

Students also have the option to complete a Financial Management major with a specialization in Information Systems. Click here to view this option.

# Financial Management Major - BS in Business Administration with Specialization in Information Systems

#### Introduction

Please click here to see Business School information.

The Financial Management major with a specialization in Information Systems provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

This specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete <u>FNCE 4370 International Financial Management</u>, to fulfill the International Studies requirement.
- 2. All courses with an asterisk must be completed with a grade of C or higher.

Finance and Risk Management:

Take all of the following courses:

- FNCE 3500 Management of Business Capital \*
- FNCE 3600 Financial Markets and Institutions
- FNCE 3700 Investment and Portfolio Management \*
- FNCE 4500 Corporate Financial Decisions \*
- RISK 3809 Introduction to Risk Management

Accounting:

Take all of following courses:

- ACCT 3220 Intermediate Financial Accounting I \*
- ACCT 3230 Intermediate Financial Accounting II
- ACCT 4054 Accounting Information Systems \*
- (Replaces ISMG 3000 in Business Core)
- ACCT 4410 Fundamentals of Federal Income Tax

Information Systems:

Take **all** of the following courses:

- ISMG 3500 Enterprise Data and Content Management
- ISMG 3600 System Strategy, Architecture and Design
- ISMG 4780 Accounting and Information Systems Processes and Controls
- ISMG 4900 Project Management and Practice (Also fulfills BGEN Experiential Learning requirement)

#### **Note**

Students should note that not all finance, risk and accounting courses are offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

# French BA

#### Introduction

Please click here to see Modern Languages department information.

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this major.

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

- To be admitted to major status in French, students must have an overall GPA of C+ (2.3).
- Students presenting four years of high school French (Level IV) for admission to CU
  Denver must see a French advisor before enrolling in courses for the major.
- Click <u>here</u> to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 30 FREN credit hours.
- Students must complete a minimum of 30 upper division (3000-level or above) FREN credit hours.
- Students must achieve a minimum GPA of 2.5 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 18 FREN credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. All courses counting toward the French major must be taught in French.
- 2. FREN 3200 does not count toward the major.
- 3. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.
- 4. Students with advanced placement credits from high school must see a French advisor about course equivalencies.
- 5. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at CU Denver. Failure to do so may result in delay of graduation.
- 6. During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.
- Note: Students must take at least one literature course and at least one culture or civilization course.

Take **all** of the following required courses:

- FREN 3010 French Phonetics and Pronunciation
- FREN 3020 Conversation through Film
- FREN 3050 Advanced Grammar and Composition
- FREN 3060 Advanced French Language Skills

Take **three** elective FREN courses at the 4000-level.

Take **three** elective FREN courses at the 3000 or 4000-level.

# Geography - BA

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum

- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 33-34 GEOG, GEOL or ENVS credit hours.
- 2. Students must complete a minimum of 24 upper division (3000-level and above) GEOG credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.
- 5. Students must complete a minimum of 15 GEOG, GEOL, or ENVS credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. Only 3 credits of Travel Study may be counted toward graduation requirements
- 2. Undergraduate students may count up to 6 credit hours of independent study or internship (any combination of GEOG 3840, 4840, 4880, or 3939) towards elective credit in the major as approved by the undergraduate coordinator. Students may not receive more than 3 credit hours per independent study section. No more than 3 credit hours of independent study may be taken with the same instructor or in the same term.

Take **all** of the following required courses:

- GEOG 1202 Introduction to Physical Geography
- 01
- ENVS 1044 Introduction to Environmental Sciences and
- ENVS 1045 Introduction to Environmental Sciences Laboratory
- GEOG 1302 Introduction to Human Geography or
- GEOG 1102 World Regions Global Context
- GEOG 2080 Introduction to Mapping and Map Analysis
- GEOG 3232 Weather and Climate
- GEOG 3412 Globalization and Regional Development

Take six additional GEOG, GEOL, or ENVS courses, including at least one course from each of the following subfields:

#### Physical Geography

- GEOG 3240 Colorado Climates
- GEOG 4010 Landscape Geochemistry
- GEOG 4020 Earth Environments and Human Impacts
- GEOG 4240 Applied Geomorphology
- GEOG 4251 Fluvial Geomorphology
- GEOG 4270 Glacial Geomorphology
- GEOG 4280 Environmental Hydrology
- GEOG 4305 Water Quality and Resources
- GEOG 4720 Climate Change: Causes, Impacts and Solutions
- GEOG 4731 Mountain Biogeography
- GEOG 4740 Geography of Soils

#### **Human Geography**

- ENVS 1342 Environment, Society and Sustainability
- GEOG 1602 Urban Studies and Planning
- GEOG 2202 Hazards to Disasters: Perception and Management
- GEOG 3401 Geography of Food and Agriculture
- GEOG 3430 Geography of Tourism
- GEOG 3440 Ecotourism
- GEOG 3450 Cultural Heritage and Tourism
- GEOG 3501 Geography of Health
- GEOG 4265 Sustainability in Resources Management
- GEOG 4300 Children's Geographies
- GEOG 4301 Population, Culture, and Resources
- GEOG 4335 Contemporary Environmental Issues
- GEOG 4350 Environment and Society in the American Past
- GEOG 4420 The Politics of Nature
- GEOG 4440 Science, Policy and the Environment
- GEOG 4450 Urban Food and Agriculture: Perspectives and Research
- GEOG 4460 Sustainable Urban Agriculture Field Study I
- GEOG 4470 Sustainable Urban Agriculture Field Study II
- GEOG 4640 Urban Geography: Denver and the U.S.
- GEOG 4680 Urban Sustainability: Perspectives and Practice
- GEOG 4710 Disasters, Climate Change, and Health

#### Regional Geography

GEOG 1102 - World Regions Global Context

- GEOG 1302 Introduction to Human Geography
- GEOG 3100 Geography of Colorado
- GEOG 3120 Geography of Europe
- GEOG 3130 Central America and the Caribbean
- GEOG 3140 Geography of South America
- GEOG 3150 Middle East
- GEOG 3160 Geography of China

#### Techniques for Geographical Analysis

- GEOG 4080 Introduction to GIS (highly recommended; pre-req to most of the advanced GISci courses)
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4070 Remote Sensing II: Advanced Remote Sensing
- GEOG 4081 Cartography and Computer Mapping
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4090 Environmental Modeling with Geographic Information Systems
- GEOG 4091 Open Source Software for Geospatial Applications
- GEOG 4092 GIS Programming and Automation
- GEOG 4095 Deploying GIS Functionality on the Web
- GEOG 4220 Environmental Impact Assessment
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 GIS Applications in the Health Sciences
- GEOG 4770 Applied Statistics for the Natural Sciences

Community/Professional Experience (optional, but highly recommended)

• GEOG 3939 - Internship

# Geography - Environment, Society and Sustainability Option BA

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 39-40 GEOG, GEOL or ENVS credit hours.
- Students must complete a minimum of 24 upper division (3000-level and above) GEOG credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major course requirements as pass/fail.
- Students must complete a minimum of 15 GEOG, GEOL or ENVS credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. Only 3 credits of Travel Study may be counted toward graduation requirements
- 2. Undergraduate students may count up to 6 credit hours of independent study or internship (any combination of GEOG 3840, 4840, 4880, or 3939) towards elective credit in the major as approved by the undergraduate coordinator. Students may not receive more than 3 credit hours per independent study section. No more than 3 credit hours of independent study may be taken with the same instructor or in the same term.

Take **all** of the following required courses:

- ENVS 1044 Introduction to Environmental Sciences and
- ENVS 1045 Introduction to Environmental Sciences Laboratory
- or
- GEOG 1202 Introduction to Physical Geography
- GEOG 1302 Introduction to Human Geography
- 01
- GEOG 1102 World Regions Global Context
- GEOG 2080 Introduction to Mapping and Map Analysis
- GEOG 3232 Weather and Climate
- GEOG 3412 Globalization and Regional Development

#### Take **both** of the following courses:

- ENVS 1342 Environment, Society and Sustainability
- GEOG 4335 Contemporary Environmental Issues

#### Take **two** of the following courses:

- GEOG 4265 Sustainability in Resources Management
- GEOG 4301 Population, Culture, and Resources
- GEOG 4420 The Politics of Nature
- GEOG 4440 Science, Policy and the Environment

#### Take **three** of the following environmental studies courses:

- GEOG 3401 Geography of Food and Agriculture
- GEOG 3440 Ecotourism
- GEOG 3501 Geography of Health
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4265 Sustainability in Resources Management
- GEOG 4301 Population, Culture, and Resources
- GEOG 4305 Water Quality and Resources
- GEOG 4350 Environment and Society in the American Past
- GEOG 4420 The Politics of Nature
- GEOG 4440 Science, Policy and the Environment

- GEOG 4450 Urban Food and Agriculture: Perspectives and Research
- GEOG 4460 Sustainable Urban Agriculture Field Study I
- GEOG 4680 Urban Sustainability: Perspectives and Practice
- GEOG 4710 Disasters, Climate Change, and Health
- GEOG 4720 Climate Change: Causes, Impacts and Solutions

Take **one** of the following Techniques for Environmental Analysis courses:

- GEOG 4080 Introduction to GIS (highly recommended; pre-req to most of the advanced GISci courses)
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing (prereq for Remote Sensing II)
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4235 GIS Applications in the Health Sciences
- GEOG 4770 Applied Statistics for the Natural Sciences

<u>Community/Professional Experience</u> (optional, but highly recommended)

• GEOG 3939 - Internship

# Geography - Environmental Science Education Option BA

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by fulltime faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 41-42 credit hours, including a minimum of 31-30 GEOG, GEOL or ENVS credit hours and 11 credit hours of ancillary coursework.
- 2. Students must complete a minimum of 24 upper division (3000-level and above) GEOG credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major course requirements as pass/fail.
- Students must complete a minimum of 15 GEOG, GEOL or ENVS credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. Only 3 credits of Travel Study may be counted toward graduation requirements
- 2. Undergraduate students may count up to 6 credit hours of independent study or internship (any combination of GEOG 3840, 4840, 4880, or 3939) towards elective credit in the major as approved by the undergraduate coordinator. Students may not receive more than 3 credit hours per independent study section. No more than 3 credit hours of independent study may be taken with the same instructor or in the same term.
- 3. Students should consult with the School of Education and Human Development teacher licensure program early and regularly for detailed information on how best to approach the degree with licensure.

Take **one sequence** of either general biology (BIOL 2051 and 2061 with labs) or general chemistry (CHEM 2031 abd 2061 with labs). If applying to the MS in Environmental Sciences program, students are advised to take both both sequences. Course choices with descriptions are below:

- BIOL 2051 General Biology I and
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II and
- BIOL 2081 General Biology Laboratory II

#### OR

- CHEM 2031 General Chemistry I and
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II and
- CHEM 2068 General Chemistry Laboratory II
- Take **all** of the following required courses:
- ENVS 1044 Introduction to Environmental Sciences and
- ENVS 1045 Introduction to Environmental Sciences Laboratory
- Or
- GEOG 1202 Introduction to Physical Geography
- GEOG 1302 Introduction to Human Geography or
- GEOG 1102 World Regions Global Context
- GEOG 2080 Introduction to Mapping and Map Analysis
- GEOG 3232 Weather and Climate
- GEOG 3412 Globalization and Regional Development

Take **both** of the following Environmental Science courses:

- GEOG 4020 Earth Environments and Human Impacts
- GEOG 4265 Sustainability in Resources Management

Take **one** of the following courses:

GEOG 3240 - Colorado Climates

- GEOG 4010 Landscape Geochemistry
- GEOG 4240 Applied Geomorphology
- GEOG 4251 Fluvial Geomorphology
- GEOG 4270 Glacial Geomorphology
- GEOG 4280 Environmental Hydrology
- GEOG 4305 Water Quality and Resources
- GEOG 4720 Climate Change: Causes, Impacts and Solutions
- GEOG 4731 Mountain Biogeography
- GEOG 4740 Geography of Soils

Take **one** upper-division Biology or Chemistry course related to the student's Environmental Science interest.

Take **one** of the following courses:

- ANTH 4050 Quantitative Methods in Anthropology
- GEOG 4770 Applied Statistics for the Natural Sciences
- MATH 2830 Introductory Statistics
- PSYC 2090 Statistics and Research Methods

Take **one** of the following Geo-Spatial Analysis courses:

- GEOG 4080 Introduction to GIS (highly recommended; pre-req to most of the advanced GISci courses)
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing (prereq for Remote Sensing II)
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4235 GIS Applications in the Health Sciences

Community/Professional Experience (optional, but highly recommended)

• GEOG 3939 - Internship

# Geography - Environmental Science Option BA

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 41-42 credit hours, including a minimum of 31-30 GEOG, GEOL or ENVS credit hours and 11 credit hours of ancillary coursework.
- Students must complete a minimum of 24 upper division (3000-level and above) GEOG credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.
- Students must complete a minimum of 15 GEOG, GEOL or ENVS credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. Only 3 credits of Travel Study may be counted toward graduation requirements
- 2. Undergraduate students may count up to 6 credit hours of independent study or internship (any combination of GEOG 3840, 4840, 4880, or 3939) towards elective credit in the major as approved by the undergraduate coordinator. Students may not receive more than 3 credit hours per independent study section. No more than 3 credit hours of independent study may be taken with the same instructor or in the same term.

Take **one sequence** of either general biology (BIOL 2051 and 2061 with labs) or general chemistry (CHEM 2031 and 2061 with labs). If applying to the MS in Environmental Sciences program, students are advised to take both sequences.

- BIOL 2051 General Biology I and
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II and
- BIOL 2081 General Biology Laboratory II

#### **OR**

- CHEM 2031 General Chemistry I and
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II and
- CHEM 2068 General Chemistry Laboratory II

Take **all** of the following required courses:

- ENVS 1044 Introduction to Environmental Sciences and
- ENVS 1045 Introduction to Environmental Sciences Laboratory
- or
- GEOG 1202 Introduction to Physical Geography
- GEOG 1302 Introduction to Human Geography or
- GEOG 1102 World Regions Global Context

- GEOG 2080 Introduction to Mapping and Map Analysis
- GEOG 3232 Weather and Climate
- GEOG 3412 Globalization and Regional Development

Take **both** of the following Environmental Science courses:

- GEOG 4020 Earth Environments and Human Impacts
- GEOG 4265 Sustainability in Resources Management

Take **one** from the following courses:

- GEOG 3240 Colorado Climates
- GEOG 4010 Landscape Geochemistry
- GEOG 4240 Applied Geomorphology
- GEOG 4251 Fluvial Geomorphology
- GEOG 4270 Glacial Geomorphology
- GEOG 4280 Environmental Hydrology
- GEOG 4305 Water Quality and Resources
- GEOG 4720 Climate Change: Causes, Impacts and Solutions
- GEOG 4731 Mountain Biogeography
- GEOG 4740 Geography of Soils

Take **one** upper-division Biology or Chemistry course related to the student's Environmental Science interest.

Take **one** of the following Quantitative Methods courses:

- ANTH 4050 Quantitative Methods in Anthropology
- GEOG 4770 Applied Statistics for the Natural Sciences
- MATH 2830 Introductory Statistics
- PSYC 2090 Statistics and Research Methods

Take **one** of the following Geo-Spatial Analysis courses:

 GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing (prereg for Remote Sensing II)

- <u>GEOG 4080 Introduction to GIS</u> (highly recommended; pre-req to most of the advanced GIS courses)
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4235 GIS Applications in the Health Sciences

Community/Professional Experience (optional, but highly recommended)

GEOG 3939 - Internship

# Geography - Urban Studies and Planning BA

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the Master of Urban and Regional Planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree and if interested in this option should work closely with the option advisor in the selection of coursework. (Please see the Graduate Catalog for more information on this graduate program.)

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

• This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click <u>here</u> for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 39-40 GEOG, GEOL or ENVS credit hours.
- Students must complete a minimum of 24 upper division (3000-level and above) GEOG credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.
- 5. Students must complete a minimum of 15 GEOG, GEOL or ENVS credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. Only 3 credits of Travel Study may be counted toward graduation requirements
- 2. Undergraduate students may count up to 6 credit hours of independent study or internship (any combination of GEOG 3840, 4840, 4880, or 3939) towards elective credit in the major as approved by the undergraduate coordinator. Students may not receive more than 3 credit hours per independent study section. No more than 3 credit hours of independent study may be taken with the same instructor or in the same term.

Take **all** of the following required courses:

- GEOG 1202 Introduction to Physical Geography
- or
- ENVS 1044 Introduction to Environmental Sciences and
- ENVS 1045 Introduction to Environmental Sciences Laboratory

- GEOG 1302 Introduction to Human Geography
- or
- GEOG 1102 World Regions Global Context
- GEOG 2080 Introduction to Mapping and Map Analysis
- GEOG 3232 Weather and Climate
- GEOG 3412 Globalization and Regional Development

Take all of the following Urban Studies courses:

- GEOG 1602 Urban Studies and Planning
- GEOG 4640 Urban Geography: Denver and the U.S.
- GEOG 4680 Urban Sustainability: Perspectives and Practice

#### Take **four** of the following Urban Planning courses:

- GEOG 4000/ <u>URPL 5010 Planning Methods</u>
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4265 Sustainability in Resources Management
- GEOG 4400 Regional Economic Systems
- GEOG 4450 Urban Food and Agriculture: Perspectives and Research
- GEOG 4460 Sustainable Urban Agriculture Field Study I
- GEOG 4630/ <u>URPL 6550 Transportation Planning/Policy</u>
- GEOG 4670/ URPL 6555 Transportation, Land Use, and the Environment
- GEOG 4710 Disasters, Climate Change, and Health
- URPL 5000 Planning History and Theory
- URPL 6300 Community and Environmental Health Planning
- URPL 6650 International Development Planning: Theory and Practice

Take **one** of the following Techniques for Urban Analysis courses:

- GEOG 4080 Introduction to GIS (pre-req to most of the advanced GISci courses)
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing (prereq for Remote Sensing II)
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4235 GIS Applications in the Health Sciences

Community/Professional Experience (optional, but highly recommended)

# **History BA**

#### Introduction

Please click here to see History department information.

The bachelor's degree in history provides students with a firm grounding for advanced studies in education, librarianship, law, business and public service, as well as graduate work in the humanities and social sciences broadly. History is an all-inclusive discipline, making it an excellent choice for students with a wide variety of career goals.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This program is offered both on-campus and online.

# **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 36 HIST credit hours.
- 2. Students must complete a minimum of 18 upper-division (3000-level and above) HIST credit hours.

- 3. Students must achieve a minimum GPA of 2.5 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.
- 5. Students must complete a minimum of 18 HIST credit hours with CU Denver faculty.

# **Program Allowances or Restrictions**

1. 15 of the 18 upper division level credit hours must be taken at the 4000 level, including HIST 4839.

Take all of the following required courses:

- HIST 3031 Theory and Practice of History: An Introduction to the Major
- HIST 4839 History Seminar
- Students must complete HIST 3031 with a grade of C (2.0) or better before enrolling in HIST 4839.

Take a minimum of **six** semester hours in each of the following areas: United States, Europe and world (Africa, Asia, Latin America). At least **three** semester hours in each area must be upper-division (3000 and 4000 level).

#### **Electives**

The degree requires a minimum of 12 additional semester hours of HIST electives, which can be satisfied by a combination of additional history courses, history internships, or history honors independent study for eligible students.

**Note:** Please see your advisor for a list of acceptable elective courses.

# Human Development and Family Relations BS

### Introduction

Please click here to see School of Education & Human Development information.

The Human Development and Family Relations (HDFR) Bachelor of Science program prepares students to effectively serve individuals and families in a wide variety of environments. HDFR is committed to a curriculum rich in family diversity and social justice. This 120 credit-hour interdisciplinary program explores family systems and the ecological development of individuals across their life span. The HDFR program leads to certification in the field.

# **Program Delivery**

• This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum total of 120 semester hours for the Human Development and Family Relations BS.
- 2. A minimum GPA of 2.0, C or better grade, is required for all courses applying to Human Development and Family Relations major requirements.
- 3. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **all** of the following Human Development and Family Relations major courses with a grade of C or better:

- HDFR 1010 Life Span Development in Ecological Settings
- HDFR 2000 Introduction to Family and Community Services
- HDFR 2080 Sex, Human Development and Family Systems
- HDFR 2200 Love, Family and Human Development
- HDFR 3002 Preparing to be a HDFR Professional
- HDFR 3020 Black and Latino Children in Families and Schools or other HDFR cultural diversity core class

- HDFR 3250 Families in Global Perspectives
- HDFR 3400 Love, Couples and Family
- HDFR 4001 Families and Parenting
- HDFR 4002 Family Life and Community Programming I
- HDFR 4003 Leadership and Organizations
- HDFR 4004 Family and Comm. Prog. II Grant Writing/Fundraising
- HDFR 4010 Family and Cultural Diversity
- HDFR 4075 Family Policy & Law
- HDFR 4080 Global Family Resource Management
- HDFR 4260 Family Systems and Social Justice
- HDFR 4930 Human Development and Family Relations Internship
- MATH 2830 Introductory Statistics
- RSEM 4100 Research and Statistics in Families and Human Development

Take **one** of the following HDFR Family Diversity courses with a grade of C or better:

- HDFR 1030 Who am I? Cultural Identity, Family, Diverse Soc Sys
- HDFR 4040 Latino Families in School and Communities
- HDFR 4045 Abuelos (Grandparents) Latino Families
- HDFR 4888 LGBTQ Family Systems
- HDFR 4850 Family Systems Therapy, Religion and Spirituality

Take **one** of the following HDFR Human Development and Learning courses with a grade of C or better:

- HDFR 1000 Global Human Development & Learning
- HDFR 2110 Child Ecology
- HDFR 3050 Children's Thinking and Assessment
- HDFR 3100 Adolescent Ecology
- HDFR 4200 Adult Ecology
- HDFR 4300 Families in Later Life

#### **HDFR Required Concentration Options**

Select a 15 semester hour concentration area from those listed below

#### **Pre-individual, Couple and Family Therapy/Counseling:**

Provides an introduction to clinical helping professions through systems and strengths therapy perspectives, and includes English and bilingual tracks.

- HDFR 3400 Love, Couples and Family
- HDFR 4080 Global Family Resource Management
- HDFR 4090 Helping Profession Skills in HDFR
- 2 Counseling Electives

#### **Leadership and Community-based Organizations:**

Provides a comprehensive understanding and preparation for students to work in and lead community-based organizations including secular, faith-based, for-profit, nonprofit, school-based, state, federal and international organizations.

- HDFR 4002 Family Life and Community Programming I
- HDFR 4003 Leadership and Organizations
- HDFR 4004 Family and Comm. Prog. II Grant Writing/Fundraising
- HDFR 4080 Global Family Resource Management
- One additional HDFR course in leadership and organizations

#### Higher Education Environments (Pre-Higher Education and Student Affairs):

Provides students with an introduction to higher education and student affairs administration and possible careers at various universities, community colleges and liberal arts colleges.

- HDFR 4050 Foundations of Student Affairs
- HDFR 4003 Leadership and Organizations
- HDFR 4500 Diversity, Inclusion, Social Justice in Higher Education
- 2 Additional \*HDFR/HESA courses

#### **Educational Foundations and Social Justice:**

Provides students with a foundation to understand justice within familial, educational and community settings. This concentration works well with the previously listed concentrations and is also offered in an English and a bilingual track.

- EDFN 1000 Equality, Rights & Education
- EDFN 3000 Undocumented Mexican Immigration
- EDFN 4000 Food Justice in City & Schools
- Two additional EDFN courses selected in consultation with faculty advisor

#### **Early Childhood Development:**

- ECED 2930 Infant & Toddler Field Experience & Seminar
- ECED 4030 Nutrition, Health, and Safety
- ECED 4060 Working with Families, Professionals, and Communities
- ECED 4070 Development and Education of Infant and Toddlers
- ECED 4202 Child Guidance and Classroom Community

#### Bilingual (Spanish) Family and Community Services:

Provides students with the linguistic ability to work with Spanish-speaking families and communities. Courses will be delivered in 70 percent Spanish and 30 percent English. Students in this concentration will also be able to complete any of the other concentrations in the program.

- HDFR 2110 Child Ecology
- HDFR 4040 Latino Families in School and Communities
- HDFR 4045 Abuelos (Grandparents) Latino Families
- 2 HDFR Bilingual Elective

#### Family Gerontology:

Provides students with an ecological understanding of culturally and linguistically diverse families in later life. This concentration provides students with insight about individuals' age in families and the community. It also exposes students to promising practices for better serving older adults.

- HDFR 4045 Abuelos (Grandparents) Latino Families
- HDFR 4200 Adult Ecology
- HDFR 4300 Families in Later Life
- \*HDFR Family Gerontology Elective
- Existing course in sociology, nursing or other social sciences approved by advisor

#### Second HDFR Concentration or Approved Minors Listed Below

Select an approved minor and complete 15 credit hours.

- Sociology
- Spanish
- Criminal Justice
- Psychology
- Women and Gender Studies
- Other minors based on the student's interest and career goals and approved by faculty advisor

<sup>\*</sup>Courses to be developed are indicated with an asterisk

<sup>\*\*</sup>Must be approved by your advisor

# Human Resources Management Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

Human Resources Management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

• Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

Take the following **required** course:

MGMT 3010 - Managing People for a Competitive Advantage

Take **two** of the following courses:

- MGMT 4420 HR: Talent MGT
- MGMT 4430 Human Resources Management: Training
- MGMT 4440 Human Resource Management: Performance Management
- MGMT 4450 Human Resources Management: Compensation

#### Take **three** of the following:

- ENTP 3200 Essentials in Entrepreneurship
- ENTP 3500 Entrepreneurship Law and Ethics
- MKTG 4050 Applied Marketing Management
- Upper division MGMT elective (one, two or three may be taken for this requirement)

# Illustration Emphasis, Fine Arts BFA

#### Introduction

Please click here to see general Visual Arts information.

The Illustration emphasis integrates fine art, mixed media and digital practices with conceptual thinking, research and storytelling in the production of creative work. As a practice, Illustration focuses on skills and concepts in the professional development of a student's individual vision and approach to illustrative arts. Marketing, business and design practices prepare students to discuss and view their work in a design context and for particular commercial markets and galleries. Courses are taught in state-of-the-art drawing and computer labs using the Adobe software suite alongside hands-on studio facilities. Illustration students gather skills to easily work across multiple artistic media—including design, drawing, painting, printmaking, and 3D media for the development of motion and spatial projects.

Students gain the ability to establish freelance illustration studio practice, as well as multifaceted professional skills and flexibility in working with designers, creative directors, and art directors. Graduates are prepared to write and illustrate concepts and stories in preparation for studios, and the editorial, publishing and advertising markets.

Students in the illustration emphasis receive instruction in conceptual illustration, digital illustration, rendering, perspective, painting, exhibition preparation, professional practices and the use of various artistic and illustration techniques. In preparation for a professional illustration career, the course work allows students to master numerous essential digital and traditional tools and work to successfully bring the two together in ambitious and innovative illustrative work.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major.
- Students who are applying for entrance into the illustration emphasis must participate in
  portfolio review day, as described below. The illustration emphasis accepts applications
  once a year during the Spring semester. Students who meet the requirements and are
  accepted go on to take upper-division illustration courses.

#### **ELIGIBILITY**

The student has completed, or is in the process of completing, the following courses:

- <u>FINE 1100 Drawing I</u>
- FINE 1400 Two-Dimensional Design
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2405 Introduction to Digital Design
- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II

A minimum cumulative fine arts/art history GPA of 2.0

#### **Portfolio Review Requirements**

Students applying to the illustration emphasis present a portfolio of 10 - 15 works of art, a written statement and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. Portfolio Day will take place on the first Friday in **April approximately between 12:00pm and 5:00pm (Mountain Time)**. Faculty review works in person, which must be formatted and presented to the specifications listed below. There is no fee to apply.

#### **Portfolio of Images**

• The portfolio must include a minimum of 10 creative works (but no more than 15). Present six or more artworks completed in FINE 1100 Drawing I, FINE 1400 Two-Dimensional Design, FINE 1500 Three-Dimensional Design and FINE 2405 Introduction to Digital Design. Artwork examples should demonstrate skill in observational drawing, linear perspective and life drawing, as well as an understanding of design principles. Additional examples (up to five) may be in the form of design, drawing, painting, photography, mixed media and/or printmaking.

#### Written Statement

Five printed copies of a one-page (400-500 words) written statement must be provided at the time of review. In the written statement, students should address the following questions.

 Why do you want to study illustration and what goals and expectations do you have regarding a career as an illustrator?

- What are your creative strengths, and what areas need further development?
- What other accomplishments would you like the committee to know about, such as Dean's List, GPA, internships, art-related extracurricular activities or relevant professional experience?

#### **Course Transcripts**

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions. The CU Denver transcript must show any current semester courses. One copy of these must be provided at the time of review.

#### THE EVALUATION PROCESS

- A committee of painting, drawing and illustration faculty members reviews the application materials. Acceptance into the illustration emphasis is based on the portfolio images, written statement and GPA.
- If not admitted into the illustration emphasis, a student may begin with the illustration minor, and then attempt the review process again the following year or may apply to another emphasis. Students are encouraged to apply for more than one emphasis. Students are also encouraged to schedule a meeting with illustration faculty to learn about ways to improve their portfolios for future submissions.

#### The application is evaluated on the following criteria:

- Presentation The portfolio should be well-crafted and well organized in content and presentation.
- **Technical Skill** The portfolio should demonstrate strong proficiency in drawing, composition, design and color.
- Creativity The portfolio should demonstrate creative choices in content and aesthetics.
- **Conceptual Skills** The portfolio and written statements should reflect analytical thinking and conceptual exploration of the foundations of drawing and design.
- Written Statement The statement should outline academic and artistic goals, addressing any potential strengths and weaknesses.
- Academic Performance The student's grades must reflect their commitment to learning and growth.
- **Completeness of Application -** All required documentation must be submitted (images, written statement and transcripts).

#### **QUESTIONS**

For more portfolio information, please contact <u>CAM@ucdenver.edu</u> or illustration faculty Rebecca Heavner (rebecca.heavner@ucdenver.edu), Travis Vermilye (travis.vermilye@ucdenver.edu), or Bryan Leister (bryan.leister@ucdenver.edu).

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by Department of Visual Arts faculty.
- 3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
- 4. At least 24 semester hours of total visual arts courses must be upper-division.

Take **all** of the following Pre-Portfolio courses:

- FINE 1100 Drawing I
- FINE 1400 Two-Dimensional Design
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2405 Introduction to Digital Design
- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II

Take **all** of the following lower-division Visual Arts courses:

- FINE 2010 The Graphic Novel Workshop
- FINE 2030 Life Drawing
- FINE 2200 Painting I
- FINE 2415 Typography Studio

Take **all** of the following Illustration Emphasis courses (to be taken after gaining acceptance to emphasis via portfolio day):

- FINE 3010 Illustration I: Spatial Thinking
- FINE 3410 Illustration II: Digital Media
- FINE 3557 Concepts in Illustration
- FINE 4001 Illustration III: Investigative Methods
- FINE 4002 Illustration IV: Advanced Illustration

Take **all** of the following upper-division Visual Arts courses:

- FINE 3300 Painting, Drawing and the Printed Image
- FINE 3450 Digital Painting
- FINE 3556 Concepts in Painting and Drawing
- FINE 4020 Anatomy for the Artist
- FINE 4990 Contemporary Art: 1960 to Present

Take **three** semester hours of Pre-20th Century Art History elective.

Take **three** semester hours of upper-division Art History elective.

Take **three** semester hours of Studio Arts elective in an area outside of painting, drawing or illustration.

Take **six** semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses.

Take the following Capstone course:

• FINE 4003 - Illustration BFA Thesis

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# Individually Structured Major - Integrated Studies BA

The College of Liberal Arts and Sciences (CLAS) Integrated Studies option provides students with the opportunity to construct an individualized major that meets their unique needs, and which results in a B.A.

This flexible program allows students to create a major by combining two course clusters

- One cluster must be based on a CLAS minor in the CU Denver catalog. The minor must be at least 15 credits, and students can add additional courses from the discipline (up to 21 credits total in one discipline) to form the cluster.
- The other cluster can also be based on a minor in the catalog (within CLAS or another school or college), or it can be constructed by the student from a group of courses from a variety of disciplines that form a coherent body of knowledge (an interdisciplinary cluster)
- Students must also complete an introduction to interdisciplinary studies course as well as an interdisciplinary capstone course and project that bring together the learning from their two clusters

These degree requirements are subject to periodic revision by CLAS, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their CLAS Academic Advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

• This is an on-campus program.

# **Declaring This Major**

- Click here to go to information about declaring a major.
- Students are required to submit a program plan that includes a proposal and a course contract. Copies of completed Integrated Studies option proposals and course contracts must be filed with the Dean's Office and with the student's CLAS Academic Advisor.
- The Integrated Studies option proposal must include
  - Two chosen clusters (at least one of which must be based on a CLAS minor)
  - If one of the clusters is constructed, an explanation of how the courses fit together to form a coherent body of knowledge
  - o Approval from an Associate Dean in CLAS
- The Integrated Studies option course contract must include
  - A list of the courses the student intends to take or has completed in the chosen clusters, as well as potential alternate courses. The student should work closely with their CLAS academic advisor to create the course contract
  - Signature from the student's CLAS Academic Advisor
  - Signature from the appropriate CLAS Associate Dean

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements

Click here for information about Academic Policies

# **Program Requirements**

- A student must have already completed at least 60 credit hours to declare the Integrated Studies option
- At least half of all credits in the Integrated Studies option must be from CLAS departments. A minimum of 24 Integrated Studies option credit hours must be completed with CU Denver faculty (at least 9 credits in each course cluster in addition to ISMA 3100 and ISMA 4900).
- Each course cluster in the major option must consist of at least 15 credit hours and one cluster must be based on a CLAS minor in the CU Denver catalog
- The major option requires a minimum of 36 credit hours, but can be up to 56 credit hours depending on the size of the clusters a student chooses and/or constructs
- At least 18 credit hours must be from 3000/4000 level courses, with at least nine upper division credit hours in each cluster
- Students can apply credits they earned before declaring the Integrated Studies option to the major

#### **Roles and Responsibilities**

#### Student

- creates the Integrated Studies option initial proposal and course contract (in collaboration with their CLAS Academic Advisor)
- meets regularly with their CLAS Academic Advisor to assess progress through the major, CLAS graduation requirements and CU Denver graduation requirements
- fulfills requirements of the Integrated Studies course contract

#### CLAS Academic Advisor

- reviews Integrated Studies option proposal and overall course contract together with the student
- meets with Integrated Studies option advisees to monitor progress
- maintains records of Integrated Studies option proposals and contracts
- · certifies graduation

#### Associate Dean

- approves student proposals and course clusters for Integrated Studies option majors
- signs off on Integrated Studies option course contracts
- may oversee advisee's capstone project
- may consult with student and other faculty on course clusters

#### **Faculty Advisor**

may oversee advisees' capstone projects

may consult with student and Associate Dean on course clusters

#### **Integrated Studies Coursework Requirements**

Students must complete a minimum of 36 credit hours towards their Integrated Studies option of the Individually Structured Major. Each cluster must consist of at least 15 credit hours, and one cluster must be based on a CLAS minor in the CU Denver catalog.

#### ISMA 3100: Learning Across Disciplines (3 credit hours)

This course introduces students to interdisciplinary thinking, methods, and writing. Examining a compelling issue chosen by the instructor (for example, hunger, human trafficking, healthcare reform, or war and PTSD), students will learn what kinds of questions require thinking beyond a single discipline, how interdisciplinary scholars combine the theories and methods of a variety of fields, and how to approach the challenges of interdisciplinary writing. The final project for ISMA 3100 requires students to combine the thinking, methods, and writing of at least two disciplines in an interdisciplinary project. Prerequisite: approval of ISM application (permission number).

Students may petition the appropriate Associate Dean to fulfill their introduction outside of ISMA 3100.

#### ISMA 4900: Interdisciplinary Studies Capstone (3 credit hours)

ISMA 4900 brings together students who have been working on their individualized majors to share a capstone experience. The goal of the capstone is for students to put their interdisciplinary learning into action - whether through a traditional research project or an experiential learning project. All students must produce a final project that demonstrates their abilities to pose an interdisciplinary question and synthesize the theories, methods, and analytical perspectives of their chosen disciplines to answer that question. While working with their Primary Faculty Advisors on their capstone projects, students meet to discuss their experiences and to get feedback from each other as their projects develop. Grades will be determined by the instructor of record in consultation with each student's Primary Faculty Advisor. Prerequisite: ISMA 3100 and Capstone proposal approved by faculty advisor.

Students may petition the appropriate Associate Dean to fulfill their capstones outside of ISMA 4900.

#### **Integrated Studies Policies and Procedures**

 Integrated Studies students must be in good academic standing, with a GPA of 2.0 or greater overall to graduate.

- Students must achieve a minimum grade of C- in all courses to be counted toward the major.
- Once the Integrated Studies option course contract is filed, any changes to coursework must be approved by the student's CLAS Academic Advisor and resubmitted to the Associate Dean for approval
- In addition to ISMA 3100 and ISMA 4900, students must take at least 18 upper division credit hours (9 each in each course cluster).
- A minimum of 24 Integrated Studies option credit hours must be completed with CU Denver faculty (at least 9 credits in each course cluster in addition to ISMA 3100 and ISMA 4900).
- Students will not receive minors in any of the cluster areas used toward the Individually Structured Major Integrated Studies option, even if the requirements for the minor are met.

# Individually Structured Major - Intercampus Interdisciplinary Option BA

#### Introduction

ISO is a system initiative realized through campus cooperation. Faculty and administrative representatives from the three comprehensive campuses of the University of Colorado System (CU Denver, CU Boulder, and UCCS) have participated in constructing the major, which they aim to launch in Fall 2018.

The central facets of the Option are:

- Collaborative Foundational Courses
  - Collaborative teams made up of faculty members from the three campuses have completed syllabi for three foundational courses and have begun the process of building these courses online through the Canvas Learning Management System (which the
  - o three comprehensive campuses have now adopted).
- Collaborative Course Clusters
  - Campus teams have vetted ten clusters across their campuses in discussions with faculty governance bodies, department chairs, and other groups to assure buy-in as well as to confirm that appropriate courses are included in the clusters.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. In addition to the Foundational Courses (9 credits), students must take at least 15 upper division credit hours.
- 2. Students must be in good academic standing, with a GPA of 2.0 or greater overall.
- 3. Students must achieve a minimum grade of C- in all major courses counted in the ISO
- 4. A minimum of 24 ISO credit hours in the major must be completed in residence at CU Denver, with CU Denver faculty.

Take all of the following courses:

- ISMA 1500 Introduction to Interdisciplinary Learning
- ISMA 3500 Interdisciplinary Experiential Learning
- ISMA 4500 Interdisciplinary Learning Capstone

#### **Clusters**

Take two student-chosen clusters.

Clusters are interdisciplinary groups of courses selected from each campus to support a recognizable topic shared among the three campuses; they differ from traditional campus- and disciplinary-based minors and certificate programs. Team ISO has created 10 interdisciplinary clusters from which students will select two, with each cluster containing a common group of courses drawn from the three comprehensive campuses:

- 1. Cultural Diversity
- 2. Research Methods & Data Analysis
- 3. Global Studies
- 4. Digital and Media Studies
- 5. Environment & Sustainability
- 6. Policy & Security

- 7. Social Justice Studies
- 8. Organizations & Leadership
- 9. Professional & Technical Communication
- 10. Health, Science, and Society

# Individually Structured Major - Interdisciplinary Studies BA

#### Introduction

Please click here to see Individually Structured Major department information.

The College of Liberal Arts and Sciences Interdisciplinary Studies Major (ISM) provides students with the opportunity to construct an individualized major that meets their unique needs and interests, and which results in a B.A. This flexible program allows students to follow academic pursuits that transcend traditional department or college boundaries, combining coursework from two, three, or even more academic units to explore a particular theme. An ISM tends to be more focused than traditional majors and should not be considered a default major for students uncertain about their course of study.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

• This is an on-campus program.

# **Declaring This Major**

- Click here to go to general information about declaring a major
- In order to declare an Interdisciplinary Studies Major, students are required to submit a
  program plan that includes a proposal and a course contract. Students should aim to
  complete a program plan before the end of the sophomore year. The proposal should be
  approved before students have taken one-third of the classes listed in their course
  contracts. Copies of your completed ISM proposal and course contract must be filed with
  the Associate Dean for Diversity, Outreach and Initiatives and with your CLAS Academic
  Advisor.
- The ISM proposal must include
  - o A description of your chosen theme (see below for sample themes).
  - An explanation of why the theme requires coursework that integrates multiple disciplines. You can choose a theme within interdisciplinary frameworks already established in CLAS but which do not offer BA degrees. These frameworks

- include Chinese Studies, Health Humanities, Law Studies, Religious Studies, Social Justice, Sustainability, and Women's and Gender Studies. You are also encouraged to create your own frameworks.
- An outline of specific learning objectives for the ISM (see below for sample learning objectives).
- Approval from the Associate Dean for Diversity, Outreach and Initiatives.
- Your ISM course contract must include
  - A list of the courses in your chosen disciplines and the optional "grab bag" of courses that you intend to apply to your ISM, as well as potential alternate courses. You should work closely with the Associate Dean for Diversity, Outreach and Initiatives and faculty advisors in your chosen disciplines to create your course contract.
  - Signatures from your chosen Primary Faculty Advisor from one of your main disciplines and signatures from Faculty Advisors from your other main disciplines. You do not need a faculty advisor for grab bag courses.
  - Signature from your Academic Advisor.
  - o Signature from the Associate Dean for Diversity, Outreach and Initiatives.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Requirements
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

- 1. ISM students must be in good academic standing, with a GPA of 2.0 or greater overall.
- 2. Students must achieve a minimum grade of C in all courses to be counted for an ISM.
- 3. The ISM proposal should be approved before students have taken one-third of the classes listed in their course contracts.
- 4. Once the ISM course contract is filed, any changes to coursework must be approved by the student's Primary Faculty Advisor and resubmitted to the Associate Dean for Diversity, Outreach and Initiatives and to the student's CLAS Academic Advisor.
- 5. In addition to ISMA 3100 and ISMA 4900 (or pre-approved alternatives), students must take at least 18 upper division credit hours (9 each in Discipline 1 and Discipline II).
- 6. A minimum of 24 ISM credit hours must be completed with CU Denver faculty (at least 9 credits in each of your main disciplines).
- 7. Between 48 and 54 semester hours are allowed for the program plan.
- 8. A minimum of 30 semester hours must be completed in liberal arts and sciences course work.
- 9. A maximum of one discipline (15 credits) may be outside CLAS.

- 10. A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
- 11. An ISM title must be consistent with the academic theme and disciplines in the program plan.
- 12. Students may petition the Associate Dean for Diversity, Outreach and Initiatives to fulfill their introduction and capstone outside of ISMA 3100 and ISMA 4900.

# **Roles and Responsibilities**

#### Student

- creates the ISM proposal and course contract (in collaboration with faculty advisors)
- meets regularly with ISM Primary Advisor to assess progress through ISM
- fulfills requirements of ISM course contract

#### Associate Dean for Diversity, Outreach and Initiatives

- approves student proposals for ISM
- signs off on ISM course contracts
- maintains records of ISM applications
- certifies graduation

#### Primary Faculty Advisor

- approves ISM course contract
- meets with ISM advisees to monitor progress
- oversees advisees' capstone projects

#### Other Faculty Advisors

- approve course contract
- help with capstone projects when needed

#### **CLAS Academic Advisor**

- reviews overall course contract
- approves exempt core area

# **ISM Coursework Requirements**

Students must complete a total of between 48 and 54 credit hours towards their ISM.

#### ISMA 3100 - Learning Across Disciplines (3 credit hours)

This course introduces students to interdisciplinary thinking, methods, and writing. Examining a compelling issue chosen by the instructor (for example, hunger, human trafficking, healthcare reform, or war and PTSD), students will learn what kinds of questions require thinking beyond a single discipline, how interdisciplinary scholars combine the theories and methods of a variety of fields, and how to approach the challenges of interdisciplinary writing. The final project for INST

3100 requires students to combine the thinking, methods, and writing at least two disciplines in an interdisciplinary project. Prerequisite: approval of ISM application (permission number).

#### Interdisciplinary Coursework (42-48 credit hours)

While the ISM requires students to take a minimum of 15 credit hours in each of two disciplines, students can fulfill the remainder of their credit hours by contracting with additional disciplines or by creating a "grab bag": choosing courses from a variety of disciplines that suit their ISM plan. Up to 15 credit hours for an ISM can come from outside of CLAS.

Sample breakdowns of what ISM coursework might look like:

Discipline I: 15 hours Discipline II: 15 hours Discipline III: 9 hours Discipline IV: 9 hours Total: 48 credit hours

Discipline I: 18 hours Discipline II: 15 hours

"Grab Bag" from four disciplines: 12 hours

Total: 45 credit hours

Discipline I: 24 hours
Discipline II: 18 hours
Total: 42 credit hours

#### ISMA 4900: Interdisciplinary Studies Capstone (3 credit hours)

Thgis course brings together students who have been working on their individualized majors to share a capstone experience. The goal of the ISM capstone is for students to put their interdisciplinary learning into action - whether through a traditional research project or an experiential learning project. All ISM students must produce a final project that demonstrates their abilities to pose an interdisciplinary question and synthesize the theories, methods, and analytical perspectives of their chosen disciplines to answer that question. While working with their Primary Faculty Advisors on their capstone projects, students meet to discuss their experiences and to get feedback from each other as their projects develop. Grades will be determined by the instructor of record in consultation with each student's Primary Faculty Advisor. Prerequisite: INST 3100 and Capstone proposal approved by faculty advisor. Students may petition the Associate Dean for Diversity, Outreach and Initiatives to fulfill their capstones outside of INST 4900.

# **Examples**

Examples of Interdisciplinary Studies Major themes could include:

- Global Health
- Victorian Studies
- Gender and Media
- Applied Sciences
- Urban Studies
- Consumers and Consumption

- Disability Studies
- Health and Sexuality
- Human Rights
- Human-centered design and innovation
- Food Studies
- Science, Technology, and Society
- Latin American Studies

An example course contract for Global Health could look like:

Discipline I: Anthropology

ANTH 1000 Anthropology: Past and Present OR ANTH 2102: Culture and the Human

Experience

ANTH 3032 Anthropology of Health Care Policy

ANTH 3210 Urban Food Systems and Sustainability

ANTH 4080 Global Health Practice (Travel Study Course)

ANTH 4300 Migrant Health

Discipline II: Public Health

PBHL 2001 Introduction to Public Health

PBHL 3041 Health, Culture, and Society

PBHL 3070 Perspectives in Global Health

PBHL 3071 Global Topics in Sexual and Reproductive Health

PBHL 4020 Global Health: Comparative Public Health Systems

#### Grab Bag

COMM 4500 Health Communication

ECON 4660 Health Economics

GEOG 3501 Geography of Health

HIST 4346 Medicine and Society: Ancients to the Present

SOCY 3440 Medical Sociology

Example of learning objectives for the ISM in Global Health:

Develop knowledge of current global health issues.

- Identify the theories, methods, and analytical perspectives of anthropology and public health to understand global health systems.
- Synthesize the theories, methods, and analytical perspectives of anthropology and public health, with input from other disciplines, to answer interdisciplinary questions.
- Communicate ideas effectively in writing and through speaking.
- Critically evaluate a variety of textual and statistical evidence.
- Demonstrate ethical approaches to studying a variety of cultural perspectives.

# Information Systems Major - BS in Business Administration (specializations available in Accounting, Finance, Human Resource Management, Management and Marketing)

#### Introduction

Please click here to see Business School information.

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) major draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competitive value. Courses require extensive hands-on projects, teamwork, and use of high-end technology. A combination of technical skills gained in class work with broad-based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

#### **Undergraduate Options**

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems specialization to another business discipline:

- Accounting with an Information Systems specialization
- Financial Management with an Information Systems specialization
- Management with an Information Systems specialization
- Marketing with an Information Systems specialization

#### **Career Opportunities**

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be

prepared for challenging careers as a business analyst, database analyst, Web content manager, project manager, IT consultant, and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation, and logistics and government.

Information systems are becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems major focuses on the effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution of IS infrastructure for use in accounting, finance, marketing, management and other business processes.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Require</u>ments
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

1. The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

Take all of the following courses:

- ISMG 2800 Designing for the Web
- ISMG 3500 Enterprise Data and Content Management
- ISMG 3600 System Strategy, Architecture and Design
- ISMG 4700 Business Data Communications and Networking

• <u>ISMG 4900 - Project Management and Practice</u> (also fulfills BGEN Experiential Learning requirement)

Take **one** of the following upper division programming courses:

- ISMG 4200 Building Business Applications
- ISMG 4400 Web Application Development

Take **two** of the following courses or, if following a specialization, select 2 courses from one of the specializations listed below:

- ISMG 4200 Building Business Applications (if not taken above)
- ISMG 4300 Information Security and Compliance
- ISMG 4400 Web Application Development (if not taken above)
- ISMG 4750 Business Intelligence and Financial Modeling
- ISMG 4760 Customer Relationship Management
- ACCT 4054 Accounting Information Systems
- CSCI 2312 Object Oriented Programming
- CSCI 2421 Data Structures and Program Design

**Note:** Not all Information Systems courses are offered every semester.

# **Accounting Specialization**

Take **two** of the following courses:

- ACCT 3220 Intermediate Financial Accounting I
- ACCT 3230 Intermediate Financial Accounting II
- ACCT 4054 Accounting Information Systems
- ACCT 4780 Accounting and Information Systems Processes and Controls

# Finance Specialization

Take **two** of the following courses:

- FNCE 3500 Management of Business Capital
- FNCE 3600 Financial Markets and Institutions
- FNCE 3700 Investment and Portfolio Management
- FNCE 4750 Business Intelligence and Financial Modeling

# **Human Resource Management Specialization**

Take **two** of the following courses:

- MGMT 3010 Managing People for a Competitive Advantage
- MGMT 4420 HR: Talent MGT
- MGMT 4430 Human Resources Management: Training
- MGMT 4450 Human Resources Management: Compensation
- MGMT 4770 Human Resource Information Systems

# **Management Specialization**

Take **two** of the following courses:

- MGMT 4350 Leading Organizational Change
- MGMT 4370 Organization Design
- MGMT 4400 Environments of International Business

# **Marketing Specialization**

- Take **two** of the following courses:
- MKTG 3100 Marketing Research
- MKTG 3200 Consumer Behavior
- MKTG 4050 Applied Marketing Management
- MKTG 4760 Customer Relationship Management

#### **Notes**

Students also have the opportunity to continue their education with an MS in Information Systems. The ISMG 4+1 program allows students to potentially complete the BS and MS degrees in as little as five years through substituting two graduate courses for two undergraduate courses. The graduate courses count towards both the BS and MS degrees.

If you are considering this 4+1 program, contact your advisor immediately so that you can appropriately plan your coursework. Email <a href="mailto:undergrad.advising@ucdenver.edu">undergrad.advising@ucdenver.edu</a>

# International Business Major - BS in Business Administration

## Introduction

Please click here to see Business School information.

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

# **Program Delivery**

This is an on-campus program.

# **Declaring This Major**

• Click here to go to information about declaring a major.

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

Take **all** of the following Foundation courses:

- MGMT 4370 Organization Design
- MKTG 4050 Applied Marketing Management
- FNCE / INTB 4370 International Financial Management
- INTB 4400 Environments of International Business
- INTB 4410 Operations of International Business
- INTB 4200 International Marketing

A second major in Business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and a minor in <a href="International Studies">International Studies</a>, offered by College of Liberal Arts and Sciences.

# International Studies BA

#### Introduction

Please click here to see International Studies department information.

In a world where the forces of politics, commerce, culture, and technology are multifaceted and interconnected, the International Studies major provides students with a muchneeded global perspective. International Studies is an interdisciplinary liberal arts degree that prepares students for international careers and graduate study. The International Studies major offers students a deep understanding of complex international issues and the underlying drivers that are shaping our world. Employers seek the qualities of International Studies graduates: historical knowledge, research ability, crosscultural competence, teamwork and leadership experience, and the ability to analyze, model, and solve realworld problems. The INTS major provides students with the methodological tools necessary to analyze various regions of the world and global issues from different academic disciplines. Students can take courses from departments including Anthropology, Business, Communication, Economics, Ethnic Studies, Geography, History, Modern Languages, Political Science, and Religious Studies, among others. This combination of coursework, flexibility, and customization provides International Studies majors a distinctive and valuable degree for today's world.

Degree requirements are subject to periodic revision by the academic program, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

International Studies students are expected to develop both a regional zone of expertise and thematic specialization. Students should choose courses from the introductory, zone, and theme lists that contribute to developing both a broad and deep understanding of international issues.

# **Program Delivery**

• This is an on-campus program.

# **Declaring This Major**

Click here to go to information about declaring a major

# **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- <u>CU Denver Core Curriculum</u>
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 48 credit hours.
- 2. Students must complete a minimum of 24 upper-division (3000-level and above) credit hours in the major.
- 3. Students must achieve a minimum GPA of 2.5 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 24 credit hours with CU Denver faculty.

# **Program Restrictions, Allowances and Recommendations**

- 1. No more than 56 credits accepted toward graduation.
- 2. Program Honors = 3.5 GPA within the major.
- 3. Students may use up to 6 internship credits toward international studies graduation requirements.
- 4. Students may use up to 6 credits of independent study toward international studies graduation requirements.
- 5. All International Studies majors must demonstrate proficiency in a language other than English. Non-native English speakers may use English for their language proficiency. Language requirements may be fulfilled by successful completion of the fourth semester of a foreign language course sequence or by passing an equivalent proficiency exam.
- 6. Both 3000- and 4000-level language courses may be counted toward the Zone or Focus Theme.
- 7. Two 2000-level courses in a relevant language may be used toward the Zone but must be in addition to the 4 upper division courses in the Zone. Students using two 2000 level language courses will count 6 total courses toward the Zone.
- 8. 1000-level language courses cannot be counted toward the major but may be used to fulfill other graduation requirements.

Take **all** of the following introductory courses:

- INTS 2020 Foundations of International Studies
- ECON 2012 Principles of Economics: Macroeconomics
- PSCI 3042 Introduction to International Relations or
- PSCI 3022 Political Systems of the World
- HIST 4032 Globalization in World History Since 1945

- COMM 4720 Dynamics of Global Communication or
- ANTH 2102 Culture and the Human Experience

Take the following International Studies Capstone course:

- INTS 4990 International Studies Capstone
- (taken in a student's final year of the program)

Take **ten** courses drawn from one Zone of Expertise and one Focus Theme:

- At least four courses from one Zone of Expertise. At least four courses from one Focus Theme.
- At least one High Impact course beyond the Capstone, e.g., global study, study abroad, internship, service learning, or independent study.
- Students must take courses in at least two different disciplines for both their Zone of Expertise and Focus Theme.
- Students who do not apply two 2000level language courses to their degree must use those two course slots for additional courses related to their chosen Zone of Expertise and/or Focus Theme.

#### **Zones of Expertise:**

- Africa (SubSaharan; French or other relevant language) Asia (Chinese or other relevant language)
- Colonial, NeoColonial, & PostColonial Worlds (English for nonnative speakers, French, German, Spanish, or other relevant language)
- Europe (English for nonnative speakers, French, German, Spanish, or other relevant language) Global (any language, English for nonnative speakers)
- Islamic World (Arabic or other relevant language) Latin America (Spanish or other relevant language)
- North America (English for nonnative speakers, French, Spanish, or other relevant language)

#### **Focus Themes:**

- o Activism, Resistance, & Social Justice
- Environmental Studies
- Ethnicity, Nationalism, & Migration
- Feminist Theory & Gender Studies

- Global Arts & Cultures
- Global Development Studies
- Global Health Studies
- o International Business, Communication, & Media
- International Political Economy
- Peace, Human Rights, & Security

## Management Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

Take **all** of the following required courses:

MGMT 3010 - Managing People for a Competitive Advantage

- MGMT 4330 Mastering Management
- MGMT 4350 Leading Organizational Change
- MGMT 4370 Organization Design
- MKTG 4050 Applied Marketing Management

Take **two** of the following courses:

- ENTP 3200 Essentials in Entrepreneurship
- ENTP 3500 Entrepreneurship Law and Ethics
- Or select any two 3000 or 4000-level MGMT electives

#### Note

Students also have the option to complete a management major with a specialization in Information Systems. Click <u>here</u> to view this option.

# Management Major - BS in Business Administration with specialization in Information Systems

#### Introduction

Please click here to see Business School information.

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management. Information technology is the prime driver of business strategy. This specialization focuses on the strategic, technological, financial, and organizational issues involved with the effective management of information technology.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- <u>CU Denver Core Curriculum</u>
- Business School Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

Take **all** of the following required courses:

- MGMT 3010 Managing People for a Competitive Advantage
- MGMT 4330 Mastering Management
- MGMT 4350 Leading Organizational Change
- MGMT 4370 Organization Design
- MKTG 4050 Applied Marketing Management
- ISMG 3500 Enterprise Data and Content Management
- ISMG 3600 System Strategy, Architecture and Design
- ISMG 4900 Project Management and Practice (also fulfills BGEN Experiential Learning requirement)

Take **two** of the following courses:

- ENTP 3200 Essentials in Entrepreneurship
- ENTP 3500 Entrepreneurship Law and Ethics
- Or select any two 3000 or 4000-level MGMT electives

## Marketing Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing

the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

Take **all** of the following required courses:

- MKTG 3100 Marketing Research
- MKTG 4050 Applied Marketing Management

Take any **six** 3000 or 4000-level and above MKTG prefixed courses, such as:

- MKTG 3200 Consumer Behavior
- MKTG 3300 Social Media in Business
- MKTG 4000 Advertising
- MKTG 4200 International Marketing
- MKTG 4220 Asian Business Development and Marketing
- MKTG 4250 Sports Marketing
- MKTG 4251 Music and Media Marketing
- MKTG 4580 International Transportation
- MKTG 4620 Customer Service Strategies

- MKTG 4700 Personal Selling and Sales Management
- MKTG 4720 Internet Marketing
- MKTG 4730 New Product Development for Consumer and Sports Products
- MKTG 4760 Customer Relationship Management
- MKTG 4780 Preparing Business Plan
- MKTG 4950 Special Topics
- **Note:** Additional MKTG electives may be available. Please check the UCD Access course offerings each term.

For career paths in Marketing Strategy/Brand Management and Communications, the following courses are recommended:

- MKTG 3200 Consumer Behavior
- MKTG 3300 Social Media in Business
- MKTG 4000 Advertising
- MKTG 4620 Customer Service Strategies

#### Note

Students also have the option to complete a Marketing major with a specialization in Information Systems. Click <u>here</u> to view this option.

### Marketing Major - BS in Business Administration with specialization in Information Systems

#### Introduction

Please here to see Business School information.

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing

the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems, and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

Within a specialization in Information Systems students can complement their individual interests as well as prior education and work experiences.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- Business School Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

Take **all** of the following required courses:

- MKTG 3100 Marketing Research
- MKTG 4050 Applied Marketing Management
- ISMG 3500 Enterprise Data and Content Management
- ISMG 3600 System Strategy, Architecture and Design
- ISMG 4760 Customer Relationship Management
- ISMG 4900 Project Management and Practice (also fulfills the BGEN Experiential Learning requirement)

Take any **two** 3000 or 4000-level and above MKTG prefixed courses:

MKTG 3200 - Consumer Behavior

- MKTG 3300 Social Media in Business
- MKTG 4000 Advertising
- MKTG 4200 International Marketing
- MKTG 4220 Asian Business Development and Marketing
- MKTG 4250 Sports Marketing
- MKTG 4251 Music and Media Marketing
- MKTG 4580 International Transportation
- MKTG 4620 Customer Service Strategies
- MKTG 4700 Personal Selling and Sales Management
- MKTG 4720 Internet Marketing
- MKTG 4730 New Product Development for Consumer and Sports Products
- MKTG 4760 Customer Relationship Management
- MKTG 4780 Preparing Business Plan
- MKTG 4950 Special Topics

For career paths in Marketing Strategy/Brand Management and Communications, the following courses are recommended:

- MKTG 3200 Consumer Behavior
- MKTG 3300 Social Media in Business
- MKTG 4000 Advertising
- MKTG 4620 Customer Service Strategies

### **Mathematics - Applied Option BS**

#### Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 55 credit hours, including a minimum of 42 MATH credit hours and 13 credit hours in ancillary coursework.
- 2. Students must complete at least 30 upper division (3000-level and above) credit hours in the major.
- Students must achieve a minimum GPA of 2.25 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 MATH credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Students must complete at least 15 of their upper-division level MATH credits with CU Denver faculty.
- 2. Students may not use any of the following MATH courses to count toward major requirements: MATH 3040, MATH 3195, MATH 3511, MATH 3800, MATH 3999, MATH 4012, MATH 4013, MATH 4014 and MATH 4830.

Take **both** of the following Computer Science courses:

- CSCI 1410 Fundamentals of Computing
- CSCI 1411 Fundamentals of Computing Laboratory

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3000 Introduction to Abstract Mathematics
- MATH 3191 Applied Linear Algebra
- MATH 3200 Elementary Differential Equations

- MATH 3382 Statistical Theory
- MATH 4310 Introduction to Real Analysis I
- MATH 4650 Numerical Analysis I
- MATH 4733 Partial Differential Equations
- MATH 4779 Math Clinic

Take **two** approved MATH electives (at least six semester hours) above the 3000 level, excluding 3040, 3195, 3511, 3800, 3999, 4012, 4013, 4014 and 4830.

Take **three** additional courses countable towards a major in the following subjects, at any level: Business, Biology, Chemistry, Computer Science, Economics, Geology or Physics. Other areas allowable on a case-by-case basis.

## Mathematics - Probability and Statistics Option BS

#### Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 55 credit hours, including a minimum of 42 MATH credit hours and 13 credit hours in ancillary coursework.
- 2. Students must complete at least 30 upper division (3000-level and above) credit hours in the major.
- 3. Students must achieve a minimum GPA of 2.25 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- Students must complete a minimum of 15 upper division level credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Students must complete at least 15 of their upper-division level MATH credits with CU Denver faculty.
- 2. Students may not use any of the following MATH courses to count toward major requirements: MATH 3040, MATH 3195, MATH 3511, MATH 3800, MATH 3999, MATH 4012, MATH 4013, MATH 4014 and MATH 4830.

Take **both** of the following Computer Science courses:

- CSCI 1410 Fundamentals of Computing
- CSCI 1411 Fundamentals of Computing Laboratory

Take all of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3000 Introduction to Abstract Mathematics
- MATH 3191 Applied Linear Algebra
- MATH 3382 Statistical Theory
- MATH 4310 Introduction to Real Analysis I
- MATH 4387 Applied Regression Analysis
- MATH 4810 Probability

Take **one** of the following Mathematics courses:

- MATH 4779 Math Clinic
- MATH 6330 Workshop in Statistical Consulting

Take **one** of the following Probability and Statistics courses:

- MATH 4390 Game Theory
- MATH 4394 Experimental Designs
- MATH 4792 Probabilistic Modeling
- MATH 5350 Mathematical Theory of Interest
- ECON 4030 Data Analysis with SAS

Take **two** approved MATH electives (at least six semester hours) above the 3000 level, excluding 3040, 3195, 3511, 3800, 3999, 4012, 4013, 4014 and 4830.

Take **three** additional courses countable towards a major in one of the following subjects, at any level: Business, Biology, Economics, Health and Behavioral Sciences, Sociology. Other areas allowable on a case-by-case basis.

### **Mathematics BS**

#### Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

• This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 46 credit hours, including a minimum of 42 MATH credit hours and 4 credit hours in ancillary coursework.
- 2. Students must complete at least 30 upper division (3000-level and above) credit hours in the major.
- 3. Students must achieve a minimum GPA of 2.25 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 MATH credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- Students must complete at least 15 of their upper-division level MATH credits with CU Denver faculty.
- 2. Students may not use any of the following MATH courses to count toward major requirements: MATH 3040, MATH 3195, MATH 3511, MATH 3800, MATH 3999, MATH 4012, MATH 4013, MATH 4014 and MATH 4830.

Take **both** of the following Computer Science courses:

- CSCI 1410 Fundamentals of Computing
- CSCI 1411 Fundamentals of Computing Laboratory

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3000 Introduction to Abstract Mathematics
- MATH 3191 Applied Linear Algebra
- MATH 3382 Statistical Theory
- MATH 4310 Introduction to Real Analysis I

Take **one** of the following Mathematics courses:

- MATH 4779 Math Clinic
- MATH 4015 Capstone Course for Secondary Teachers
- MATH 6330 Workshop in Statistical Consulting

Take **five** approved MATH electives (at least fifteen semester hours) above the 3000 level, excluding 3040, 3195, 3511, 3800, 3999, 4012, 4013, 4014 and 4830.

### **Mechanical Engineering BS**

#### Introduction

Please click here to see Mechanical Engineering department information.

The mechanical engineer is concerned with satisfying the needs of society using a combination of material, human and economic resources. Mechanical engineering covers a wide spectrum of activities in the engineering profession. These activities include the conversion and transmission of energy and associated power processes; the kinematic, dynamic, strength and wear considerations, as well as economic aspects of the development, design and use of materials, machines and processes; and the analysis, synthesis and control of entire engineering systems.

The program offered by the Department of Mechanical Engineering of the University of Colorado Denver can be completed in the afternoon and evening hours to accommodate both working and traditional students. The department seeks to graduate a diverse population of students with a bachelor's degrees who within a few years of graduation are able to:

- 1. be employed by a diverse group of industries, research laboratories and educational institutions
- 2. pursue careers in engineering, interdisciplinary areas, research and education
- 3. pursue postgraduate education and advanced degrees

The mechanical engineering curriculum begins with a strong emphasis on mathematics, physics and chemistry. It continues with a concentration in engineering sciences, including solid and fluid mechanics; thermodynamics, heat and mass transport; materials; and systems analysis and control. It concludes with laboratory and design courses that demonstrate the ways in which scientific knowledge is applied in the design and development of useful devices and manufacturing processes.

The mechanical engineering program may be roughly subdivided into two-year groupings. In the first two years, the program emphasizes the fundamentals of mathematics and basic science that are essential for an understanding of most branches of engineering. In the last two years of

the program, the curriculum emphasizes engineering science and design and provides technical electives in the following areas:

- thermodynamics
- heat transfer
- fluid mechanics
- solid mechanics
- motorsports engineering
- power
- biomechanics
- dynamics and controls
- computer-aided design and manufacturing
- thermomechanical systems
- composite materials
- additive manufacturing

#### **Program Delivery**

• This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Engineering, Design and Computing Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. <u>CVEN 2121</u> and <u>CVEN 3111</u> may be substituted for <u>MECH 2023</u> and <u>MECH 2033</u> respectively.
- 2. Not all courses may be offered every semester.
- 3. Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
- 4. Students must maintain a minimum 2.0 GPA in all MECH courses attempted.
- 5. Students must complete a minimum of 128 semester hours of course work.
- 6. The last 30 hours must be earned as a degree-seeking student in the College of Engineering, Design and Computing at CU Denver.

Take **all** of the following courses in Mechanical Engineering major:

- MECH 1025 CAD and Graphics for Mechanical Engineering
- MECH 2023 Statics or
- CVEN 2121 Analytical Mechanics I
- MECH 2033 Dynamics or
- CVEN 3111 Analytical Mechanics II
- MECH 3030 Electric Circuits and Systems
- MECH 1045 Manufacturing Processes Design
- MECH 2024 Introduction to Materials Science
- MECH 2034 Properties of Engineering Materials
- MECH 3010 Elementary Numerical Methods and Programming
- MECH 3012 Thermodynamics
- MECH 3021 Introduction to Fluid Mechanics
- MECH 3022 Thermodynamics II
- MECH 3023 System Dynamics I: Vibrations
- MECH 3027 Measurements
- MECH 3028 Laboratory of Mechanical Measurements
- MECH 3031 Fluids/Thermal Laboratory
- MECH 3032 Electric Circuits and Systems Lab
- MECH 3035 Design of Mechanical Elements
- MECH 3042 Heat Transfer
- MECH 3043 Strength of Materials
- MECH 4035 Senior Design I
- MECH 4045 Senior Design II
- MECH 4142 Thermal Systems Design

Take 12 semester hours of Technical Electives.

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3195 Linear Algebra and Differential Equations

Take **all** of the following Science courses:

- CHEM 1130 Engineering General Chemistry \*
- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II

\*ENGR 1130 is an acceptable substitute for CHEM 1130

## Music Business Emphasis, Audition Track, Music BS

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

The music business emphasis prepares musicians for careers in such fields as artist management, music publishing, concert promotion, record production, venue management, label promotion, distribution and entertainment law.

#### **Program Delivery**

• This is an on-campus program.

#### **Declaring This Major**

- Click here to go to information about declaring a major.
- The Bachelor of Science (BS) in Music has a competitive application process. Please refer to the <u>Department of Music & Entertainment Industry Studies website</u> for detailed guidelines and information.
- Students who wish to pursue the music business emphasis, audition track, are required
  to pass an entrance audition on their primary instrument or voice as part of the
  application process and to pass varying levels of performance proficiency as part of the
  curriculum. Please contact the College of Arts & Media at <a href="CAM@ucdenver.edu">CAM@ucdenver.edu</a> for
  further information.

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. To earn a BS in Music, students must complete musicianship courses, Music & Entertainment Industry Studies core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take **all** of the following Musicianship course groups:

- PMUS 1100 Music Theory I
- PMUS 1110 Ear Training and Sight Singing I
- PMUS 1023 Piano Class I
- PMUS 1200 Music Theory II
- PMUS 1210 Ear Training and Sight Singing II
- PMUS 1024 Piano Class II
- PMUS 2100 Music Theory III
- PMUS 2110 Ear Training and Sight Singing III
- PMUS 1025 Piano Class III

- PMUS 2200 Jazz Theory PMUS 1026 Piano Class IV

•	PMUS 1 Applied Instrument/Voice (1 semester hour)  PMUS 1500 - General Recital (1 semester hour)  PMUS Ensemble (1 semester hour) <i>Note:</i> Students must complete PMUS 1470 - Performance Practice Ensemble during their first or second semester of Applied Instrument/Voice.
•	PMUS 1 Applied Instrument/Voice (1 semester hour)  PMUS 1500 - General Recital (1 semester hour)  PMUS Ensemble (1 semester hour)
•	PMUS 2 Applied Instrument/Voice (1 semester hour)  PMUS 1500 - General Recital (1 semester hour)  PMUS Ensemble (1 semester hour)
•	PMUS 2 Applied Instrument/Voice (1 semester hour)  PMUS 1500 - General Recital (1 semester hour)  PMUS Ensemble (1 semester hour)
•	Take <b>all</b> of the following Musicianship courses:  PMUS 3832 - Music in Culture  PMUS Music History Elective  PMUS or MUSC Music Elective (3 semester hours)  PMUS Ensemble (1 semester hour)  PMUS Ensemble (1 semester hour)

Take all of the following Music & Entertainment Industry Studies Core courses:

- MUSC 2700 Introduction to Music Business
   MUSC 1540 Introduction to Audio Production

Take **all** of the following Music Business Emphasis courses:

- MUSC 3210 Music and Entertainment Marketing
- MUSC 3220 Artist Management
- MUSC 3690 Concert Promotion, Tour, and Venue Management
- MUSC 3700 Music and Entertainment Business in the Digital Age
- MUSC 3710 CAM Records
- MUSC 3755 Music Publishing
- MUSC 3720 Law and the Music Industry
- MUSC 4740 Music Business Analysis
- MUSC 4890 Music Business Senior Seminar

Take **six** semester hours of Music Business elective.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

## Music Business Emphasis, Non-Audition Track, Music BS

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

The music business emphasis prepares undergraduates for careers in such fields as artist management, music publishing, concert promotion, record production, venue management, label promotion, distribution and entertainment law.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

- Click here to go to information about declaring a major.
- The Bachelor of Science (BS) in Music has a competitive application process. Please refer to the <u>Department of Music & Entertainment Industry Studies website</u> for detailed guidelines and information.

• Students who wish to pursue the music business emphasis, non-audition track, are not required to complete an audition as part of the application process. Students will be assessed for varying levels of performance proficiency as part of the curriculum. Please contact the College of Arts & Media at CAM@ucdenver.edu for further information.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. To earn a BS in Music, students must complete musicianship courses, Music & Entertainment Industry Studies core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
- A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take **all** of the following Musicianship course groups:

- PMUS 1100 Music Theory I
- PMUS 1110 Ear Training and Sight Singing I
- PMUS 1023 Piano Class I
- PMUS 1200 Music Theory II
- PMUS 1210 Ear Training and Sight Singing II
- PMUS 1024 Piano Class II
- PMUS 18 Applied Instrument/Voice, Non-Juried (1 semester hour)
- PMUS 1500 General Recital (1 semester)
- PMUS 18 Applied Instrument/Voice, Non-Juried (1 semester hour)
- PMUS 1500 General Recital (1 semester)

Take **all** of the following Musicianship courses:

- PMUS 1310 Sight Reading and Improvisation
- PMUS 2310 Introduction to Songwriting
- PMUS 3832 Music in Culture
- PMUS \_\_\_\_ Music History Elective
- PMUS or MUSC \_\_\_\_ Music Elective (3 semester hours)
- PMUS \_\_\_\_ Ensemble (1 semester hour)
- PMUS \_\_\_\_ Ensemble (1 semester hour)
- Take any two of the following Musicianship courses:
- PMUS 1025 Piano Class III
- PMUS 1026 Piano Class IV
- PMUS 1040 Class Guitar
- PMUS 1041 Class Guitar II
- PMUS 1050 Voice Class I
- PMUS 1060 Voice Class II

Take **one** of the following Musicianship courses:

- PMUS 2200 Jazz Theory
- PMUS 3310 Intermediate Songwriting
- PMUS 2220 Commercial Electronic Music Composition

Take **three** semester hours of Music Performance electives.

Take **all** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 2700 Introduction to Music Business
- MUSC 1540 Introduction to Audio Production

Take **all** of the following Music Business Emphasis courses:

- MUSC 3210 Music and Entertainment Marketing
- MUSC 3220 Artist Management
- MUSC 3690 Concert Promotion, Tour, and Venue Management
- MUSC 3700 Music and Entertainment Business in the Digital Age
- MUSC 3710 CAM Records
- MUSC 3755 Music Publishing

- MUSC 3720 Law and the Music Industry
- MUSC 4740 Music Business Analysis
- MUSC 4890 Music Business Senior Seminar

Take **nine** semester hours of Music Business Emphasis electives.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

### Performance Emphasis, Music BS

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

The performance emphasis includes specialized courses in small performance ensembles, applied private study, contemporary improvisation, and analysis and history. Students gain a diverse set of performance skills in commercial, jazz, classical and experimental music styles.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

- Click here to go to information about declaring a major.
- The Bachelor of Science (BS) in Music has a competitive application process. Please refer to the <u>Department of Music & Entertainment Industry Studies website</u> for detailed guidelines and information.
- Students who wish to pursue the performance emphasis are required to pass an
  entrance audition on their primary instrument or voice as part of the application process
  and to pass varying levels of performance proficiency as part of the curriculum. This
  includes passing a Sophomore Proficiency on their primary instrument or voice in order
  to maintain performance emphasis status. Each student is also required to successfully
  complete a junior recital and the 2-credit PMUS 4200 Senior Recital Project. Please
  contact the College of Arts & Media at CAM@ucdenver.edu for further information.

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. To earn a BS in Music, students must complete musicianship courses, Music & Entertainment Industry Studies core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take **all** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 2700 Introduction to Music Business
- MUSC 1540 Introduction to Audio Production

Take **one** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 3210 Music and Entertainment Marketing
- MUSC 3220 Artist Management

Take **all** of the following Musicianship course groups:

- PMUS 1100 Music Theory I
- PMUS 1110 Ear Training and Sight Singing I
- PMUS 1023 Piano Class I
- PMUS 1200 Music Theory II
- PMUS 1210 Ear Training and Sight Singing II
- PMUS 1024 Piano Class II

•	PMUS 2100 - Music Theory III PMUS 2110 - Ear Training and Sight Singing III PMUS 1025 - Piano Class III
	PMUS 2200 - Jazz Theory PMUS 1026 - Piano Class IV
•	PMUS 1 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour) <i>Note:</i> Students must complete <u>PMUS 1470 - Performance Practice Ensemble</u> during their first or second semester of Applied Instrument/Voice.
	PMUS 1 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
•	PMUS 2 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
•	PMUS 2 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)

	Take all of the following Musicianship courses:
•	PMUS 3832 - Music in Culture PMUS Music History elective
	Take <b>all</b> of the following Performance Emphasis course groups:
•	PMUS 3 Applied Instrument/Voice (2 semester hours) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
•	PMUS 3 Applied Instrument/Voice (2 semester hours) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
•	PMUS 4 Applied Instrument/Voice (2 semester hours) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
•	PMUS 4 Applied Instrument/Voice (2 semester hours) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)

Take  $\ensuremath{\mathbf{one}}$  of the following Performance Emphasis courses:

PMUS 3300 - Advanced Jazz Improvisation

PMUS 3330 - Advanced Vocal Improvisation (for Voice students only)

Take **all** of the following Performance Emphasis courses:

- PMUS 3210 Introduction to Teaching Private Music Lessons
- PMUS 4060 Music Theory Analysis
- PMUS 4200 Senior Recital Project

Take **eleven** semester hours of Music electives. Specific elective courses may be required depending on student's primary instrument.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

### Philosophy BA

#### Introduction

Please click here to see Philosophy department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Degree Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 36\* PHIL credit hours.
- 2. Students must complete a minimum of 27 upper-division (3000-level and above) PHIL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C- (1.7) and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 18 PHIL credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- Courses taken at other institutions must either be transferred as direct equivalent to a CU Denver course or be approved by an advisor in the Philosophy Department for application towards the major.
- 2. For those students who major in philosophy and minor in ethics, philosophy or philosophy of science, up to two courses can satisfy the requirements for both.
- 3. For those students who qualify for and fulfill the requirements of graduation with Honors, a total of at least 39 hours is required.
- 4. Courses not specifically listed here but offered by the Department may count toward the degree upon the approval of the Department Undergraduate Advisor.

Take **all** of the following required courses:

- PHIL 2441 Logic, Language and Scientific Reasoning
- or
- PHIL 3440 Introduction to Symbolic Logic
- PHIL 3002 Ancient Greek Philosophy
- PHIL 3022 Modern Philosophy
- PHIL 3760 Kant

Take **one** of the following upper division Social/Political Philosophy courses:

- PHIL 3200 Social and Political Philosophy
- PHIL 3280 War and Morality
- PHIL 3500 Ideology and Culture: Racism and Sexism
- PHIL 4500 Feminist Philosophy

Take **one** of the following upper division Ethics courses:

- PHIL 3150 History of Ethics
- PHIL 3250 Business Ethics
- PHIL 3280 War and Morality
- PHIL 3500 Ideology Culture
- PHIL 3550 Philosophy of Death and Dying
- PHIL 4242 Bioethics
- PHIL 4250 Environmental Ethics
- PHIL 4260 Philosophy of Law
- PHIL 4500 Feminist Philosophy

Take **one** of the following upper division Continental Philosophy courses:

- PHIL 4780 Heidegger
- PHIL 4790 Nietzsche
- PHIL 4833 Existentialism
- PHIL 4500 Feminist Philosophy

Take **one** of the following upper division American or Analytic Philosophy courses:

- PHIL 3032 Twentieth Century Analytic Philosophy
- PHIL 4101 Pragmatism: Classical American Philosophy
- PHIL 4300 Philosophy of Mind
- PHIL 4350 Philosophy of Science
- PHIL 4900 John Dewey

Take **one** of the following history of Philosophy courses:

- PHIL 3005 Roman and Early Medieval Philosophy
- PHIL 3010 Medieval Philosophy
- PHIL 3022 Modern Philosophy
- PHIL 3032 Twentieth Century Analytic Philosophy
- PHIL 4000 19th Century Philosophy
- PHIL 4101 Pragmatism: Classical American Philosophy
- PHIL 4735 Rationalism

- PHIL 4740 Empiricism
- PHIL 4770 Hegel
- PHIL 4780 Heidegger
- PHIL 4790 Nietzsche
- PHIL 4795 Marx and Marxism
- PHIL 4800 Plato
- PHIL 4810 Aristotle
- PHIL 4820 Hume
- PHIL 4833 Existentialism
- PHIL 4900 John Dewey

Take **one** additional upper division elective (courses from previous lists may apply if they were not already used to satisfy distribution area requirements)

Take **two** additional PHIL electives (may be upper or lower division)

### Photography Emphasis, Fine Arts BFA

#### Introduction

Please click here to see general Visual Arts information.

Students in the photography emphasis develop skills in traditional and digital photography while refining their creative and conceptual approaches to the medium. The photography curriculum emphasizes individual artistic development that integrates the history of photography, critical theory and contemporary practice. Through an exploration of photographic techniques, students are given the tools to create visually compelling images that communicate their artistic ideas.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **QUESTIONS**

For more information, please contact <a href="mailto:CAM@ucdenver.edu">CAM@ucdenver.edu</a>.

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by Department of Visual Arts faculty.
- 3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
- 4. At least 24 semester hours of total visual arts courses must be upper-division.

Take **all** of the following Foundations courses:

- FINE 1100 Drawing I
- FINE 1150 Introduction to Darkroom Photography
- FINE 1400 Two-Dimensional Design
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II

Take all of the following Photography Emphasis courses:

- FINE 3156 Photography Studio and Lighting
- FINE 3160 Color and the Constructed Image
- FINE 3161 The Silver Fine Print
- FINE 3162 The Digital Fine Print
- FINE 3171 Concepts and Processes in Photography
- FINE 3172 Photography and Community
- FINE 4195 Advanced Photography I
- FINE 4196 Advanced Photography II

Take **all** of the following Visual Arts courses:

- FINE 3630 History of Photography
- FINE 3631 Photography: Theory and Criticism
- FINE 3635 Photography Now
- FINE 4990 Contemporary Art: 1960 to Present

Take **three** semester hours of Pre-20th Century Art History elective.

Take **three** semester hours of Studio Arts elective in an area outside of photography.

Take **nine** semester hours of Studio Arts electives.

Take **six** semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses.

Take the following Capstone course:

FINE 4950 - Studio BFA Thesis

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

## Physics - Pure and Applied Physics Option BS

#### Introduction

Please click here to see Physics department information.

Students are strongly encouraged to consult with the Physics advisor, meet physics faculty engaged in Pure & Applied Physics research, attend departmental seminars, and explore ways that Physics relates to research undertaken by faculty in other disciplines.

For more information, contact: Clyde Zaidins (Physics advisor) Clyde.zaidins@ucdenver.edu Office:North Classroom 3123B

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

• This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- Students must complete a total of 63 credits, including a minimum of 47 PHYS credit hours and 16 credit hours in ancillary coursework
- 2. Students must complete a minimum of 16 upper-division (3000-level and above) credit hours in the major.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all ancillary and transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 12 PHYS credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Students must declare their intention to major in Physics by the time they have completed 60 semester hours
- 2. The introductory labs, PHYS 2351 and PHYS 2361, are required for all physics majors. If the department is unable to offer one or both of these labs then PHYS 2321 may be substituted for PHYS 2351 and PHYS 2341 may be substituted for PHYS 2361, upon prior advisor approval.
- 3. Students earning a Physics major cannot earn a Physics minor. A senior thesis is required for all students wishing to graduate with departmental honors. For all other students, the faculty encourages a senior thesis or project.
- 4. Students who must retake PHYS 4331 may fulfill this requirement by obtaining a C or better in: PHYS 4351 Bioelectromagnetism
- 5. The department will accept the following combination of math courses in place of MATH 3195:
- MATH 3191 Applied Linear Algebra
- MATH 3200 Elementary Differential Equations

Take **all** of the following required courses:

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2351 Applied Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2361 Applied Physics Lab II
- PHYS 2711 Vibrations and Waves
- PHYS 2811 Modern Physics I
- PHYS 3120 Methods of Mathematical Physics
- PHYS 3711 Junior Laboratory I
- PHYS 3811 Quantum Mechanics

The introductory labs, PHYS 2351 and PHYS 2361, are required for all physics majors. If the department is unable to offer one or both of these labs then <u>PHYS 2321</u> may be substituted for PHYS 2351 and <u>PHYS 2341</u> may be substituted for PHYS 2361, upon prior advisor approval.

Take all of the following ancillary courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- \* MATH 3195 Linear Algebra and Differential Equations

Take **all** of the following Pure and Applied Physics track courses:

- PHYS 3211 Analytical Mechanics
- PHYS 3411 Thermal Physics
- PHYS 3721 Junior Laboratory II
- \* PHYS 4331 Principles of Electricity and Magnetism
- PHYS 4711 Senior Laboratory I
- (or a course in computational physics approved by advisor)

Take **six** 3000-level or above PHYS credit hours, including up to 3 semester hours of independent study.

## Political Science - Public Policy Option, BA

#### Introduction

Please click here to see Political Science department information.

This option was designed for students who desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. This BA track emphasizes the specifically political aspects of public policy processes and is grounded in political science theory and familiarity with American, Comparative and International politics. Courses will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy-making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 39 PSCI credit hours.
- 2. Students must complete a minimum of 21 upper division (3000-level and above) PSCI credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 PSCI credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

1. Students with significant pre-existing political or civic engagement experience in the community, or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the experiential-learning requirement; the overall requirement of 39 credit hours for Political Science graduation will still apply.

Take **all** of the following courses:

- PSCI 1001 Introduction to Political Science: The Quest for Freedom and Justice
- PSCI 1101 American Political System
- PSCI 2011 Logic of Political Inquiry

Take **one** of the following American Politics courses:

- PSCI 4002 Topics in Political Science
- PSCI 4014 Media and Politics
- PSCI 4024 State Politics: Focus Colorado
- PSCI 4044 The Presidency
- PSCI 4074 Urban Politics
- PSCI 4075 Gentrification and Social Equity
- PSCI 4094 Seminar: American Politics
- PSCI 4124 Denver Politics
- PSCI 4354 Environmental Politics

- PSCI 4477 Constitutional Law I
- PSCI 4487 Constitutional Law II
- PSCI 4535 Labor and Working Class Politics
- PSCI 4545 Immigration Politics

Take **one** of the following Comparative Politics and International Relations courses:

- PSCI 4025 Local Governance and Globalization
- PSCI 4085 Comparative Governance: Environment and Society
- PSCI 4185 Corruption in the U.S. and Abroad
- PSCI 4226 The United Nations in World Affairs
- PSCI 4236 American Foreign Policy
- PSCI 4266 International Law
- PSCI 4326 Advanced International Political Economy: Globalization
- PSCI 4434 The Cooperative Movement: Politics and Policy
- PSCI 4524 The Social Economy and Sustainable Development
- PSCI 4645 Comparative Political Leadership

Take **one** of the following Public Policy and Administration courses:

- PSCI 4009 Politics of the Budgetary Process
- PSCI 4024 State Politics: Focus Colorado
- PSCI 4084 Local Government and Administration
- PSCI 4274 Conflict Resolution and Public Consent Building
- PSCI 4414 Non-Profits and Social Change
- PSCI 4914 Community Organizing and Community Development

Take any **two** additional courses from the three fields above, plus take any **one** other upper or lower-division PSCI course.

Take **two** of the following Political Theory courses:

- PSCI 4207 Theories of Social and Political Change
- PSCI 4265 Social Justice And Globalization
- PSCI 4407 Early Political Thought
- PSCI 4417 Modern Political Thought
- PSCI 4427 Law, Politics and Justice
- PSCI 4437 Coercion and the State
- PSCI 4457 American Political Thought

Take **one** of the following courses:

- PSCI 3914 The Urban Citizen
- PSCI 3939 Internship
- PSCI 4934 CU at the Capitol
- PSCI 4995 Global Study Topics

Students must complete a capstone experience by enrolling in the following course, any time after completing 27 credit hours in the Major.

PSCI 4960 - Capstone in Political Science

## **Political Science BA**

#### Introduction

Please click here to see Political Science department information.

Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum

- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 39 PSCI credit hours.
- 2. Students must complete a minimum of 21 upper division (3000-level and above) PSCI credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 15 PSCI credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

- 1. Exceptions to the coursework requirement of the Experiential Learning Requirement
  - In lieu of taking one of the identified courses, students may complete a substantial
    experiential learning project in a different PSCI class. The course instructor must
    certify with a written submission to the departmental undergraduate advisor that the
    experiential learning project in that course fulfills the departmental experiential
    learning requirement.
  - Students with preexisting significant political or civic engagement experience in the
    community (i.e., community and civic leadership work, or work with government
    agencies, on political campaigns, or in non-governmental organizations) or for whom
    the experiential learning requirement poses a hardship may petition the
    undergraduate advisor to waive the requirement.
  - **Note:** In either of these cases of exception to the Experiential Learning coursework requirement, 39 total credit hours in political science are still required for graduation.

Take **all** of the following required courses:

- PSCI 1001 Introduction to Political Science: The Quest for Freedom and Justice
- PSCI 1101 American Political System
- PSCI 2011 Logic of Political Inquiry \*
- \*This course must be taken by all majors as part of their first 24 credit hours in the program. If this requirement poses a hardship due to such issues as late-declaring majors, scheduling problems, or students transferring in multiple credits, please contact the Department undergraduate advisor to craft a solution.

Take **two** political theory courses:

- PSCI 4057 Religion and Politics
- PSCI 4207 Theories of Social and Political Change
- PSCI 4407 Early Political Thought
- PSCI 4417 Modern Political Thought
- PSCI 4427 Law, Politics and Justice
- PSCI 4437 Coercion and the State
- PSCI 4457 American Political Thought

#### Take **one** of the following American Politics courses:

- PSCI 4009 Politics of the Budgetary Process
- PSCI 4014 Media and Politics
- PSCI 4024 State Politics: Focus Colorado
- PSCI 4025 Local Governance and Globalization
- PSCI 4034 Political Parties and Pressure Groups
- PSCI 4044 The Presidency
- PSCI 4074 Urban Politics
- PSCI 4075 Gentrification and Social Equity
- PSCI 4084 Local Government and Administration
- PSCI 4094 Seminar: American Politics
- PSCI 4124 Denver Politics
- PSCI 4236 American Foreign Policy
- PSCI 4237 American National Security
- PSCI 4324 Politics, Public Policy and Leadership
- PSCI 4330 U.S. Health Policy
- PSCI 4354 Environmental Politics
- PSCI 4374 Public Priorities for the 21st Century
- PSCI 4414 Non-Profits and Social Change
- PSCI 4444 Contemporary Culture and Politics in America
- PSCI 4477 Constitutional Law I
- PSCI 4487 Constitutional Law II
- PSCI 4494 Judicial Politics
- PSCI 4535 Labor and Working Class Politics
- PSCI 4545 Immigration Politics
- PSCI 4554 Chicano and Latino Politics
- PSCI 4644 Ethical Responsibilities of Leaders
- PSCI 4726 Seminar on U.S. and China Relations
- PSCI 4827 Women and the Law
- PSCI 4837 Contemporary Issues in Civil Liberties
- PSCI 4914 Community Organizing and Community Development

#### Take **one** of the following Comparative Politics courses:

- PSCI 4085 Comparative Governance: Environment and Society
- PSCI 4105 Comparative Politics: Europe
- PSCI 4115 Third World Politics

- PSCI 4144 Indigenous Political Systems
- PSCI 4146 Indigenous Politics
- PSCI 4150 Gender Politics in the Middle East: Beyond Orientalism & Islamism
- PSCI 4155 Political Systems of the Middle East and North Africa
- PSCI 4156 The Arab-Israeli Peace Process
- PSCI 4165 Islamic Politics and Culture
- PSCI 4186 East Asia in World Affairs
- PSCI 4195 Political Systems of Sub-Saharan Africa
- PSCI 4206 Social Movements, Democracy and Global Politics
- PSCI 4215 Women's Rights, Human Rights: Global Perspectives
- PSCI 4225 Democracy and Democratization
- PSCI 4248 Gender, Globalization and Development
- PSCI 4265 Social Justice And Globalization
- PSCI 4446 Advanced Indigenous Peoples' Politics
- PSCI 4505 Political System of Russia and Its Neighbors
- PSCI 4555 International Women's Resistance
- PSCI 4605 Politics and Governments of South Asia
- PSCI 4615 Politics and Government of China
- PSCI 4645 Comparative Political Leadership
- PSCI 4914 Community Organizing and Community Development

#### Take **one** of the following International Politics courses:

- PSCI 4025 Local Governance and Globalization
- PSCI 4105 Comparative Politics: Europe
- PSCI 4115 Third World Politics
- PSCI 4126 Introduction to International Political Economy
- PSCI 4144 Indigenous Political Systems
- PSCI 4146 Indigenous Politics
- PSCI 4150 Gender Politics in the Middle East: Beyond Orientalism & Islamism
- PSCI 4155 Political Systems of the Middle East and North Africa
- PSCI 4156 The Arab-Israeli Peace Process
- PSCI 4165 Islamic Politics and Culture
- PSCI 4176 Gandhi's Legacy: Non-Violent Resistance Today
- PSCI 4185 Corruption in the U.S. and Abroad
- PSCI 4186 East Asia in World Affairs
- PSCI 4195 Political Systems of Sub-Saharan Africa
- PSCI 4206 Social Movements, Democracy and Global Politics
- PSCI 4215 Women's Rights, Human Rights: Global Perspectives
- PSCI 4216 International Politics: Human Rights
- PSCI 4224 Dictatorships in 21st Century
- PSCI 4225 Democracy and Democratization
- PSCI 4226 The United Nations in World Affairs
- PSCI 4235 Politics and Markets in Latin America
- PSCI 4236 American Foreign Policy
- PSCI 4237 American National Security

- PSCI 4240 International Security
- PSCI 4248 Gender, Globalization and Development
- PSCI 4265 Social Justice And Globalization
- PSCI 4266 International Law
- PSCI 4274 Conflict Resolution and Public Consent Building
- PSCI 4276 Conflicts and Rights in International Law
- PSCI 4280 The Politics of War Law
- PSCI 4286 International Relations: War or Peace?
- PSCI 4326 Advanced International Political Economy: Globalization
- PSCI 4365 Global Ecological Crises
- PSCI 4446 Advanced Indigenous Peoples' Politics
- PSCI 4505 Political System of Russia and Its Neighbors
- PSCI 4555 International Women's Resistance
- PSCI 4605 Politics and Governments of South Asia
- PSCI 4615 Politics and Government of China
- PSCI 4726 Seminar on U.S. and China Relations
- PSCI 4736 The Middle East in World Affairs
- PSCI 4807 Political Violence
- PSCI 4808 Strategies of Peacebuilding
- PSCI 4878 War, Film, and International Law

Take **one** of the following Experiential Learning courses (see exception policy, above):

- PSCI 2939 Internship
- PSCI 3000 Topics: Conference Participation
- PSCI 3075 Community Organizing and Community Development
- PSCI 3840 Independent Study: PSCI
- PSCI 3914 The Urban Citizen
- PSCI 3939 Internship
- PSCI 4840 Independent Study: PSCI
- PSCI 4880 Directed Research
- PSCI 4914 Community Organizing and Community Development
- PSCI 4934 CU at the Capitol
- PSCI 4995 Global Study Topics

Take the following course:

 <u>PSCI 4960 - Capstone in Political Science</u> (Students can only enroll in this course after they have completed at least 27 credit hours in the major)

Take three additional Political Science(PSCI) elective courses

# **Psychology BA**

#### Introduction

Please click here to see Psychology department information.

The College of Liberal Arts and Sciences also offers a Psychology BS degree.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus and online program.

## **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 37 PSYC credit hours.
- Students must complete a minimum of 16 upper division (3000-level and above) PSYC credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 16 upper division (3000-level and above) PSYC credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

- PSYC 3939, Internship/Cooperative Education, does NOT count toward the 37- hour minimum or the 16-hour upper-division requirement, but it does count as elective psychology credit.
- Topics courses (PSYC 3600): See your advisor to determine if they count as Group A or Group B courses.
- 3. Many courses have prerequisites. Refer to the course descriptions for prerequisite information.
- 4. Students may not apply more than 56 PSYC credit hours to their degree.

#### Take **all** of the following required courses:

- PSYC 1000 Introduction to Psychology I
- PSYC 1005 Introduction to Psychology II
- PSYC 2090 Statistics and Research Methods
- PSYC 2220 Biological Basis of Behavior
- PSYC 3090 Research Methods in Psychology
- PSYC 4511 History of Psychology

#### **Group A**: **Two** Group A courses are required.

Take **one** of the following:

- PSYC 3222 Principles of Learning and Behavior
- PSYC 3144 Human Cognition

#### Take **one** of the following to reach a total of **two** Group A courses:

- PSYC 3104 Behavioral Genetics
- PSYC 3144 Human Cognition (if not taken above)
- PSYC 3222 Principles of Learning and Behavior (if not taken above)
- PSYC 3254 Introduction to Animal Behavior
- PSYC 3262 Health Psychology
- PSYC 3263 Hormones and Behavior
- PSYC 3264 Exercise, Brain and Behavior
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3385 Psychology of Mindfulness
- PSYC 3724 Developmental Psychobiology
- PSYC 3810 Neuropsychology
- PSYC 3822 Aging, Brain and Behavior
- PSYC 3832 Neural Basis of Learning
- PSYC 4054 Behavioral Neuroscience

PSYC 4164 - Psychology of Perception

**Group B**: Three Group B courses required.

Take **two** of the following courses:

- PSYC 3205 Human Development I: Child Psychology
- PSYC 3305 Abnormal Psychology
- PSYC 3415 Experimental Social Psychology

Take **one** of the following to reach a total of **three** Group B courses:

- PSYC 3145 Industrial and Organizational Psychology
- PSYC 3205 Human Development I: Child Psychology (if not taken above)
- PSYC 3215 Human Development II: Adolescence and Adulthood
- PSYC 3235 Human Sexuality
- PSYC 3305 Abnormal Psychology (if not taken above)
- PSYC 3405 Family Psychology
- PSYC 3415 Experimental Social Psychology (if not taken above)
- PSYC 3505 Psychology and the Law
- PSYC 3610 Psychological Trauma
- PSYC 3611 Psychology of Women
- PSYC 3612 Domestic Abuse
- PSYC 3615 Positive Psychology
- PSYC 4455 Theories of Personality
- PSYC 4485 Psychology of Cultural Diversity
- PSYC 4500 Psychotherapy
- PSYC 4730 Clinical Psychology: Ethics and Issues

Take **one** additional course from either Group A or Group B not already taken to fulfill that group requirement.

## Psychology BS

#### Introduction

Please click here to see Psychology department information.

The College of Liberal Arts and Sciences also offers a Psychology BA degree.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 54-58 credit hours, including a minimum of 31 PSYC credit hours and 23-27 credit hours in ancillary course work.
- 2. Students must complete a minimum of 16 upper division (3000-level and above) credit hours in the major.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 16 upper division (3000-level and above) PSYC credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. An experiential learning component is required and must be approved by the Bachelor of Science academic advisor. To fulfill the experiential learning requirement a student must have a minimum overall GPA of 2.5 or higher. Fulfilling this requirement with a project outside of the Psychology Department requires prior approval by the Bachelor of Science academic advisor. Independent study or internship credit hours taken outside of the Psychology Department will not count as Psychology credit hours.
- 2. A maximum of 56 semester hours of PSYC coursework will count toward graduation.

#### Take all of the following required courses:

- PSYC 1000 Introduction to Psychology I
- PSYC 1005 Introduction to Psychology II
- PSYC 2090 Statistics and Research Methods
- PSYC 2220 Biological Basis of Behavior
- PSYC 3090 Research Methods in Psychology
- PSYC 4054 Behavioral Neuroscience

#### Take **one** of the following courses:

- PSYC 3205 Human Development I: Child Psychology
- PSYC 3305 Abnormal Psychology
- PSYC 3415 Experimental Social Psychology

#### Take **two** of the following courses:

- PSYC 3104 Behavioral Genetics
- PSYC 3222 Principles of Learning and Behavior
- PSYC 3254 Introduction to Animal Behavior
- PSYC 3262 Health Psychology
- PSYC 3263 Hormones and Behavior
- PSYC 3264 Exercise, Brain and Behavior
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3724 Developmental Psychobiology
- PSYC 3810 Neuropsychology
- PSYC 3822 Aging, Brain and Behavior
- PSYC 3832 Neural Basis of Learning
- PSYC 4164 Psychology of Perception

Take **3 semester hours** from the following (all require consultation with BS advisor AND permission of instructor):

- PSYC 3939 Internship (2.75 GPA required)
- PSYC 4840 Independent Study: PSYC (2.5 GPA required)
- PSYC 4880 Directed Research : PSYC (2.5 GPA required)
- Honors Project in Psychology (3.5 GPA required): See honors project requirements

Take **all** of the following required courses:

BIOL 2051 - General Biology I

- BIOL 2061 General Biology II
- BIOL 2071 General Biology Laboratory I
- BIOL 2081 General Biology Laboratory II
- CHEM 2031 General Chemistry I
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II
- CHEM 2068 General Chemistry Laboratory II

#### Take **two** of the following courses:

- BIOL 3225 Human Physiology
- BIOL 3244 Human Anatomy
- BIOL 3445 Introduction to Evolution
- BIOL 3611 General Cell Biology
- BIOL 3654 General Microbiology
- BIOL 3832 General Genetics
- BIOL 4134 Human Genetics
- BIOL 4165 Neurobiology
- CHEM 3810 Biochemistry

## **Public Health BA**

#### Introduction

Please click here to see Health and Behavioral Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

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Click here for BS in Public Health

## **Program Delivery**

• This is an on-campus program.

## **Declaring This Major**

• Click here to go to information about declaring a major.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a total of 43 credit hours, including a minimum of 29 PBHL credit hours and a minimum of 14 credit hours in ancillary coursework.
- 2. Students must complete a minimum of 16 upper-division (3000-level and above) credit hours in the major.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 26 PBHL credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

1. Students must complete PBHL 3020, 3001, 3030, 3070, 4040 and 4099 with CU Denver faculty.

Take all of the following required courses:

- PBHL 2001 Introduction To Public Health
- PBHL 3020 Introduction to Environmental Health
- PBHL 3001 Introduction to Epidemiology
- PBHL 3030 Health Policy
- PBHL 3070 Perspectives in Global Health
- PBHL 4040 Social Determinants of Health

#### PBHL 4099 - Capstone Experience in Public Health

Take **one** of the following Quantitative Methods courses, or another statistics course that has been approved by the undergraduate program director/advisor in advance:

- ANTH 4050 Quantitative Methods in Anthropology
- BIOL 3763 Biostatistics
- MATH 2830 Introductory Statistics
- PSYC 2090 Statistics and Research Methods

#### Take **two** PBHL electives from the following list:

- PBHL 3002 Ethnicity, Health and Social Justice
- PBHL 2052 Global Demography and Health
- PBHL 3010 Human Sexuality and Public Health
- PBHL 3021 Fundamentals of Health Promotion
- PBHL 3031 Health, Human Biology and Behavior
- PBHL 3041 Health, Culture and Society
- PBHL 3071 Global Topics In Sexual and Reproductive Health
- PBHL 3200 Human Migration: Nomads, Sojourners, and Settlers
- PBHL 3440 Medical Sociology
- PBHL 3939 Internship
- PBHL 4020 Global Health: Comparative Public Health Systems
- PBHL 4031 Ethnographic Research In Public Health
- PBHL 4060 Evolutionary Medicine
- PBHL 4080 Global Health Practice
- PBHL 4090 Drug Syndemic
- PBHL 4110 Public Health Perspectives On Family Violence
- PBHL 4200 The Global HIV/AIDS Epidemic
- PBHL 4999 Topics In Public Health

#### Take **one** elective from either the PBHL list (above) or the following list:

- ANTH 4010 Medical Anthropology: Global Health
- ANTH 4080 Global Health Practice
- ANTH 4290 Anthropology and Public Health
- ANTH 4600 Medical Anthropology
- COMM 4500 Health Communication
- COMM 4550 Rhetorics of Medicine & Health
- COMM 4620 Health Risk Communication
- ECON 5660 Health Economics
- ENVS 1342 Environment, Society and Sustainability
- ETST 3002 Ethnicity, Health and Social Justice
- GEOG 3501 Geography of Health

- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 GIS Applications in the Health Sciences
- HEHM 3100 Introduction to Health Humanities
- HIST 4345 Gender, Science, and Medicine: 1600 to the Present
- PHIL 4242 Bioethics
- PSCI <u>4215 Women's Rights, Human Rights: Global Perspectives</u>
- PSCI 4330 U.S. Health Policy
- PSYC 3262 Health Psychology
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3305 Abnormal Psychology
- PSYC 3822 Aging, Brain and Behavior
- SOCY 3440 Medical Sociology
- SOCY 4110 Sociology of Health Care
- SOCY 4220 Population Change and Analysis
- SOCY 4290 Aging, Society and Social Policy

**Biological Sciences Ancillary Courses** 

Option 1) Take **two** of the following Biological Sciences ancillary courses:

- BIOL 1550 Basic Biology: Ecology and the Diversity of Life
- BIOL 1560 Basic Biology: From Cells to Organisms
- ANTH 1303 Introduction to Biological Anthropology

-OR-

Option 2) Take all of the following courses:

- BIOL 2051 General Biology I
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II
- BIOL 2081 General Biology Laboratory II

## **Public Health BS**

#### Introduction

Please click here to see Health and Behavioral Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in

individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

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Click here for BA in Public Health

### **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Degree Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences General Degree Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 73 credit hours, including a minimum of 26 PBHL credit hours and a minimum of 47 credit hours in ancillary coursework.
- 2. Students must complete a minimum of 16 upper-division (3000-level and above) credit hours in the major.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 26 PBHL credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

1. Students must complete PBHL 3020, 3001, 3030, 3070, 4040 and 4099 with CU Denver faculty.

Take **all** of the following courses (five of the following courses must be taken at the University of Colorado Denver):

- PBHL 2001 Introduction To Public Health
- PBHL 3020 Introduction to Environmental Health
- PBHL 3001 Introduction to Epidemiology
- PBHL 3030 Health Policy
- PBHL 3070 Perspectives in Global Health
- PBHL 4040 Social Determinants of Health
- PBHL 4099 Capstone Experience in Public Health

Take **one** of the following Quantitative Methods courses, OR another statistics course that has been approved by the undergraduate program director/advisor in advance:

- ANTH 4050 Quantitative Methods in Anthropology
- BIOL 3763 Biostatistics
- MATH 2830 Introductory Statistics
- PSYC 2090 Statistics and Research Methods

Take **one** PBHL elective from the following list:

- PBHL 3002 Ethnicity, Health and Social Justice
- PBHL 2052 Global Demography and Health
- PBHL 3010 Human Sexuality and Public Health
- PBHL 3021 Fundamentals of Health Promotion
- PBHL 3031 Health, Human Biology and Behavior
- PBHL 3041 Health, Culture and Society
- PBHL 3071 Global Topics In Sexual and Reproductive Health
- PBHL 3200 Human Migration: Nomads, Sojourners, and Settlers
- PBHL 3440 Medical Sociology
- PBHL 3939 Internship
- PBHL 4020 Global Health: Comparative Public Health Systems
- PBHL 4031 Ethnographic Research In Public Health
- PBHL 4060 Evolutionary Medicine
- PBHL 4080 Global Health Practice
- PBHL 4090 Drug Syndemic
- PBHL 4110 Public Health Perspectives On Family Violence
- PBHL 4200 The Global HIV/AIDS Epidemic

#### PBHL 4999 - Topics In Public Health

Take **one** elective from either the PBHL list (above), from the following list or another course that has been approved by the undergraduate program director/advisor in advance:

- ANTH 4010 Medical Anthropology: Global Health
- ANTH 4080 Global Health Practice
- ANTH 4290 Anthropology and Public Health
- ANTH 4600 Medical Anthropology
- ECON 5660 Health Economics
- GEOG 3501 Geography of Health
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 GIS Applications in the Health Sciences
- HEHM 3100 Introduction to Health Humanities
- HIST 4345 Gender, Science, and Medicine: 1600 to the Present
- PHIL 4242 Bioethics
- PSCI 4215 Women's Rights, Human Rights: Global Perspectives
- PSCI 4330 U.S. Health Policy
- PSYC 3262 Health Psychology
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3305 Abnormal Psychology
- PSYC 3822 Aging, Brain and Behavior
- SOCY 3440 Medical Sociology
- SOCY 4110 Sociology of Health Care
- SOCY 4220 Population Change and Analysis
- SOCY 4290 Aging, Society and Social Policy

Take **all** of the following lecture/lab courses:

- BIOL 2051 General Biology I
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II
- BIOL 2081 General Biology Laboratory II

Take **all** of the following additional math and science ancillary courses:

- CHEM 2031 General Chemistry I
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II
- CHEM 2068 General Chemistry Laboratory II
- CHEM 3411 Organic Chemistry I
- CHEM 3418 Organic Chemistry Lab I
- CHEM 3421 Organic Chemistry II

- CHEM 3428 Organic Chemistry Lab II
- MATH 1401 Calculus I
- PHYS 2010 College Physics I or
- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2030 College Physics Lab I or
- PHYS 2321 General Physics Lab I
- PHYS 2020 College Physics II or
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2040 College Physics Lab II or
- PHYS 2341 General Physics Lab II

## **Public Service BA**

#### Introduction

The Bachelor of Arts in Public Service, offered by the School of Public Affairs, prepares the next generation of civic-minded leaders to take active roles in organizations that promote the common good, such as local, state, and federal government agencies and nonprofit and nongovernmental organizations. Coursework explores the history and values of public service while building real-world capacity in areas such as managing people and resources, designing and evaluating programs, collaborating with others and across sectors, making ethical decisions, and communicating effectively in diverse environments. All courses are available online, providing students with the flexibility to schedule courses around the reality of family and work demands while also engaging both local and fully online students in public service opportunities in their own communities. The BAPS program has been ranked #9 overall by SR Education Group's 2018 Best and Most Affordable Online Colleges, based upon a mix of #3 for quality and #22 for affordability. Students who choose to focus on nonprofit management also have the option to earn the nationally recognized Certified Nonprofit Professional (CNP) designation through the Nonprofit Leadership Alliance. As workforce demand increases in the government and nonprofit sectors, students will be ready to apply critical thinking and analytical skills to make a difference in the world.

## **Program Delivery**

This is an online program.

### **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- School of Public Affairs Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- Students must receive a minimum C- grade in each undergraduate course applied to satisfy major or minor degree requirements and must maintain a 2.0 GPA overall in major or minor courses.
- 2. The Bachelor of Arts in Public Service requires 45 credit hours of coursework.
- 3. Students must complete a minimum of 45 upper-division credit hours, 12 of which must be Public Service courses offered by the School of Public Affairs.
- 4. A maximum of 12 transfer credits may be applied to the major.

Take all of the following required courses:

- PUAD 1001 Introduction to Leadership and Public Service \*
- PUAD 2001 Management for Public Service
- PUAD 3001 Financial Management for Public Service
- PUAD 3002 Program Design, Evaluation, and Decision-Making
- PUAD 4001 Ethics in Public Service
- PUAD 4002 Leading for the Public Good
- PUAD 4003 Effective Communication for Public Service
- \*This class also fulfills a Social Science requirement of the CU Denver core curriculum

#### **Electives**

Take a total of 24 credit hours of electives, twelve of which must be Public Administration courses offered by the School of Public Affairs, and 12 of which may be taken from other departments with advisor approval.

Public Administration Electives:

- PUAD 3005 Collaboration Across Sectors
- PUAD 3110 Seminar in Nonprofit Management
- PUAD 4006 Organizational Development

- PUAD 4008 Current Issues in Public Sector Organizations
- PUAD 4009 Human Service Organizations
- PUAD 4010 Public Service in Emergency Management and Homeland Security
- PUAD 4020 Social Entrepreneurship
- PUAD 4140 Nonprofit Financial Management
- PUAD 4145 Philanthropy
- PUAD 4160 Nonprofit Boards and Executive Leadership
- PUAD 4325 Public Private Partnerships
- PUAD 4628 Urban Social Problems
- PUAD 4630 Colorado State Politics
- PUAD 4740 Sustainable Energy Policy
- PUAD 4939 Public Service Internship
- \*The internship PUAD 4939, is required as one of the electives for the major unless
  officially waived by the BAPS Program Director, in which case a regular PUAD elective
  may substitute. Students should direct questions and concerns to their Academic
  Advisor. See SPA Graduation Requirements for more information.

#### Other Electives:

All courses taken from another department that you would like to count as an elective must be approved by your advisor in advance. Please contact your advisor directly to discuss any class you may be considering for elective credit that is not listed above.

#### **Nonprofit Management Concentration:**

BAPS students may elect to graduate with an emphasis in Nonprofit Management as part of the Bachelor of Arts in Public Service degree. Students seeking a Nonprofit Management concentration must focus 15 credit hours on courses related to nonprofit management which will count towards the elective requirement for the Bachelor of Arts in Public Service degree. SPA's affiliation with the Nonprofit Leadership Alliance gives students the opportunity to earn the Certified Nonprofit Professional credential through completion of the Nonprofit Management concentration coursework and additional required extracurricular activities. Contact <a href="mailto:cnp@ucdenver.edu">cnp@ucdenver.edu</a> for more information about this credential. To declare this concentration please see your advisor.

Take the following required courses:

PUAD 3003 - Introduction to Nonprofit Organizations

<sup>\*\*</sup>Please consult your advisor for any other PUAD course you are considering as an elective in advance of enrolling in the course.

- PUAD 3004 Managing Nonprofit Organizations
- Choose 3 courses from the following list of Nonprofit electives:
  - PUAD 3005 Collaboration Across Sectors
  - o PUAD 3110 Seminar in Nonprofit Management
  - PUAD 4140 Nonprofit Financial Management
  - PUAD 4160 Nonprofit Boards and Executive Leadership
  - o PUAD 4020 Social Entrepreneurship

# Recording Arts Emphasis, Audition Track, Music BS

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

The recording arts emphasis focuses on contemporary analog and digital technology as it is used in music recording, sound reinforcement and media applications (Internet, video games, interactive art installations, etc.). While mastering technology skills and formats, musicians also study the artistic and aesthetic applications of technology to recording, reinforcement, composition and performance.

### **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

- Click <u>here</u> to go to information about declaring a major.
- The Bachelor of Science (BS) in Music has a competitive application process. Please refer to the <u>Department of Music & Entertainment Industry Studies website</u> for detailed guidelines and information.
- Students who wish to pursue the recording arts emphasis, audition track, are required to
  pass an entrance audition on their primary instrument or voice as part of the
  departmental application process, and to pass varying levels of performance proficiency
  as part of the curriculum. Students must also gain admission to the recording arts
  emphasis before being able to take any of the upper-division (3000/4000 level) recording
  arts course work. Please see the recording arts website and contact the College of Arts
  & Media at CAM@ucdenver.edu for further information and any updates.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. To earn a BS in Music, students must complete musicianship courses, Music & Entertainment Industry Studies core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take **all** of the following Musicianship course groups:

- PMUS 1100 Music Theory I
- PMUS 1110 Ear Training and Sight Singing I
- PMUS 1023 Piano Class I
- PMUS 1200 Music Theory II
- PMUS 1210 Ear Training and Sight Singing II
- PMUS 1024 Piano Class II
- PMUS 2100 Music Theory III
- PMUS 2110 Ear Training and Sight Singing III
- PMUS 1025 Piano Class III
- PMUS 2200 Jazz Theory
- PMUS 1026 Piano Class IV
- PMUS 1 Applied Instrument/Voice (1 semester hour)
- PMUS 1500 General Recital

•	PMUS Ensemble (1 semester hour) <i>Note:</i> Students must complete <u>PMUS 1470</u> <u>Performance Practice Ensemble</u> during their first or second semester of Applied Instrument/Voice.
	PMUS 1 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
	PMUS 2 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
•	PMUS 2 Applied Instrument/Voice (1 semester hour) PMUS 1500 - General Recital
•	PMUS Ensemble (1 semester hour)
	Take all of the following Musicianship courses:
•	PMUS 3832 - Music in Culture  PMUS Music History Elective  PMUS or MUSC Music Elective (3 semester hours)  PMUS Ensemble (1 semester hour)  PMUS Ensemble (1 semester hour)

Take **all** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 2700 Introduction to Music Business
   MUSC 1541 Audio Production I
   MUSC 1560 Audio Production II

Take **one** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 3210 Music and Entertainment Marketing
- MUSC 3220 Artist Management

Take the following course:

MUSC 1800 - Acoustics for Audio Production

Take **all** of the following Recording Arts Emphasis courses (available only to students accepted to emphasis):

- MUSC 2550 Critical Listening for Recording Arts
- MUSC 2580 Audio Production III
- MUSC 2590 Mastering & Advanced Digital Audio
- MUSC 3505 Audio Post Production I
- MUSC 4580 Audio Production Seminar I

Take **seven** semester hours of Recording Arts Emphasis electives.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# Recording Arts Emphasis, Non-Audition Track, Music BS

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

The recording arts emphasis focuses on contemporary analog and digital technology as it is used in music recording, sound reinforcement and media applications (Internet, video games, interactive art installations, etc.). While mastering technology skills and formats, students also study the artistic and aesthetic applications of technology to recording, reinforcement, composition and performance.

## **Program Delivery**

This is an on-campus program.

### **Declaring This Major**

- Click <u>here</u> to go to information about declaring a major.
- Students who wish to pursue the recording arts emphasis, non-audition track, are not required to complete an audition as part of the departmental application process. Students will be assessed for varying levels of performance proficiency as part of the curriculum. Please see the <u>recording arts website</u> and contact the College of Arts & Media at CAM@ucdenver.edu for further information and any updates.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. To earn a BS in Music, students must complete musicianship courses, Music & Entertainment Industry Studies core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take **all** of the following Musicianship course groups:

- PMUS 1120 Music Theory I
- PMUS 1119 Ear Training and Sight Singing I
- PMUS 1211 Ear Training and Sight Singing II
- PMUS 1500 General Recital (2 semester hours)

Take **all** of the following Musicianship courses:

- PMUS 3832 Music in Culture
- PMUS \_\_\_\_ Music History Elective
- PMUS or MUSC\_\_\_\_ Music Elective (3 semester hours)

Take **one** of the following Musicianship courses (1 semester hour):

- PMUS 1040 Class Guitar
- PMUS 1023 Piano Class I

Take any **two** of the following Musicianship courses:

- PMUS 1023 Piano Class I
- PMUS 1024 Piano Class II
- PMUS 1025 Piano Class III
- PMUS 1026 Piano Class IV
- PMUS 1040 Class Guitar
- PMUS 1041 Class Guitar II
- PMUS 1050 Voice Class I
- PMUS 1060 Voice Class II

Take **all** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 2700 Introduction to Music Business
- MUSC 1541 Audio Production I
- MUSC 1560 Audio Production II

Take **one** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 3210 Music and Entertainment Marketing
- MUSC 3220 Artist Management

Take the following course:

• MUSC 1800 - Acoustics for Audio Production

Take **all** of the following Recording Arts Emphasis courses:

- MUSC 2550 Critical Listening for Recording Arts
- MUSC 2580 Audio Production III
- MUSC 2590 Mastering & Advanced Digital Audio
- MUSC 2530 Live Sound Reinforcement
- MUSC 3505 Audio Post Production I
- MUSC 4580 Audio Production Seminar I

Take **twenty eight** semester hours of Recording Arts Emphasis electives.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# Risk Management and Insurance Major - BS in Business Administration

#### Introduction

Please click here for more information on this program.

The risk management and insurance major provides students with the fundamental knowledge needed to accurately measure and manage risk.

Recent crisis situations suggest that understanding risk and how to manage it, and ultimately, how risk management can be used to increase firm value, is essential in the current business environment. The RISK major will provide an overall perspective on risk, with a specific focus on insurance products and their use in mitigating risk in business and personal situations. The insurance industry recognizes many high-level certifications as a sign of expertise, and the RISK course work will provide the knowledge base so that students can proceed to acquire certification in their specific choice of insurance specialty.

Potential job opportunities include positions in the insurance industry and those that require a thorough understanding of risk, such as corporate risk officer or risk manager. In addition, students who choose to work in the insurance industry can make a seamless transition into underwriting, ratemaking, and policy approval. The program will be supported by a unique internship and special project opportunities in the insurance industry, and is the first program of its kind in the region.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

1. A grade of C or higher must be earned in all courses that are used as prerequisites. These are noted with an asterisk.

Take all of the following required courses:

- FNCE 3500 Management of Business Capital \*
- RISK 3809 Introduction to Risk Management
- RISK 3949 Experiential Learning in RMI Industry \* (Fulfills BGEN Experiential Learning requirement)
- RISK 4809 Property & Casualty Insurance
- RISK 4909 Corporate Risk Management

Take **three** of the following courses:

- FNCE 3600 Financial Markets and Institutions
- FNCE 3700 Investment and Portfolio Management \*
- FNCE 4500 Corporate Financial Decisions \*
- RISK 4129 Practical Enterprise Risk Management

- RISK 4509 Global Risk Management
- RISK 4609 Claims Management
- RISK 4709 Life & Health Insurance
- RISK 4950 Special Topics: Cyber Risk Management & Cyber Warfare
- \* RISK majors are required to complete a RISK internship to satisfy the BGEN requirement

#### Note

All RISK courses have a fixed tuition rate. However, students have the option to apply for RMI scholarships for each RISK course they take (one scholarship per semester).

# Singer/Songwriter Emphasis, Music BS

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

Students in the singer/songwriter emphasis complete specialized courses in songwriting and arranging repertoire while developing their performance skills through small performance ensembles and applied private study of voice, accompanying instrument and songwriting.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

- Click here to go to information about declaring a major.
- The Bachelor of Science (BS) in Music has a competitive application process. Please refer to the <u>Department of Music & Entertainment Industry Studies website</u> for detailed guidelines and information.
- Students who wish to pursue the singer/songwriter emphasis are required to pass an
  audition on their accompanying instrument AND voice as part of the application process,
  and to pass varying levels of performance proficiency as part of the curriculum. This
  includes passing a Sophomore Proficiency in order to maintain singer/songwriter
  emphasis status. Each student is also required to successfully complete a junior recital
  and the 2-credit PMUS 4200 Senior Recital Project. Please contact the College of Arts
  & Media at CAM@ucdenver.edu for further information.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. To earn a BS in Music, students must complete musicianship courses, Music & Entertainment Industry Studies core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take **all** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 2700 Introduction to Music Business
- MUSC 1540 Introduction to Audio Production

Take **one** of the following Music & Entertainment Industry Studies Core courses:

- MUSC 3210 Music and Entertainment Marketing
- MUSC 3220 Artist Management
- MUSC 3755 Music Publishing

Take **all** of the following Musicianship course groups:

- PMUS 1100 Music Theory I
- PMUS 1110 Ear Training and Sight Singing I
- PMUS 1023 Piano Class I
- PMUS 1200 Music Theory II
- PMUS 1210 Ear Training and Sight Singing II
- PMUS 1024 Piano Class II
- PMUS 2100 Music Theory III
- PMUS 2110 Ear Training and Sight Singing III
- PMUS 1025 Piano Class III

Take **one** of the following Musicianship courses:

PMUS 1026 - Piano Class IV (for Piano/Voice students)

- PMUS 2750 Functional Guitar Skills: Acoustic Guitar Styles (for Guitar/Voice students)
- PMUS 2751 Functional Guitar Skills: Electric Guitar Styles (for Guitar/Voice students)

Take **all** of the following Musicianship courses:

- PMUS 3832 Music in Culture
- PMUS\_\_\_\_ Music History Elective
- PMUS or MUSC \_\_\_\_\_ Music Elective (6 semester hours)

Take all of the following Singer/Songwriter Emphasis course groups:

- Either PMUS 1574 Applied Guitar, Singer/Songwriter or PMUS 1644 Applied Piano, Singer/Songwriter Note: Students must complete both semesters of applied instrument lessons on their primary audition instrument.
- PMUS 1500 General Recital
- PMUS\_\_\_\_ Ensemble (1 semester hour) *Note:* Students must complete <u>PMUS 1470 Performance Practice Ensemble</u> during their first or second semester of Applied Music.
- Either PMUS 1574 Applied Guitar, Singer/Songwriter or PMUS 1644 Applied Piano, Singer/Songwriter Note: Students must complete both semesters of applied instrument lessons on their primary audition instrument.
- PMUS 1500 General Recital
- PMUS\_\_\_\_ Ensemble (1 semester hour)
- PMUS 1734 Applied Voice, Singer/Songwriter
- PMUS 1500 General Recital
- PMUS Ensemble (1 semester hour)
- PMUS 1734 Applied Voice, Singer/Songwriter
- PMUS 1500 General Recital
- PMUS Ensemble (1 semester hour)
- PMUS 3772 Applied Singer/Songwriter
- PMUS 1500 General Recital
- PMUS Ensemble (1 semester hour)
- PMUS 3772 Applied Singer/Songwriter
- PMUS 1500 General Recital
- PMUS\_\_\_\_ Ensemble (1 semester hour)
- PMUS 4772 Applied Singer/Songwriter
- PMUS 1500 General Recital
- PMUS Ensemble (1 semester hour)

- PMUS 4772 Applied Singer/Songwriter
- PMUS 1500 General Recital
- PMUS\_\_\_\_ Ensemble (1 semester hour)

Take **all** of the following Singer/Songwriter Emphasis courses:

- PMUS 3200 Popular Music Performance Skills
- PMUS 3310 Intermediate Songwriting
- PMUS 3320 Popular Music Arranging
- PMUS 4060 Music Theory Analysis
- PMUS 4310 Advanced Songwriting
- PMUS 4200 Senior Recital Project

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this emphasis.

# Sociology BA

#### Introduction

Please click here to see Sociology department information.

Sociology is the study of social relations, interactions, and institutions. Using quantitative and qualitative scientific methods, it offers a unique way of seeing and understanding the social world and how it shapes individual lives and history. Sociology's subject matter is broad and diverse. Some of the topics covered are criminology, religion, families, inequalities between social groups, childhood, youth, adulthood and old age, social stability and social change, urban issues, environment, technology, education, and health.

All prospective majors should contact the undergraduate advisor in Sociology as early in their academic careers as possible for information about the degree requirements. Transfer or returning students should consult with the undergraduate advisor in Sociology concerning completion of the core courses.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their Sociology advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

• This program is also offered online.

### **Declaring This Major**

Click here to go to information about declaring a major

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 32 SOCY credit hours.
- Students must complete a minimum of 16 upper-division (3000-level and above) SOCY credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major course requirements as pass/fail.
- 5. Students must complete a minimum of 13 SOCY credit hours with CU Denver faculty.

### **Program Allowances and Restrictions:**

- 1. The maximum number of hours allowed in sociology is 56.
- 2. Students must take a minimum of 3 credit hours in elective courses at the 4000 level.
- 3. Students must earn a minimum of C (2.0) in their elective courses for the major that are taken at CU Denver. A grade of C- (1.7) is acceptable for elective courses that are transferred.

Take **all** of the following courses:

- SOCY 1001 Introduction to Sociology
- SOCY 2001 Inequalities in the Social World
- SOCY 3115 Quantitative Methods & Analysis
- SOCY 3119 Qualitative Methods
- SOCY 3140 Sociological Theory
- SOCY 4830 Senior Capstone: Worklife Practices & Policies

Take a minimum of **12** and a maximum of 36 SOCY elective credit hours. At least 3 credit hours must be completed at 4000-level or higher.

# Sociology BA - Gender and Society Concentration

#### Introduction

Please click here to see Sociology department information.

A concentration in Gender and Society provides students with an understanding of the role of gender in the experiences of females, males, and gender non-conforming individuals. The interdisciplinary nature of the concentration enables students to develop the skills to critically evaluate the ways in which inequality, oppression, and social structure contribute to various social problems such as the pay gap, sexual assault, domestic violence, and human trafficking. The Gender and Society concentration equips students for jobs in a variety of areas such as advocacy, counseling, public health, policy-making and government, business, and criminal justice.

All prospective majors should contact the undergraduate advisor in Sociology as early in their academic careers as possible for information about the degree requirements. Transfer or returning students should consult with the undergraduate advisor in Sociology concerning completion of the core courses.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their Sociology advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

- This is an on-campus program.
- This program is also offered online.

## **Declaring This Major**

Click here to go to information about declaring a major

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 38 credit hours, including a minimum of 20 SOCY credit hours and 18 ancillary courses.
- 2. Students must complete a minimum of 16 upper-division (3000-level and above) credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all courses applying to major requirements taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 13 SOCY credit hours with CU Denver faculty.

### **Program Allowances and Restrictions:**

- 1. The maximum number of SOCY credit hours allowed for the Sociology BA Gender and Society concentration is 56.
- 2. Students must take four electives for the major. Three of these electives must be cross-listed as SOCY and WGST. The fourth elective must be a WGST course cross-listed with a department other than Sociology.
- 3. Students who pursue this concentration simultaneously earn a minor in Women's and Gender Studies.

Take **all** of the following courses:

- SOCY 1001 Introduction to Sociology
- WGST 1050 Introduction to Women's and Gender Studies
- SOCY 2001 Inequalities in Social World
- SOCY 3115 Quantitative Methods & Analysis
- SOCY 3119 Qualitative Methods
- SOCY 3140 Sociological Theory
- WGST 4306 Survey of Feminist Thought OR WGST 4308 Contemporary Feminist
  Thought
- SOCY 4830 Senior Capstone: Worklife Practices & Policies

Take three courses (9 credit hours) cross-listed as SOCY and WGST. These courses are examples. Students should check course descriptions and the schedule to find courses that meet this requirement.

- SOCY /WGST 3700 Sociology of the Family
- SOCY /WGST 3080 Sex and Gender
- SOCY /WGST 3010 Sociology of Human Sexuality
- SOCY /WGST 4270 Social Meanings of Reproduction

#### SOCY /WGST 4780 - Violence in Relationships

Take one additional WGST elective course. These courses are examples. Students should check course descriptions and the schedule to find courses that meet this requirement.

- WGST 3343 Women in U.S. History
- WGST 3450 Contemporary Women Writers
- WGST 4150 Gender Politics in the Middle East: Beyond Orientalism & Islamism
- WGST 4215 Women's Rights, Human Rights: Global Perspectives
- WGST 4225 Urban America: Colonial Times to the Present
- WGST 4230 Women in the West
- WGST 4248 Gender, Globalization and Development
- WGST 4303 Sex and Gender in Modern Britain
- WGST 4306 Survey of Feminist Thought
- WGST 4307 History of Sexuality
- WGST 4308 Contemporary Feminist Thought
- WGST 4345 Gender, Science, and Medicine: 1600 to the Present
- WGST 4420 Goddess Traditions
- WGST 4500 Feminist Philosophy
- WGST 4510 Whores and Saints: Medieval Women
- WGST 4511 French Women Writers
- WGST 4540 Race, Class, and Gender in Spanish Golden Age Literature
- WGST 4555 International Women's Resistance
- WGST 4564 Gender and Politics
- WGST 4610 Communication, media, and sexuality
- WGST 4660 Queer Media Studies
- WGST 4710 Women and Religion
- WGST 4827 Women and the Law
- WGST 4933 Philosophy of Eros

Take one additional WGST elective course

# Spanish Language, Literature and Culture BA

#### Introduction

Please click here to see Modern Languages department information.

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

• This is an on-campus program.

## **Declaring This Major**

- Click here to go to information about declaring a major
- To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3).

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 36 SPAN credit hours.
- 2. Students must complete a minimum of 36 upper division(3000-level and above) credit hours in the major.
- 3. Students must achieve a minimum GPA of 2.5 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 18 SPAN credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.
- 2. Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.
- 3. Students must complete at least 12 SPAN credit hours at the 4000 level.
- 4. Students must complete a minimum of 30 credit hours in courses taught in Spanish.
- 5. Up to 6 credit hours of the 36 upper division level credit hours may be taken in related fields.

#### Take the following **required** courses:

- SPAN 3101 Introduction to the Study of Literature
- SPAN 3060 Hispanic Phonetics: Theory and Practice

#### Take at least one Spanish Literature course

- SPAN 3199 Topics in Spanish Literature
- SPAN 3400 Survey of Spanish Literature I
- SPAN 3410 Survey of Spanish Literature II
- SPAN 4110 Contemporary Spanish Literature
- SPAN 4130 Medieval Spanish Literature
- SPAN 4150 Masterpieces of Spanish Literature
- SPAN 4300 Generation of 1898
- SPAN 4340 Race, Class, and Gender in Spanish Golden Age Literature
- SPAN 4380 Romanticism in Spain
- SPAN 4399 Special Topics: Spanish Peninsular Literature

#### Take at least one Spanish-American literature course:

- SPAN 3510 Survey of Spanish American Literature II
- SPAN 4180 Modernism
- SPAN 4401 Survey of Spanish-American Literature I: Pre-1898
- SPAN 4450 Masterpieces of Spanish-American Literature

#### Take **two** additional courses on Language Skills and Theory:

- SPAN 3010 Spanish Composition I
- SPAN 3020 Spanish Composition II
- SPAN 3030 Spanish Oral Proficiency
- SPAN 3050 Advanced Spanish Grammar

Take **two** of the following Culture and Civilizations of Spain or Spanish America courses:

- SPAN 3212 Spanish American Culture and Civilization
- SPAN 3213 Contemporary Latin American Culture and Institutions
- SPAN 3221 Culture and Civilization of Spain I
- SPAN 3222 Culture and Civilization of Spain II
- SPAN 3223 Contemporary Spanish Culture and Institutions
- SPAN 3225 Special Topics In Hispanic Culture
- SPAN 3230 Ibero-American Cultures through Film
- SPAN 3240 Food Metaphors: Ibero-American Cuisine and Culture
- SPAN 3270 Bilingual Communities: Spanish as a Language of Contact
- SPAN 4330 Modern Culture of Spain through Film and Narrative

Take four upper division (3000-level and above) electives. Up to two of these electives may be taken outside the SPAN subject code

- ANTH 3121 Language, Culture, and Communication
- ANTH 4320 Archaeology of Mexico and Central America
- CHIN 3— Any upper-division course in Chinese
- CHIN 4— Any upper-division course in Chinese
- ENGL 3160 Language Theory
- ENGL 3798 International Perspectives in Literature and Film
- ENGL 4601 Principles and Practices of Second Language Acquisition
- ENGL 4460 Contemporary World Literature
- ETST 3108 Chicano/a and Latino/a History
- ETST 3350 Colonial Latin America
- ETST 3408 Social Psychology of Latinos/as
- ETST 3838 History of the Mexican American in Colorado
- ETST 4616 Selected Topics: Chicanos/as and Latinos/as
- ETST 4768 Chicano/Chicana Narrative and Social History
- FREN 3— Any upper-division course in French
- FREN 4— Any upper-division course in French
- GEOG 3130 Central America and the Caribbean
- GEOG 3140 Geography of South America
- GRMN 3— Any upper-division course in German
- GRMN 4— Any upper-division course in German
- HIST 3345 Immigration and Ethnicity in American History
- HIST 3350 Colonial Latin America
- HIST 3365 Aztlan in the United States: Chicano History from 1821
- HIST 3460 Modern Latin American History
- HIST 4411 Modern Mexico
- HIST 4412 Mexico and the United States: People and Politics on the Border
- HIST 4415 Social Revolutions in Latin America
- HIST 4417 Commodities and Globalization
- LING 3100 Language in Society
- MLNG 4690 Methods of Teaching Modern Languages
- MLNG 4691 Methods of Teaching Modern Languages II
- PSCI 4235 Politics and Markets in Latin America
- PSCI 4545 Immigration Politics
- PSCI 4554 Chicano and Latino Politics

# Spanish, International Language and Culture for the Professions Option BA

#### Introduction

Please click here to see Modern Languages department information.

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

- Click here to go to information about declaring a major
- International Spanish for the Professions is a controlled-enrollment major that takes two
  years to complete. Interested students should contact the Spanish advisor in the
  Department of Modern Languages to declare the major. This should be done as early as
  possible in the student's academic career, but not later than the second semester of the
  sophomore year.
- To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3).
- Prerequisites: (These courses do not count toward the major total of 45 semester hours)
  - o ECON 2012 Principles of Economics: Macroeconomics
  - ECON 2022 Principles of Economics: Microeconomics
  - MATH 1070 Algebra for Social Sciences and Business or
  - MATH 1110 College Algebra or
  - higher level math course
  - SPAN 2110 Second Year Spanish I or
  - SPAN 2120 Second Year Spanish II

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 45 credit hours, including a minimum of 30 SPAN credit hours and 15 credit hours in ancillary coursework.
- 2. Students must complete a minimum of 30 upper division (3000-level and above) credit hours in the major.
- 3. Students must achieve a minimum GPA of 2.5 for all courses applied to major requirements.
- Students must complete all major courses taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 18 SPAN credit hours with CU Denver faculty.

#### **Program Allowances and Restrictions**

- 1. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.
- 2. Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.
- 3. Students must complete least 6 SPAN credit hours at the 4000 level.
- 4. Students must complete a minimum of 30 credit hours in courses taught in Spanish.

Take **all** of the following Spanish courses:

- SPAN 3101 Introduction to the Study of Literature
- SPAN 3700 Spanish for International Business I
- SPAN 3710 Spanish for International Business II
- SPAN 3782 Introduction to Translation I or
- SPAN 3792 Introduction to Translation II

Take **two** of the following language skills and theory courses:

- SPAN 3010 Spanish Composition I
- SPAN 3020 Spanish Composition II
- SPAN 3030 Spanish Oral Proficiency
- SPAN 3050 Advanced Spanish Grammar
- SPAN 3060 Hispanic Phonetics: Theory and Practice

Take **one** of the following courses.

- SPAN 3213 Contemporary Latin American Culture and Institutions
- SPAN 3223 Contemporary Spanish Culture and Institutions

Take **one** of the following courses:

- SPAN 3212 Spanish American Culture and Civilization
- SPAN 3213 Contemporary Latin American Culture and Institutions (if not taken for the above requirement)
- SPAN 3221 Culture and Civilization of Spain I
- SPAN 3222 Culture and Civilization of Spain II
- SPAN 3223 Contemporary Spanish Culture and Institutions (if not taken for the above requirement)
- SPAN 3225 Special Topics In Hispanic Culture
- SPAN 3230 Ibero-American Cultures through Film
- SPAN 3240 Food Metaphors: Ibero-American Cuisine and Culture
- SPAN 3270 Bilingual Communities: Spanish as a Language of Contact

Take two SPAN electives at the 4000-level.

Take **all** of the following Business courses:

- ACCT 2200 Financial Accounting and Financial Statement Analysis
- MGMT 1000 Introduction to Business
- MGMT 3000 Managing Individuals and Teams
- MGMT 4400 Environments of International Business
- MKTG 3000 Principles of Marketing

# Sports Business Major - BS in Business Administration

#### Introduction

Please click here to see Business School information.

The Sports Business major offers students the opportunity to prepare for a competitive career in the sports industry. This program was developed with industry partners who are in need of qualified leaders in the field. Sports firms are currently hiring at the entry level and promoting from within. The Sports Business major will provide you with the knowledge and skills you need to begin your career in the exciting field of sports.

The program includes faculty who are active researchers in the field, prominent guest speakers, and the opportunity to participate in exciting internships with local leaders in the industry. Some companies where students have interned include Broncos Football Club, Kroenke Sports and Entertainment, United States Olympic Committee and Anschutz Entertainment group.

Students completing the Sports Business major are also eligible to participate in the London Calling study abroad program. This unique opportunity provides students with a firsthand look at the global sports management field through behind-the-scenes visits to key sports and entertainment organizations and venues in London. The two-week elective includes visits to the UK's top sports facilities, including Arsenal FC, O2 Arena, Wimbledon, 2012 Olympic committee and more.

Students enrolled in the program will learn about diverse, cross-functional areas of the sports industry, including:

Sports industry trends & growth opportunities
Sports media trends & new media
Stadium financing & development
Naming rights & sponsorships
Sports specific marketing plans
Sports pricing & fan loyalty
Negotiating contracts with athletes
Team valuations
Labor law and collective bargaining agreements
Pro team and college athletics management
Money flow in teams - managing revenue streams
Outdoor sports industry - marketing & management
Community relations and event planning
Olympics bid process and finances

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

Take the following required course:

MKTG 4250 - Sports Marketing

Take **two** of the following Business Practices courses:

- MKTG 4251 Music and Media Marketing
- MKTG 4252 The Business of Sports
- MKTG 4620 Customer Service Strategies
- MKTG 4730 New Product Development for Consumer and Sports Products

Take **one** of the following Research Skills courses:

- MKTG 3100 Marketing Research
- MKTG 3200 Consumer Behavior

Take **one** of the following Sales & Comm Skills courses:

- MGMT 4330 Mastering Management
- MKTG 3300 Social Media in Business
- MKTG 4000 Advertising
- MKTG 4700 Personal Selling and Sales Management

Take **one** of the following Application courses:

- MGMT 4900 Project Management and Practice
- MKTG 4050 Applied Marketing Management
- MKTG 4834 Global Sports & Entertainment Management

SPTB 3939

Take one 4000-level MKTG or MGMT elective

## **Undergraduate Minors**

# **Anthropology Minor**

#### Introduction

Please click here to see Anthropology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

• This is an on-campus or online program.

# **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

- 1. Students must complete a minimum of 18 ANTH credit hours.
- 2. Students must complete a minimum of 9 upper division (3000-level and above) ANTH credit hours. Most upper division courses have lower division pre-requisites.

- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

 All upper division core courses must be taken from CU Denver faculty in order to count for specific requirements. Upper division courses from other schools will only count as electives.

Take at least **three** of the following courses:

- ANTH 1302 Introduction to Archaeology
- ANTH 1303 Introduction to Biological Anthropology
- ANTH 2102 Culture and the Human Experience
- ANTH 3101 Foundations of Cultural Anthropology
- ANTH 3301 World Prehistory
- ANTH 3512 Human Evolution

Take 9 semester hours of Anthropology electives.

# **Art History Minor**

#### Introduction

Please click here to see general Visual Arts information.

The art history minor familiarizes students with the principal traditions of art history and includes a selection of lecture courses in advanced studies. This program provides a strong introduction to historical developments while developing analytical skills in research, writing and visual culture.

#### **Program Delivery**

This is an on-campus program.

## **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at CAM@ucdenver.edu for more information.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Art History Minor courses:

- FINE 2600 Art History Survey I
- FINE 2610 Art History Survey II

Take **nine** semester hours of upper-division Art History electives.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for lists of approved electives and more information about this minor.

# **Astrophysics Minor**

#### Introduction

Please click here to see Physics department information.

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extragalactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also the opportunity to do research in this field.

The physics department offers minors in physics, biophysics, and astrophysics. However, it is not possible to receive a minor in more than one of these fields. Also, physics majors may elect to receive the astrophysics or biophysics minor from the department, but not the physics minor.

Students are strongly encouraged to consult with the astrophysics advisor, meet physics faculty engaged in Astrophysics research, attend departmental astrophysics-related seminars, and explore ways that astrophysics relates to research undertaken by faculty in other disciplines.

For more information, contact: Clyde Zaidins (Physics advisor) clyde.zaidins@ucdenver.edu Office: North Classroom 3123B

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

## **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

# **Program Requirements**

1. Students must complete a minimum of 17 PHYS credit hours.

- 2. Students must complete a minimum of 6 upper-division (3000-level and above) PHYS credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 PHYS credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics.
- 2. A student majoring in physics who wants to minor in astrophysics needs to take a minimum of 15 credit hours in astrophysics that do not overlap with the major, excluding college physics, general physics or the associated labs.

Take the following **required** course:

PHYS 1052 - General Astronomy I

Take either of the following sequences:

- PHYS 2010 College Physics I
- PHYS 2020 College Physics II
- PHYS 2030 College Physics Lab I
- PHYS 2040 College Physics Lab II

or

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II

Take **one** of the following courses:

- PHYS 3050 General Astronomy II
- PHYS 3070 Physical Cosmology
- PHYS 3082 Energy and the Environment
- PHYS 3411 Thermal Physics
- \* PHYS 3840 Independent Study: PHYS
- PHYS 3939 Internship
- PHYS 4510 Optics
- PHYS 4550 Astrophysics

- \* PHYS 4840 Independent Study: PHYS
- \* PHYS 4920 Advanced Undergraduate Seminar
- \* PHYS 4980 Advanced Physics Topics

# **Behavioral Cognitive Neuroscience Minor**

#### Introduction

Please click here to see Psychology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

1. Students must complete a minimum of 15 PSYC credit hours.

<sup>\*</sup>Topics in these classes vary, as do the number of credits that can be earned. See departmental advisor for approval.

- 2. Students must complete a minimum of 9 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA is 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 PSYC credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. If a student is a Psychology major (either a Bachelor of Arts or Bachelor of Science), their PSYC 1000 and PSYC 2220 courses do not count toward this minor. Additionally, if a student is a Bachelor of Science Psychology major, the PSYC 4054 course does not count toward this minor, nor do the two upper division Psychology elective courses they are using to fulfill their Psychology Department major requirements. As a substitution, for these courses Psychology (B.A.) majors must take an additional 2 courses from either the Cognitive Neuroscience and/or Behavioral Neuroscience category lists.
- 2. To fulfill this minor a non-Psychology major must successfully complete a total of 5 courses, including PSYC 1000, 2220 and 3 of the upper division courses from the 2 lists, with at least one course from each of the lists. Psychology majors must complete a total of 5 courses from the two lists with a minimum of 1 from each category. None of the 5 courses used toward the minor can also be used toward their Psychology major requirements.
- 3. Students can take both PSYC 4054 Behavioral Neuroscience and BIOL 4165, but only one can count toward this minor.
- 4. Students must complete 9 upper-division (3000-level and above) credit hours with CU Denver faculty.

Take **all** of the following courses:

- PSYC 1000 Introduction to Psychology I
- PSYC 2220 Biological Basis of Behavior

Take **one** of the following Cognitive Neuroscience courses:

- PSYC 3144 Human Cognition
- PSYC 3205 Human Development I: Child Psychology
- PSYC 3215 Human Development II: Adolescence and Adulthood
- PSYC 3222 Principles of Learning and Behavior
- PSYC 3305 Abnormal Psychology
- PSYC 3810 Neuropsychology

Take **one** of the following Behavioral Neuroscience courses:

- PSYC 3104 Behavioral Genetics
- PSYC 3254 Introduction to Animal Behavior
- PSYC 3262 Health Psychology
- PSYC 3263 Hormones and Behavior
- PSYC 3264 Exercise, Brain and Behavior
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3724 Developmental Psychobiology
- PSYC 3822 Aging, Brain and Behavior
- PSYC 3832 Neural Basis of Learning
- PSYC 4054 Behavioral Neuroscience
- PSYC 4164 Psychology of Perception
- BIOL 4165 Neurobiology

Take **one** additional course from either the Cognitive Neuroscience or Behavioral Neuroscience lists above.

# **Biology Minor**

#### Introduction

Please click here to see Integrative Biology department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

# **Declaring This Minor**

Please see your CLAS advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a total of 28-31 credit hours, including a minimum of 20-23 BIOL credit hours and 8 credit hours in ancillary coursework
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) BIOL credit hours.
- 3. Students must achieve a minimum of 2.0 for all courses applied to the minor requirements, including ancillary courses.
- 4. Students must complete all minor courses, including ancillary courses, and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation.
- 2. Students cannot use courses taken to fulfill the Biology minor requirements toward fulfilling requirements in the Biology major or in other science majors, minors or certificates.

Take **all** of the following required courses:

- BIOL 2051 General Biology I or
- BIOL 2095 Honors General Biology I
- BIOL 2071 General Biology Laboratory I or
- BIOL 2096 Honors General Biology Lab I
- BIOL 2061 General Biology II or
- BIOL 2097 Honors General Biology II
- BIOL 2081 General Biology Laboratory II or
- BIOL 2098 Honors General Biology Lab II

Take **two** of the following courses:

- BIOL 3411 Principles of Ecology
- BIOL 3611 General Cell Biology
- BIOL 3832 General Genetics
- BIOL 3445 Introduction to Evolution

Take **all** of the following ancillary courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or
- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory

Take at least **two** upper division Biology courses, including at least one lab.

# **Biophysics Minor**

#### Introduction

Please click here to see Physics department information.

The minor in biophysics enables students with primary interests in biology, chemistry, health sciences, mathematics, anthropology, psychology, or other disciplines to explore the deep connections between fundamental physical processes and the functions and development of life. Using mathematical and computational models as well as precise experimental measurements and advanced instrumentation, biophysics explores living processes within a framework that builds upon fundamental physics concepts of mechanics, electrodynamics, statistical physics, and quantum physics. Students taking a minor in biophysics will be able to synthesize some or all of these areas of physics at a mature level of understanding into their primary field(s) of study, bringing an enriched array of intellectual and experimental tools to the pursuit of their professional goals.

Students must consult with the physics advisor, meet physics faculty engaged in biophysics research, attend departmental biophysics-related seminars, and explore ways that biophysics relates to research undertaken by faculty in other disciplines - including both fundamental science and clinical medicine. Opportunities also arise to connect biophysics studies to outreach

into regional high schools so that pre-college students can benefit from undergraduates sharing their experiences with connecting studies across disciplines.

For more information, contact: Clyde Zaidins (Physics advisor) clyde.zaidins@ucdenver.edu Office: North Classroom 3123B

#### **Program Delivery**

• This is an on-campus program.

## **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 16 PHYS credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) PHYS credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 12 PHYS credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Requirements for the minor in biophysics may be used to fulfill the requirements of the major in physics.
- 2. A student majoring in physics who wants to minor in biophysics needs to take a minimum of 15 credit hours in astrophysics that do not overlap with the major, excluding college physics, general physics or the associated labs.
- 3. Students must complete a minimum of 12 PHYS credit hours taken with CU Denver faculty with a minimum grade of C.

Take **all** of the courses in one of the following four course Physics lecture/lab sequences:

- PHYS 2010 College Physics I
- PHYS 2030 College Physics Lab I
- PHYS 2020 College Physics II
- PHYS 2040 College Physics Lab II
- or
- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II

Take **both** of the following upper division biophysics courses:

- PHYS 3151 Biophysics Outlook I
- PHYS 3161 Biophysics Outlook II

Take at least **one** of the following:

- PHYS 3251 Biophysics of the Body or
- PHYS 3252 Biophysics of the Body NM
- PHYS 3451 Biophysics of the Cell or
- PHYS 3452 Biophysics of the Cell NM
- PHYS 4351 Bioelectromagnetism or
- PHYS 4352 Bioelectromagnetism NM
- PHYS 4840 Independent Study: PHYS
- Additional biophysics-related special topics or elective courses may be approved by the department advisor. Such courses include topics such as Radiation Physics in Biomedicine, Computational Modeling in Biophysics, Nonlinear Dynamics in Biomedicine, and specialized courses in biophysics-related instrumentation.
  - \*\*Note: the courses containing "NM" are versions whose math and use of prior physics knowledge has been adjusted in terms of grading and assignments for students who have taken fewer math and physics courses than physics majors (NM stands for non-majors). Both versions are meant to be content rich and conceptually challenging, still require quantitative modeling, and are offered simultaneous by the same instructor. Students with strong math backgrounds are encouraged to take the "majors" (xx51) version. Either one or the other version can count toward the minor, but not both.

# **Business Minor**

#### Introduction

Please click here to see Business School information.

Business minors can give you an edge in your career.

By adding a business minor to a liberal arts, arts and media, architecture, or engineering degree you will gain an edge in the job market. The business minor allows you to focus on a specific area of business that fits your career goals.

The Business School offers all undergraduate students at CU Denver the opportunity to add a minor in business administration.

#### **Program Delivery**

This is an on-campus program.

## **Declaring This Minor**

 As a CU Denver Undergraduate student, you need a 2.0 GPA to be accepted for a business minor.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Please see an advisor regarding residency requirements.
- 2. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval.
- 3. Students must maintain or exceed a 2.0 GPA to graduate with the minor.

Take all of the following courses:

- MGMT 1000 Introduction to Business or
- ISMG 2050 Introduction to Business Problem Solving

- ACCT 2200 Financial Accounting and Financial Statement Analysis \*
- \* College algebra must be completed as a pre-requisite.

Take **three** of the following courses:

- BANA 3000 Operations Management
- BLAW 3050 Business Law and Ethics
- ENTP 3200 Essentials in Entrepreneurship
- FNCE 3000 Principles of Finance
- INTB 3000 Global Perspectives
- ISMG 3000 Technology In Business
- MGMT 3000 Managing Individuals and Teams
- MKTG 3000 Principles of Marketing

# **Chemistry Minor**

#### Introduction

Please click here to see Chemistry department information.

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

To register your minor in chemistry, please visit the CLAS advising office in NC 4002.
 After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Dr. Priscilla Burrow.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 24 semester hours of chemistry courses.
- 2. Students must complete a minimum of 15 upper division level (3000-level and above) CHEM credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to the minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to the minor requirements, including ancillary courses, with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 upper-division credit hours with CU Denver faculty.

Take **all** of the following chemistry minor courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or
- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory
- CHEM 3411 Organic Chemistry I or
- CHEM 3481 Honors Organic Chemistry I
- CHEM 3421 Organic Chemistry II or
- CHEM 3491 Honors Organic Chemistry II

Take **one** of the following upper division laboratory courses:

- CHEM 3018 Inorganic Chemistry Laboratory
- CHEM 3118 Analytical Chemistry Laboratory
- CHEM 3418 Organic Chemistry Lab I
- CHEM 3488 Honors Organic Chemistry Laboratory I

#### CHEM 4828 - Biochemistry Lab

Take **one** of the following upper division courses:

- CHEM 3011 Inorganic Chemistry
- CHEM 3111 Analytical Chemistry

Take **one** of the following upper division electives:

- CHEM 3810 Biochemistry
- CHEM 4810 General Biochemistry I
- CHEM 5810 Graduate Biochemistry I
- CHEM 4010 Advanced Inorganic Chemistry
- CHEM 4110 Advanced Analytical Chemistry
- CHEM 4121 Instrumental Analysis
- CHEM 4221 Practical Applications of Spectroscopy
- CHEM 4421 Cannabis Chemistry
- CHEM 4510 Computational Chemistry
- CHEM 4511 Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4521 Physical Chemistry: Quantum and Spectroscopy
- CHEM 4700 Environmental Chemistry
- <u>CHEM 4840 Independent Study: Chem</u> (with prior permission from the Chemistry Minor Advisor)
- CHEM 4880 Directed Research (with prior permission from the Chemistry Minor Advisor)
- CHEM 5010 Advanced Inorganic Chemistry
- CHEM 5110 Advanced Analytical Chemistry
- CHEM 5221 Practical Applications of Spectroscopy
- CHEM 5310 Advanced Organic Chemistry

# **Chinese Studies Minor**

#### Introduction

Please click here to see Modern Languages department information.

<sup>\*</sup>Only one biochemistry course may count towards the minor. Non-majors wishing to focus in biochemistry should consult the requirements for the <u>Biochemistry</u> Certificate program.

The Minor Program in Chinese Studies is an interdisciplinary program offering a specialized study of China through coursework in the related disciplines of language, anthropology, history, geography, philosophy, and political science. China's economic and political presence is increasingly prominent in the United States. CU Denver is uniquely positioned to make use of its location as the cultural, economic and political center of the Rocky Mountain region and of its diverse, well-trained and highly qualified faculty to offer a course of interdisciplinary studies related to China. Students may choose to focus either on General Chinese Studies or *Chinese Language and Culture*. On the one hand, *General Chinese Studies* encourages an interdisciplinary approach of accepting courses from various departments that focus on history, political science, art, philosophy, and more from China, Taiwan, Hong Kong, and Singapore. On the other hand, *Chinese Language and Culture* further develops students' linguistic competence and cultural awareness. The minor program offers a wide variety and levels of Mandarin Chinese language and culture courses that not only improve students' communication skills but also give a deeper look into different aspects of Chinese culture.

The program in Chinese studies offers a host of study abroad opportunities throughout the academic year and every summer. CU Denver has on-going programs at the China Agricultural University in Beijing, and programs in Taipei, as well as an association with Yunnan University in Kunming. Study abroad programs of five weeks to one year in length may be arranged, and program faculty can help students enroll in intensive Chinese language programs in Taiwan or on the mainland. Students pursuing the minor in Chinese language and area studies are encouraged to complete the program with a period of residence and study in China.

Program Director: Dr. I-hao Victor Woo

Advisor: Dr. I-hao Victor Woo Email: i-hao.woo@ucdenver.edu

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 15 credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all minor courses, including ancillary courses, taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours from CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

1. Courses taken at other institutions may be applied to the minor but only with approval of a Chinese faculty advisor in the Department of Modern Languages.

Take the **following** required courses:

- \* CHIN 1000 China and the Chinese
- \*CHIN 1000 should be taken toward the beginning of the minor.
- OR
- CHIN 1071 Mandarin Chinese for the Professions
- AND
- CHIN 2110 Second Year Chinese I

Take an additional **9-12** credits hours from the following courses, or any course approved in advance by the Chinese Studies Program Director. Students are encouraged to contact the program advisor to devise a study plan:

- ANTH 4000 Special Topics in Anthropology
- CHIN 2120 Second Year Chinese II
- CHIN 2970 Contemporary Chinese Cinema
- CHIN 3010 Advanced Intermediate Chinese
- CHIN 3130 Special Topics in Chinese
- CHIN 3200 Contemporary Chinese Society and Culture
- CHIN 3300 Special Topics on Chinese Film
- COMM 3230 Chinese Communication & Culture in Context
- COMM 4430 Communication, China, and the US
- COMM 4995 Global Study Topics
- FINE 4524 Topics in Art History II: Modern and Contemporary Art
- FINE 4750 Arts of China
- GEOG 3160 Geography of China
- HIST 3470 Intro to East Asia: Since 1800
- HIST 4420 Traditional China: China to 1600
- HIST 4421 Modern China
- HIST 4422 Lvng thr Mao's China: Life, Mat. Cult, Movies, 1949-76

- LING 2000 Foundations of Linguistics
- LING 3100 Language in Society
- PSCI 4186 East Asia in World Affairs
- PSCI 4615 Politics and Government of China
- PSCI 4726 Seminar on U.S. and China Relations
- PHIL 3666 Asian Philosophies and Religions
- PHIL 3981 Chinese Philosophy and Culture
- RLST 3410 Asian Philosophies and Religions
- RLST 3660 Chinese Philosophy and Culture

China-related travel study, taken under the following course numbers:

- ANTH 4995 Global Study Topics
- CHIN 3995 Travel Study
- PSCI 4995 Global Study Topics

# **Communication Minor**

#### Introduction

Please click here to see Communication department information.

Knowledge in most professional settings means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

These Minor requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their Minor advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This program is offered both on-campus and online.

#### **Declaring This Minor**

Please see your CLAS advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies
- Students must complete a minimum of 18 COMM credit hours (six courses)
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) COMM credit hours
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to the minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

Take all of the following Communication courses:

- COMM 1011 Fundamentals of Communication
- COMM 1021 Introduction To Media Studies
- COMM 2020 Communication, Citizenship, and Social Justice

Take **one** of the following Communication courses:

- COMM 1001 Presentational Speaking
- COMM 2050 Business and Professional Speaking

In addition to the four courses specified above, students must take **two** upper-division COMM courses (3000 level or above).

# **Computer Engineering Minor**

#### Introduction

Please click here to see electrical engineering department information.

The minor in computer engineering provides an opportunity to gain a more in-depth knowledge of computing technology, programming digital hardware, interfacing digital hardware, internet of things, microcontrollers and microprocessors, sensor technology, as well as computer vision

and image processing. The calculus sequence required for most engineering programs is not a prerequisite for the computer engineering minor.

#### **Program Delivery**

• This is an on-campus program.

#### **Declaring This Minor**

 Contact the Department of Electrical Engineering for a Computer Engineering Minor Coursework form.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must meet all prerequisites for all ELEC courses taken.
- 2. The minimum GPA is 2.0 with no individual course grade below C-
- 3. The student's application is subject to department approval.
- 4. Students may apply minor courses toward their major when applicable.

Take **all** of the following required courses (13 credit hours)

- <u>ELEC 1510</u> or <u>CSCI 1510 Logic Design</u> (3 hours)
- ELEC 1520 Embedded Systems Engineering I (3 hours)
- ELEC 2520 Embedded Systems Engineering 2 (3 hours)
- ELEC 2531 Logic Laboratory (1 hour)
- ELEC 3651 Digital Hardware Design (3 hours)

Technical elective - complete at least one (3 hours)

- ELEC 4511 Hardware-Software Interface
- ELEC 4678 Quantum Electronics
- ELEC 4727 Computer Vision & Image Processing Acceleration
- <u>ELEC 4800 Special Topics</u> (if related to computer engineering and with approval by the electrical engineering department chair)

# **Computer Science Minor**

#### Introduction

Please click here to see Computer Science department information.

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

#### **Program Delivery**

This is an on-campus program.

# **Declaring This Minor**

- To declare the CS minor, students must complete and send a Minor Declaration Form to the engineering dean's office. Once declared, students are required to meet with a CS advisor to complete the CS minor coursework form. The CS Minor declaration must be completed to register for 3000 level courses.
- For more information or an advising appointment, contact the Department of Computer Science and Engineering at 303-315-1408 or visit the Lawrence Street Center (1380 Lawrence Street), suite 800.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Any undergraduate student currently enrolled in a CU Denver degree program with a major other than computer science may earn a minor in computer science.
- 2. A CS Minor plan of study must be completed and approved by a CS advisor.
- 3. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.
- 4. All courses taken for the minor must be completed with a grade of C- or better and must be taught be a CS faculty member.
- 5. At the time of graduation, the student must have a CU Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.

Take **all** of the following required courses:

- MATH 1401 Calculus I
- CSCI 1410 Fundamentals of Computing
- CSCI 1411 Fundamentals of Computing Laboratory
- CSCI 2312 Object Oriented Programming
- CSCI 2421 Data Structures and Program Design

Take **four** additional CSCI courses: one of which may be at the 2000 level. All others must be at the 3000-level or higher.

# **Construction Management Minor**

#### Introduction

Please click here to see civil engineering department information.

Construction management involves the design, planning and management of the construction, maintenance and disposal of the built environment. This includes buildings, transportation systems, utilities and commercial, industrial, residential and environmental projects. Examples include highways, bridges, airports, buildings, dams, reservoirs, light and high-speed rail systems, hospitals, laboratories, residential communities, utilities and environmental restoration projects.

The construction management minor is designed for CU Denver undergraduates in engineering, architecture, business and other related disciplines who want to grow their skills and expertise in the fields of construction and engineering. The curriculum has been developed with the encouragement and review of a team of industry professionals and allows students to learn skills to facilitate entry into the construction industry.

#### **Program Delivery**

This is an on-campus program.

# **Declaring This Minor**

 To enroll in the construction management minor, complete the top portion of the <u>Construction Management Minor Coursework form</u>. Email the form to <u>roxanne.pizano@ucdenver.edu</u> or bring it to the Department of Civil Engineering office, located in North Classroom 3037.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

All courses must be taken in residence CU Denver (no transfer hours). A minimum 2.0 GPA is required for courses applied to this minor with no individual course grade below C- (1.7).

Take **all** of the following required courses:

- CVEN 2212 Engineering Surveying
- CVEN 4230 Construction Engineering Systems
- CVEN 4231 /5231 Construction Materials and Methods \*
- CVEN 4232 /5232 Construction Planning and Control \*

\*One of the following courses can be substituted for CVEN 4231 or CVEN 4232:

- CVEN 4236 /5236 Project Management Systems
- CVEN 5233 Construction Cost Estimating
- CVEN 5234 Sustainable Construction
- CVEN 5240 Building Information Modeling (BIM)
- CVEN 5242 Construction Safety
- MGMT /ISMG 4900 Project Management and Practice

# **Creative Writing Minor**

#### Introduction

Please click here to see English department information.

Students who are not majoring in an English creative writing track or are not majoring in English, and who have an interest in writing poetry or fiction, may enroll in the creative writing minor. The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in

individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 15 ENG credit hours.
- Students must complete a minimum of 6 upper-division (3000-level and above) ENGL credit hours
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7).
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

Take **all** of the following required courses:

- ENGL 2156 Introduction to Creative Writing
- ENGL 2450 Introduction to Literature

Take **one** of the following courses:

- ENGL 3020 Poetry Workshop
- ENGL 3050 Fiction Workshop

Take **one** of the following courses:

- ENGL 4025 Advanced Poetry Workshop
- ENGL 4055 Advanced Fiction Workshop
- ENGL 3020 or 3050 Writing Workshop (not previously taken)

Students who have taken ENGL 3020, take **one** of the following Poetry courses:

- ENGL 4160 Poetics
- ENGL 4166 History of American Poetry
- ENGL 4320 History of Poetry in English
- ENGL 4800 Special Topics in Creative Writing (poetry emphasis)

Students who have taken ENGL 3050, take **one** of the following Fiction courses:

- ENGL 4200 Survey of the English Novel to 1900
- ENGL 4230 The American Novel
- ENGL 4236 The American Short Story
- ENGL 4800 Special Topics in Creative Writing (fiction emphasis)

# **Criminal Justice Minor**

#### Introduction

Please click here to see School of Public Affairs information.

A minor in criminal justice will provide students with foundational knowledge of criminology and criminal justice. Students majoring in sociology, psychology, political science, and related fields are likely to interact with the criminal justice system in their careers and would benefit from the addition of the CJ minor to their degree plan.

#### **Program Delivery**

This is an on-campus and online program.

## **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. A minor in Criminal Justice requires 18 semester hours of course work.
- 2. A maximum of 9 transfer credits may be applied to the minor.
- 3. Electives must be taken from outside the student's major.

Take **all** of the following required courses:

- CRJU 1000 Criminology and Criminal Justice: An Overview
- CRJU 2041 Criminological Theory

Take **two** of the following courses:

- CRJU 4042 Corrections
- CRJU 4043 Law Enforcement
- CRJU 4044 Courts and Judicial Process

Take **two** additional upper-division elective courses in Criminal Justice or ancillary fields.

# **Digital Design Minor**

#### Introduction

Please click here to see general Visual Arts information.

The digital design minor integrates creative thinking with experience using digital applications in the production of graphic design and motion graphics. Configured as an interdisciplinary arts and design laboratory, this minor offers a practical understanding of how digital technology can be applied to help solve human, social and business problems.

## **Program Delivery**

• This is an on-campus program

#### **Declaring This Minor**

Students who are applying for entrance into the digital design minor must submit a
portfolio, as described below. The digital design minor accepts applications only once a
year. Students who meet the requirements and are accepted will be able to register for
upper-division digital design courses.

#### **ELIGIBILITY**

The student has completed, or is in the process of completing, the following courses with a grade of C (2.0) or better in each:

- FINE 2405 Introduction to Digital Design
- FINE 2415 Typography Studio

FINE 2405 and 2415 are both offered fall term at CU Denver.

#### PORTFOLIO APPLICATION REQUIREMENTS

To properly prepare the application, refer to the digital design website for detailed instructions. Applications are due by **November 1 at 5:00pm (Mountain Time)** or on the following business day if the deadline falls on a weekend or holiday.

Applications are only accepted online via the Canvas course portal and must be formatted to the specifications listed on the digital design website. The portfolio samples should consist of images and video links. Written work should be integrated into the submission. It is VERY important for students to visit the submission page early and begin uploads two weeks before the due date. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

#### **Application Portfolio**

Your portfolio must include a Design Project and 5 additional examples of your work. The Design Project asks for multiple images and writing, these do not count towards your 5 examples of your work. Details about choosing those 5 images are below.

Your complete application must be comprised of the following:

Follow all instructions to complete the Design Project. Writing is important, make sure that you include the required written elements of the design project (no more than 400 to 500 words in length). Your writing should demonstrate your critical thinking skills regarding your work, process, design choices and your ability to address the assignment

in a notable way. Refer to the Digital Design Portfolio Rubric on the Evaluation Process page for requirements, guidance, and criteria.

1 project or exercise from FINE 2405 Introduction to Digital Design (or equivalent for a transfer student). Label the image with the project/exercise name and class.

2 projects or exercises from FINE 2415 Typography (or equivalent for transfer students). Label the image with the project/exercise name and class.

2 additional creative works. They can be your original design, drawing, sculpture, photography, installation, painting, video (no longer than 2 minutes in length), freelance design work, or additional projects/exercises from design or other courses. All pieces will need to be in digital format.

#### **Portfolio Submission**

Current CU Denver students must submit their portfolio application through the Canvas course. Transfer students will submit by emailing a multipage PDF to Bryan Leister, at bryan.leister@ucdenver.edu by the Application Deadline. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

#### **QUESTIONS**

For more portfolio information, please contact <u>CAM@ucdenver.edu</u>, Visual Arts Chair, Michelle Carpenter at <u>michelle.carpenter@ucdenver.edu</u> or Associate Chair, Bryan Leister at <u>bryan.leister@ucdenver.edu</u>

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

### **Program Requirements**

- 1. All courses for this minor must be taken at CU Denver unless approved otherwise by the digital design faculty advisor.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to major requirements.

Take **all** of the following Digital Design Minor courses (entry level):

- FINE 2405 Introduction to Digital Design
- FINE 2415 Typography Studio

Students must complete FINE 2405 and 2415 and pass a portfolio review before they are eligible to take FINE 3414-3434 below. Discuss course planning and access with the Digital Design faculty advisor. Digital Design Minors are not required to take FINE 2105 Human-Centered Design.

Take **all** of the following Digital Design Minor courses (available only to students accepted to minor via portfolio review):

- FINE 3414 Motion Design I
- FINE 3415 Design Studio I
- FINE 3424 Interactive Media
- FINE 3434 3D Motion Design
- FINE 4600 History of Modern Design:Industrial Revolution-Present

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and more information about this minor.

# **Digital Media and Learning Minor**

#### Introduction

Please click <u>here</u> to see School of Education and Human Development information.

For more information, click here.

In our globally connected world, learning happens not just in schools but everywhere: in the workplace, at home, and in informal settings. Competency with technology, especially for creating and sharing knowledge, can further your chosen career in education, business, healthcare, technical fields, or the humanities. Social media and multimedia tools can accelerate learning on the job and set you on a course for lifelong, self-directed learning. You will enhance your career by keeping up with knowledge advances and establishing a strong professional presence online.

CU Denver's undergraduate minor in Digital Media and Learning will help you:

• Be a better student, using technology to create products and learn effectively

- Be a better employee, using social media and other tools to improve your knowledge and work performance
- Help others use learning technologies in school, work, and home

The 15-credit minor in Digital Media and Learning is offered through the School of Education and Human Development and the faculty in Learning Design and Technology.

### **Program Delivery**

 The first course, INTE 2500 Digital Media and Learning is taught on campus. The rest of the courses and electives are taught online.

### **Declaring This Minor**

 If you are currently a CU Denver student please contact the Undergraduate Advisor in the School of Education & Human Development for specific meeting times to discuss the process.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. To complete a minor in Digital Media and Learning, a student will need to complete 15 credit hours of Digital Media and Learning courses with a minimum grade of C+ (2.3).
- 2. Of those Digital Media and Learning courses, at least 12 credits must be completed at the University of Colorado Denver.
- 3. Transfer courses must be approved by faculty and/or advisor to apply to the minor.
- 4. Your minor program of study is developed in consultation with an academic advisor and requires a minimum of 15 credits of undergraduate courses.

Take all of the following courses:

- INTE 2500 Digital Media and Learning
- INTE 4340 Learning with Digital Stories
- INTE 4665 Social Media and Digital Cultures

Take **six** semester hours from the following elective courses:

- INTE 4300 Media Literacy
- INTE 4320 Games and Learning
- or an INTE elective approved by the program/advisor

### **Economics Minor**

#### Introduction

Please click here to see Economics department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

• This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 ECON credit hours.
- 2. Students must complete a minimum of 6 upper division (3000-level and above) ECON credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 ECON credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- Students may double count all but two upper division level courses toward other degree requirements
- 2. Only courses taken at CU Denver will apply in the GPA calculation.
- 3. All courses other than ECON 2012 and ECON 2022 require written department approval to be transferred in as satisfying major requirements.

Take the following **required** courses:

- ECON 2012 Principles of Economics: Macroeconomics
- ECON 2022 Principles of Economics: Microeconomics and
- Three upper-division electives in economics: 9 semester hours (ECON 3100 -Economics of Race and Gender is acceptable)

# **Education Studies Minor**

#### Introduction

Please click here to see School of Education and Human Development information.

The Education Studies Minor is a 15-credit undergraduate course of study that explores cognition and learning theory, teaching methods, development across the life span, and working with culturally and linguistically diverse learners.

The Education Studies Minor is useful across many disciplines and career paths. It is customized for two major audiences - those who plan to move into the teacher education program at CU Denver and students going into fields outside of K-12 teaching. Students outside of the K-12 teaching pathway will be able to create an emphasis that best suits their professional goals and needs as the minor is designed to enhance many disciplinary or career paths where there may be an educational component.

Students who are becoming teachers and have Elementary, Early Childhood, or Special Education as a declared major are not eligible for the Education Minor

### **Program Delivery**

This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, and online courses.

### **Declaring This Minor**

If you are currently a CU Denver student, please contact Undergraduate Advising in the School of Education & Human Development at 303-315-6300 for an appointment to discuss the process.

### **General Requirements**

The Education Minor is combined with an existing major and degree. To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

Pathway 1: Education Studies Minor for students moving into the K-12 teaching licensure pathways at CU Denver. Students must complete 15 credits below with a minimum grade of B-or better. (Consult with advisor for timing and specific requirements of this minor.)

- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education
- CLDE 4020 Responsive Classroom Communities
- EDHD 3930 Diverse Learners Field Experience & Seminar
- <u>SPED 4030 Understanding (dis)Ability in Contemporary Classrooms</u> (concurrent enrollment in EDHD 3930 required)
- One content course in area of licensure area of study (e.g. English, Mathematics, Science). Of those courses, at least 9 credits must be completed at the University of Colorado Denver. Transfer courses must be approved by faculty to apply to the minor.

Pathway 2: Education Studies Minor for non-K-12 teaching. Students must complete 15 credits below with a minimum grade C- or better. An overall minimum 2.0 is required for this minor. (Consult with advisor for timing and specific requirements of this minor.)

#### Foundations (Choose 1)

- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education
- EDFN 1000 Equality, Rights & Education (Core Social Science course)
- <u>CLDE 1000 Language, Identity, & Power: International Perspectives</u> (Core International Perspective course)

#### Pedagogy (Choose 2)

- <u>LCRT 2000 Rebels, Villains, & Superheroes: How Children's Literature Shapes Our Identities</u> (Core Humanities course)
- INTE 2500 Digital Media and Learning (Core Social Science course)
- INTE 2000 Digital Teaching and Learning
- SPED 4400 Universal Design for Learning (UDL)
- CLDE 2000 CLDE Foundations
- HDFR 3050 Children's Thinking and Assessment
- CLDE 3680 Spanish for Educators
- ECED 4102 Developmentally Appropriate Curriculum Methods and Techniques
- ECED 4060 Working with Families, Professionals, and Communities
- SPED 4300 Family, Professional, and Community Collaboration
- MTED 3040 Mathematics for Elementary Teachers

#### Development (Choose 1)

- HDFR 2110 Child Ecology
- HDFR 3020 Black and Latino Children in Families and Schools (Core Cultural Diversity course)
- <u>SPSY 2200 Child and Adolescent Mental Health in Schools and Communities</u> (Core Behavioral Science course)

Elective (Choose an additional course from the list above)

Please contact Undergraduate Advising in the School of Education & Human Development at 303-315-6300 for an appointment to discuss and plan your route through the Education Minor

# **Electrical Engineering Minor**

#### Introduction

Please click here to see electrical engineering department information.

Electrical engineers use mathematics and physics tools and theory to develop systems ranging from smart electric grids, embedded systems and computer engineering products, integrated electronics, wired and wireless communications, networking sensing and imaging devices, and information technology. Students enrolled in the minor of electrical engineering will be given the

opportunity to learn the fundamentals of electrical engineering as well as be introduced to some advanced applications. Students will be exposed to many real world applications and have hands-on engineering design experiences.

Students are encouraged to start this minor in their sophomore year of study.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 Contact the Department of Electrical Engineering for an Electrical Engineering Minor Coursework form.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must meet all pre-requisites for any ELEC courses taken.
- To receive the minor, the minimum GPA is 2.0 with no individual course grade below C-
- 3. The student's application is subject to department approval.
- 4. Students may apply minor courses toward their major when applicable.

Take **all** of the following required courses (9 credits)

- ELEC 2132 Circuit Analysis I or
- ELEC 3030 Electric Circuits and Systems
- ELEC 2142 Circuit Analysis II
- ELEC 3316 Linear Systems Theory

Junior Elective Courses - complete one of the following (3 credit hours)

ELEC 3215 - Electronics I

- ELEC 3164 Energy Conversion
- ELEC 3133 Electromagnetic Fields

Technical Electives - complete two of the following (6 credit hours)

- ELEC 3225 Electronics II
- Any 3 hour 4000-level ELEC lecture course (excluding ELEC 4309/4319)
- Any 3 hour 5000-level ELEC lecture course

# **English Writing, Rhetoric, and Technology Minor**

#### Introduction

Please click here to see English department information.

The English Writing, Rhetoric, and Technology minor allows students to complement their area of major study with systematic experience in writing.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus and online program.

### **Declaring This Minor**

Please see your CLAS advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 ENGL credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) ENGL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to the minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor course requirements pass/fail.
- Students must complete a minimum of 9 ENGL credit hours CU Denver English faculty.
- 6. A minimum of 6 credits must be taken at the upper division level.

### **Program Restrictions, Allowances and Recommendations**

- 1. Core composition courses (English 1020 and 2030) do not count toward the minor, nor does CLEP or AP credit.
- 2. Courses counted in the minor cannot be counted toward any of the English majors.
- Internships are available for students who have completed over 60 credit hours and count toward the upper-division elective in the minor. Visit CU Denver's Experiential Learning Center (ELC) for more (Tivoli 260). A faculty sponsor is required for all internships.
- 4. Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. (ENGL 2154 and ENGL 2030 can be taken concurrently.)

#### A. Required Course Areas (four courses) 12 hours:

Introduction to Writing and Rhetoric (take **ONE** as you begin the minor)

- ENGL 2060 Introduction to Writing & Digital Studies
- ENGL 2070 Grammar, Rhetoric and Style

#### Multimedia (take **ONE**):

- ENGL 3084 Multimedia Composition
- ENGL 4701 Multimedia in the Community

#### Language Study (take **ONE**):

- ENGL 3160 Language Theory
- ENGL 4601 Principles and Practices of Second Language Acquisition
- ENGL 4651 Second Language Writing

Advanced Writing Experience (take **ONE**):

ENGL 4190 - Advanced Topics in Writing & Digital Studies

#### B. Elective Course in Writing, Rhetoric, and Digital Studies (one course):

\*\* A course does not count here and in the Required Course Areas above. The exception is English 4190. One 4190 is required in the above section (A: Required Course Areas), and one additional 4190 can count below (in B: Elective Courses), if elected. (A maximum of two 4190s in total.)

#### Elective Courses in Writing, Rhetoric, and Digital Studies (take one) 3 hours:

- ENGL 2060 Introduction to Writing & Digital Studies
- ENGL 2070 Grammar, Rhetoric and Style
- ENGL 3084 Multimedia Composition
- ENGL 3154 Technical Writing
- ENGL 3160 Language Theory
- ENGL 3170 Business Writing
- ENGL 3405 Topics in Writing
- ENGL 3416 Magazine Writing
- ENGL 3995 Travel Study
- ENGL 4175 Writing in the Sciences
- ENGL 4180 Argumentation and Logic
- ENGL 4190 Advanced Topics in Writing & Digital Studies
- ENGL 4280 Proposal and Grant Writing
- ENGL 4601 Principles and Practices of Second Language Acquisition (by permission)
- ENGL 4651 Second Language Writing (by permission)
- ENGL 4701 Multimedia in the Community

**TOTAL: 15 hours** 

# **Entrepreneurship Minor**

#### Introduction

Please click here to see Business School information.

The Business School offers all undergraduate students at CU Denver the opportunity to add a minor in entrepreneurship.

Students enrolled in this minor have the benefit of following their passion with their undergraduate degree while adding the business knowledge and skills employers want and entrepreneurs need. By adding a business minor to a liberal arts, arts and media, architecture, or engineering degree, you will gain an edge in the job market.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 As a CU Denver Undergraduate student, you need a 2.0 GPA to be accepted for an entrepreneurship minor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must take 9 of the 15 hours of required business courses in the minor while in residence at the University of Colorado Denver. If a student has already taken the equivalent of one or more of these courses at another university, other higher-level business courses may be substituted with the approval of the Business School.
- 2. Students must maintain or exceed a 2.0 GPA to graduate with the minor.

Take all of the following courses:

- ENTP 3200 Essentials in Entrepreneurship
- ENTP 3230 Small Business Accounting and Finance
- ENTP 3299 Business Model Development & Planning

Take two ENTP electives

# **Environmental Sciences Minor**

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students emphasize the natural/physical sciences, and may strategically incorporate the social sciences and humanities.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 17 credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000- level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

1. Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.

- 2. The four upper-division elective courses for the Environmental Sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.
- 3. Undergraduate students may count up to 3 credit hours of independent study (any combination of ENVS 3840, 4840, 4880) towards elective credit in the minor as approved by the undergraduate coordinator.
- 4. The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).

Take **two** of the following lecture/laboratory courses (see Program Requirement note 9, above):

- BIOL 2051 General Biology I and
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II and
- BIOL 2081 General Biology Laboratory II
- CHEM 2031 General Chemistry I and
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II and
- CHEM 2068 General Chemistry Laboratory II
- PHYS 2010 College Physics I and
- PHYS 2030 College Physics Lab I
- PHYS 2020 College Physics II and
- PHYS 2040 College Physics Lab II

Take **three** of the following courses outside of the student's major discipline (see Program Requirement note 7):

- BIOL 3411 Principles of Ecology
- CHEM 4700 Environmental Chemistry
- ECON 4540 Environmental Economics
- ENVS 3082 Energy and the Environment or
- PHYS 3082 Energy and the Environment
- ENVS 4720 Climate Change: Causes, Impacts and Solutions
- ENVS 4740 Geography of Soils
- GEOG 3232 Weather and Climate
- GEOG 3240 Colorado Climates

- GEOG 4020 Earth Environments and Human Impacts
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4090 Environmental Modeling with Geographic Information Systems
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4240 Applied Geomorphology
- GEOG 4265 Sustainability in Resources Management
- GEOG 4270 Glacial Geomorphology
- GEOG 4280 Environmental Hydrology
- GEOG 4335 Contemporary Environmental Issues
- GEOG 4420 The Politics of Nature
- GEOG 4440 Science, Policy and the Environment
- GEOG 4720 Climate Change: Causes, Impacts and Solutions
- GEOG 4731 Mountain Biogeography
- GEOL 4030 Environmental Geology
- PSCI 4354 Environmental Politics

# **Ethics Minor**

#### Introduction

Please click here to see Philosophy department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 6 upper-division (3000-level and above) PHIL credit hours.
- 2. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 3. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 4. Students must complete a minimum of 9 PHIL credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. For those students who major in philosophy, up to two courses can satisfy the requirements for both programs.
- 2. Religious Studies courses cannot be used to fulfill the requirements for the minor.
- Courses taken at other institutions must either be transferred as direct equivalent to a CU Denver course or be approved by an advisor in the Philosophy Department for application towards the minor.
- 4. Courses not specifically listed here but offered by the Department may count toward the degree upon the approval of the Department Undergraduate Advisor.

Take the following **required** course:

PHIL 1020 - Introduction to Ethical Reasoning

Take **four** of the following courses:

- PHIL 3002 Ancient Greek Philosophy
- PHIL 3150 History of Ethics
- PHIL 3200 Social and Political Philosophy
- PHIL 3250 Business Ethics
- PHIL 3280 War and Morality
- PHIL 3500 Ideology and Culture: Racism and Sexism
- PHIL 3550 Philosophy of Death and Dying
- PHIL 4150 Twentieth Century Ethics
- PHIL 4242 Bioethics
- PHIL 4250 Environmental Ethics
- PHIL 4260 Philosophy of Law
- PHIL 4500 Feminist Philosophy
- PHIL 4700 Seminar in a Major Philosopher
- PHIL 4812 Special Topics in Philosophy
- PHIL 4833 Existentialism

# **Ethnic Studies Minor**

#### Introduction

Please click here to see Ethnic Studies department information.

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

• This is an on-campus program and all courses are available online.

### **Declaring This Minor**

Please click here to go to information about declaring a minor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 18 ETST credit hours (6 courses) in ethnic studies coursework with a grade of C or better.
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) ETST credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all major courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to major requirements with a minimum grade of C- (1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete all requirements for the Ethnic Studies minor with CU Denver faculty. Transfer courses do not apply.

#### Take the following required course:

#### • ETST 2000 - Introduction to Ethnic Studies

Take **four** upper- or lower-division ETST courses from the following focal U.S. racial/ethnic groups:

#### Asian-Americans

- ETST 3297 Social History of Asian Americans
- ETST 3307 Selected Topics: Asian Americans
- ETST 3357 Asian American Literature
- ETST 3567 Asian American Women
- ETST 3697 Contemporary Asian American Experience

#### African-Americans

- ETST 2105 African American Contemporary Social Issues
- ETST 2155 African American History
- ETST 3230 African American Family
- ETST 4220 African-American Literature
- ETST 4515 The African American in Politics

#### American Indians

- ETST 2496 American Indian Literature
- ETST 2606 The American Indian Experience
- ETST 3110 Indigenous Studies
- ETST 3216 Federal Law and American Indians
- ETST 3396 History of the American Indian
- ETST 3616 Selected Topics: American Indians
- ETST 4144 Indigenous Political Systems
- ETST 4146 Indigenous Politics
- ETST 4726 North American Indian Art

#### Chicanos/as and Latinos/as

- ETST 2400 Issues in Chicano/a Education
- ETST 3108 Chicano/a and Latino/a History
- ETST 3129 Contemporary Latin American Literature
- ETST 3350 Colonial Latin America

- ETST 3365 Aztlan in the United States: Chicano History from 1821
- ETST 3408 Social Psychology of Latinos/as
- ETST 3838 History of the Mexican American in Colorado
- ETST 4558 Chicano and Latino Politics
- ETST 4616 Selected Topics: Chicanos/as and Latinos/as

Take **one** ETST elective course of your choice.

# Film and Television Performance Minor

#### Introduction

Please click here to see general Film & Television Department information.

Students in this minor will receive an introductory education and practical experience in the art of on-camera performance. Through guidance from faculty, students will be instructed on methods of acting for various types of film and television projects. This will include fiction, non-fiction, voice work and understanding on how an actor works with directors, camera crews, and audio personnel. Students may also have opportunities to perform in student film productions produced within the department.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at CAM@ucdenver.edu for more information.

### **General Requirements**

- To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Film and Television Performance Minor courses:

- FITV 2220 Acting for Film and Television
- FITV 3220 Advanced Acting Workshop for Film and Television
- FITV 3570 Directing for Film and Television
- FITV 4200 Advanced Directing for Film and Television
- FITV 4400 Acting for Film and TV Practicum

Please contact the College of Arts & Media at <a href="mailto:CAM@ucdenver.edu">CAM@ucdenver.edu</a> for course sequencing, any prerequisite updates and for more information about this minor.

# Film and Television Production Minor

#### Introduction

Please click here to see general Film & Television Department information.

This minor gives students a hands-on experience in both production and post-production, providing a foundation of basic skills and procedures in the film and television industry.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- Students may transfer up to six semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Film and Television Production Minor courses:

- FITV 1035 Introduction to Filmmaking
- FITV 1040 Lighting, Grip, and Sound Introductory Workshop
- FITV 2050 Production II Film and Television Techniques

Take **two** of the following Film and Television Production Minor courses:

- FITV 2040 Introduction to Digital Effects
- FITV 2220 Acting for Film and Television
- FITV 3040 TV Studio Production
- FITV 3350 Editing Aesthetics

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# Film and Television Writing Minor

#### Introduction

Please click here to see general Film & Television Department information.

Students gain writing skills (fiction and non-fiction) for the development of episodic television and film scripts. Students also learn the practices and mechanics expected of professional screenwriters.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **one** of the following Film and Television Writing Minor courses:

FITV 1001 - Fundamentals of Film and Television

FITV 1200 - The Culture of Television

Take **all** of the following Film and Television Writing Minor courses:

- FITV 1551 Scriptwriting for Non-Majors
- FITV 1600 Writing Short Film:Non-Fiction
- FITV 3500 Writing for Episodic Television
- FITV 3510 Feature Screenwriting

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# **Film Studies Minor**

#### Introduction

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your CLAS advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 hours for the film studies minor.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) ENGL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to the major
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 ENGL credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. Students are strongly advised to take ENGL 2250, Introduction to Film, before taking other film courses.
- 2. Students are advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses.
- 3. No more than two online film studies courses can be counted toward the minor.
- 4. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions.

Take the following required courses:

ENGL 2250 - Introduction to Film

Take **one** of the following:

- ENGL 3070 Film History
- ENGL 3080 Global Cinema

Take three additional courses:

- ENGL 2415 Introduction to Movie Writing
- ENGL 2450 Introduction to Literature
- ENGL 3075 Film Genres \*
- ENGL 3085 Film Directors \*
- ENGL 3200 From Literature to Film
- ENGL 3300 Topics in Film \*
- ENGL 4190 Advanced Topics in Writing & Digital Studies \*(Film Focused Only)

- ENGL 4420 Film Theory and Criticism
- ENGL 4770 Topics in English: Film and Literature (Film Topics Only) \*

# **Finance Minor**

#### Introduction

Please click here to see Business School information.

Students in other undergraduate schools and colleges at CU Denver wishing to complete the Finance minor need to complete the course work described below.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

• To declare the Finance minor, students must have a 3.0 GPA, either cumulative or from their last 24 completed semester hours.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students must maintain or exceed a 2.0 GPA to graduate with the minor.
- 2. A student must take 12 of the 15 hours of required business courses in the minor while in residence at the University of Colorado Denver. If a student has already taken the equivalent of one or more of these courses at another university, other higher-level business courses may be substituted with the approval of the Business School.
- 3. Students must have declared the Finance minor to register for any of the upper-division FNCE courses or petition separately to take each of these courses.

<sup>\*</sup>Courses are repeatable if taken as a different genre/director/topic.

Take **all** of the following required prerequisite and proficiency courses:

- MATH 1070 College Algebra for Business or
- MATH 1110 College Algebra
- ECON 2012 Principles of Economics: Macroeconomics
- ECON 2022 Principles of Economics: Microeconomics
- BANA 2010 Business Statistics (BANA 2010 can be substituted with an upper division stats course such as ECON 3811 or MATH 3800)

Take **all** of the following courses:

- ACCT 2200 Financial Accounting and Financial Statement Analysis
- FNCE 3000 Principles of Finance

Take **three** of the following courses:

- FNCE 3500 Management of Business Capital
- FNCE 3600 Financial Markets and Institutions
- FNCE 3700 Investment and Portfolio Management
- FNCE 4370 International Financial Management
- FNCE 4500 Corporate Financial Decisions
- FNCE Elective (Can be from list above or any other upper-division FNCE course)

### **French Minor**

#### Introduction

Please click here to see Modern Languages department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 Students may declare a major in the CLAS advising office, but should see the French advisor to discuss course selections.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 FREN credit hours.
- 2. Students must complete a minimum of 15 upper-division (3000-level and above) FREN credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor requirements as pass/fail.
- 5. Students must complete a minimum of 9 FREN credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. The minor in French must include at least one language skills class, chosen from the classes listed below.
- 2. FREN 3200 is taught in English, and does not count toward the minor.
- 3. All upper-division level (3000-level and above) courses must be taught in French.

Take **one** of the following courses:

- FREN 3010 French Phonetics and Pronunciation
- FREN 3020 Conversation through Film
- FREN 3050 Advanced Grammar and Composition
- FREN 3060 Advanced French Language Skills

Take **four** additional upper-division FREN elective courses.

# **Fundamentals of Business Minor**

#### Introduction

The Business School offers all undergraduate students at CU Denver the opportunity to add a minor in fundamentals of business.

Students enrolled in this minor have the benefit of following their passion with their undergraduate degree while adding the business knowledge and skills employers want and entrepreneurs need. By adding a business minor to a liberal arts, arts and media, architecture, or engineering degree, you will gain an edge in the job market.

### **Program Delivery**

This is an on-campus program

### **Declaring This Minor**

 As a CU Denver undergraduate student, you need a 2.0 GPA to be accepted for a fundamentals of business minor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Please see an advisor regarding residency requirements.
- Students may only use transfer coursework in place of BMIN 1000. All remaining courses must be completed at CU Denver.
- Students must maintain or exceed a 2.0 GPA to graduate with the minor.

Take **one** of the following courses:

- BMIN 1000 Introduction to Business or
- BMIN 1010 Introduction to Business Career Planning

Take **all** of the following courses:

- BMIN 3001 Fundamentals of Management and Marketing
- BMIN 3002 Fundamentals of Accounting and Finance
- BMIN 3004 Principles of Strategic Management

Take **one** of the following electives:

- BLAW 3050 Business Law and Ethics
- ENTP 3200 Essentials in Entrepreneurship
- INTB 3000 Global Perspectives
- ISMG 2050 Introduction to Business Problem Solving

# **General Music Minor**

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

The general music minor offers students the opportunity to gain an informed understanding of the field of music performance, its language and history. Courses cover applied lessons on a specific instrument and/or voice, music theory, ear training and general recital. Students will also take courses that deal with the function and operation of the music industry, including an introduction to the music business, audio production, and music in culture

### **Program Delivery**

This is an on-campus program.

### **Declaring This Major**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at CAM@ucdenver.edu for more information.

### **General Requirements**

- To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements. Contact the Music Department at <a href="MEIS.Dept@ucdenver.edu">MEIS.Dept@ucdenver.edu</a> for more information on the minor.

Take **all** of the following General Music Minor Required courses (17 semester hours/8 courses total):

- PMUS 1105 Music Theory I
- PMUS 1115 Ear Training and Sight Singing I
- PMUS 1901-1923 Applied Lessons (1 semester hour)
- PMUS 1500 General Recital (1 semester hour)
- PMUS\_\_\_- Ensemble (1 semester hour)
- MUSC 2750 Introduction to Music Business
- MUSC 1540 Introduction to Audio Production

Take **One** of the following courses:

- PMUS 1021 Piano Class For Non-Majors
- PMUS 1040 Class Guitar
- PMUS 1045 Class Guitar I for Non-Majors

Take **One** of the following courses:

- PMUS 2315 Introduction to Songwriting
- PMUS 3832 Music in Culture

# **Geography Minor**

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus or online program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 GEOG credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000- level and above) GEOG credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. The minor is flexible and does not have core requirements. A student can elect to take any GEOG courses as long as they are not being used to fulfill requirements in another degree program in the department.
- 2. Undergraduate students may count up to 3 credit hours of independent study (GEOG 3840, 4840, 4880/GEOL 3840, 4840, 4880) towards elective credit in the minor as approved by the undergraduate advisor.

3. Students may not double-count courses for the Geography minor and another degree program in the department, the Sustainability Minor, or the GISci Certificate.

# **Health Humanities Minor**

#### Introduction

Please click here to see Health Humanities department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

• This is an on-campus program.

### **Declaring This Minor**

 Please see you advisor. Students declaring a minor in HEHM must have at least a 2.5 over GPA.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. Students may only count ONE relevant transfer course toward their elective requirements for the minor.
- 2. Students may double count no more than two courses from their major or University General Education Core toward the minor elective requirements.

Take the following **required** course:

• HEHM 3100 - Introduction to Health Humanities

Take **three** upper-division (3000-level and above) elective courses from at least two different disciplines. The following list is not exhaustive and continues to be updated. One elective course can be a service learning course or independent study approved by an HEHM advisor.

- ANTH 4600 Medical Anthropology
- COMM 4500 Health Communication
- ETST 3002 Ethnicity, Health and Social Justice
- GEOG 3501 Geography of Health
- GEOG 4235 GIS Applications in the Health Sciences
- GEOG 4710 Disasters, Climate Change, and Health
- HIST 4307 History of Sexuality
- HIST 4503 Topics in History of Science
- PBHL 3030 Health Policy
- PBHL 3070 Perspectives in Global Health
- PBHL 3041 Health, Culture and Society
- PBHL 4040 Social Determinants of Health
- PHIL 4242 Bioethics
- PSCI 4330 U.S. Health Policy
- PSYC 3262 Health Psychology
- SOCY 3440 Medical Sociology
- \* COMM 4550 Rhetorics of Medicine & Health
- \* ENGL 4290 Rhetoric and the Body
- \* HIST 4345 Gender, Science, and Medicine: 1600 to the Present

Take **one** capstone course, identified by an asterisk\* in the above list. These courses incorporate substantial original writing or research projects designed to promote broad reflection about the role of culture, society, and ethics in medicine. Students should choose these courses at the culmination of their minor course work.

# **History Minor**

#### Introduction

Please click here to see History department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

 This is an on-campus program and an online program. Students can complete the minor with all on-campus courses, all online courses, or a mix of on-campus and online courses.

### **Declaring This Minor**

 To declare this minor, contact CLAS advising at <u>CLAS\_Advising@ucdenver.edu</u> or visit the CLAS advising office in NC 1030. Students must be in a degree-seeking undergraduate program before they can declare this minor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 18 HIST credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) HIST credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to the minor requirements.
- 4. Students must complete all minor courses taken at CU Denver with a minimum grade of C(2.0) and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 12 HIST credit hours with CU Denver faculty.

Take a minimum of **three** credit hours in each of the following areas:

- United States
- Europe
- World.

At least **six** semester hours of these electives must be upper-division history courses.

Note: Please see your advisor for a list of acceptable courses.

Take an additional 9 HIST elective credit hours.

# Human Development and Family Relations Minor

#### Introduction

Please click here to see School of Education and Human Development information.

The Human Development and Family Relations (HDFR) minor prepares students to effectively serve and understand culturally and linguistically diverse family systems. For students who are interested in becoming family therapist, work in community based organizations or work as a university or college advisor/administrator this minor will provide excellent foundational courses in these areas. It also provides students with a family systems and ecological systems theories foundation of families and how they interact with community and educational contexts.

### **Program Delivery**

• This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

### **Declaring This Minor**

 If you are currently a CU Denver student please contact the Undergraduate Advisor in the School of Education and Human Development to set up an appointment to discuss the process.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

### **Program Requirements**

- To earn a minor, students must complete 15 approved credit hours specific to the minor, maintain good academic standing in the courses, must complete their undergraduate degree concurrently, must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
- 2. To complete a minor in HDFR, a student will need to complete 15 semester hours of HDFR courses with a minimum grade of C (2.0) including 1 required and 4 electives.
- 3. Of those HDFR courses at least 9 credits must be completed at the University of Colorado Denver.
- 4. Transfer courses must be approved by faculty and/or advisor to apply to the minor.

Take **one** of the following courses:

- HDFR 2000 Introduction to Family and Community Services
- HDFR 2200 Love, Family and Human Development

Take **four** HDFR elective courses in Human Development and Family Relations (or newly approved HDFR courses) or pick from the list below. Students will be encouraged to select courses that meet their interest and/or career aspirations. All course selections must be approved by an HDFR advisor or HDFR faculty. Please check the university catalog for when courses are offered. Other HDFR courses will be added to the list as they are designed and approved.

- HDFR 1000 Global Human Development & Learning
- ECED 4030 Nutrition, Health, and Safety
- ECED 4070 Development and Education of Infant and Toddlers
- EDFN 1000 Equality, Rights & Education
- EDFN 3000 Undocumented Mexican Immigration
- EDFN 4000 Food Justice in City & Schools
- EDHD 2050 Current Topics in Education and Human Development
- EDHD 2840 Independent Study in Education & Human Development
- EDHD 2910 Service Learning in Education and Human Development
- EDHD 4050 Special Topics in Education and Human Development
- <u>LCRT 2000 Rebels, Villains, & Superheroes: How Children's Literature Shapes Our Identities</u>

# **Humanities Minor**

#### Introduction

The Humanities Minor cultivates humanistic exploration through historically grounded texts and traditions. It teaches critical engagement with society's most pressing issues by developing a human-oriented perspective in which creativity and critical, theoretical thinking frame ethical being in the world.

These degree requirements are subject to periodic revision by the academic program, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

• This is an on-campus program.

## **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 15 credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to the minor requirements.
- 4. Students must complete all minor courses taken at CU Denver with a minimum grade of C(2.0) and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 12 credit hours with CU Denver faculty.

#### **Program Allowances and Restrictions**

- 1. Coursework must be approved by a Humanities Minor advisor.
- 2. Of the four elective courses, at least one course must be taken at 3000-level and at least one must be at the 4000-level.

Take the following introductory course:

- HUMN 1012 The Humanistic Tradition: Modes of Expression
- Students may opt to complete or transfer in a comparable HUMN 1000- or 2000-level course with prior advisor approval.

Take **four** elective courses (12 credit hours) of coursework in Humanities disciplines and Humanities-related programs. These courses must focus on one of three available interdisciplinary pathways:

- Story-telling and Meaning: comprised of Humanities electives focused on how humans make ethical decisions and meaning in life through literature, philosophy, history, and religion.
- Picturing Humanity: comprising Humanities courses emphasizing the aesthetic role of art, history, film, and visual studies in the constitution of diverse cultural and social perspectives OR
- Theorizing Humanity: comprised of coursework focusing on the public role of social theory, philosophy, ethnic studies, and social justice in the formation of culture and society.

#### Story-telling and Meaning:

- ENGL 3070 Film History
- ENGL 3075 Film Genres
- ENGL 4236 The American Short Story
- ENGL 4510 Whores and Saints: Medieval Women
- ENGL 4735 Philosophy and Literature
- ETST 3224 U.S. Middle East Culture and Religion
- ETST 3300 Shamanic Traditions
- HUMN 4984 Topics: Interdisciplinary Humanities
- PHIL 3280 War and Morality
- PHIL 3550 Philosophy of Death and Dying
- PHIL 3666 Asian Philosophies and Religions
- PHIL 4270 Philosophy of History
- PHIL 4470 Concepts of the Soul
- PHIL 4480 Perspectives on Good and Evil
- PHIL 4600 Philosophy of Religion
- PHIL 4933 Philosophy of Eros
- RLST 4340 The Hero's Journey
- RLST 4460 Death and Concepts of Afterlife

#### **Picturing Humanity:**

ENGL 2250 - Introduction to Film

- ENGL 3070 Film History I
- ENGL 3200 From Literature to Film
- ETST 3036 American Indian Cultural Images
- FINE 2600 Art History Survey I
- FINE 4630 History of Latin American Art:1520-1820
- FINE 4632 Media History and Aesthetics
- FINE 4670 Greek and Roman Art
- FINE 4680 Art of the Middle Ages
- FINE 4700 Italian Renaissance Art
- FINE 4750 Arts of China
- FINE 4990 Contemporary Art: 1960 to Present
- FINE 5610 Pre-Columbian Art
- HIST 4228 Western Art and Architecture
- HIST 4231 History in Museums
- HIST 4232 Historic Preservation
- PHIL 1700 Philosophy and the Arts
- PHIL 4220 Aesthetics and the Philosophy of Art

#### **Theorizing Humanity:**

- ETST 2024 Race and Ethnic Relations
- ETST 3211 Hip Hop Music & Culture
- ETST 3704 Culture, Racism and Alienation
- HIST 3121 The World at War, 1914-1945
- HIST 3230 The American Presidency
- HIST 3231 Famous U.S. Trials
- HIST 3235 U.S. Labor History, 1800 to the Present
- HIST 3347 African-American History, 1619-Present
- HIST 3364 Native Americans and Spaniards in North America
- HIST 3365 Aztlan in the United States: Chicano History from 1821
- HIST 3366 Nature and Power in American History
- HIST 3601 Colorado History
- HIST 4027 Enlightenment and Revolution
- HIST 4028 Nations and Classes: 19th Century Europe
- HIST 4055 The Atlantic Slave Trade: Africa, Caribbean and U.S.
- HIST 4076 History of Modern Science
- HUMN 4251 Introduction to Legal Studies
- HUMN 4984 Topics: Critical Public Humanities
- HUMN 4984 Topics: Spatial Humanities
- SJUS 2000 Foundations in Social Justice
- SJUS 2010 Social Justice: Theories, Narratives, and Technologies

If a student wants to deviate from these lists, they must have advisor approval prior to completing the substitute coursework.

# **Illustration Minor**

#### Introduction

Please click here to see general Visual Arts information.

The illustration minor is designed for students interested in broadening their visual communication skills and obtaining an introductory understanding of what is involved in the production of client-driven visual work. Undergraduates explore digital as well as hand-produced techniques and gain a basis for combining the two in a seamless manner in rendered illustrative works. This minor allows students to complement their major area of study with professionally effective visual communication skills.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take all of the following Illustration Minor courses:

- <u>FINE 1100 Drawing I</u>
- FINE 1400 Two-Dimensional Design
- FINE 2405 Introduction to Digital Design
- FINE 3010 Illustration I: Spatial Thinking

Take **two** of the following Illustration Minor courses:

- FINE 2010 The Graphic Novel Workshop
- FINE 3300 Painting, Drawing and the Printed Image
- FINE 3410 Illustration II: Digital Media
- FINE 3450 Digital Painting
- FINE 3557 Concepts in Illustration

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# **International Studies Minor**

#### Introduction

Please click here to see International Studies department information.

As the globe becomes increasingly connected, students gravitate towards classes that provide the interdisciplinary skills and international awareness required for success in the 21st century. The International Studies minor at CU Denver offers students a unique opportunity to create an individually tailored and relevant minor based upon a spectrum of Liberal Arts classes.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

 This is an on-campus program, available to students at the Denver campus and International College of Beijing.

#### **Declaring This Minor**

Denver students: please see your CLAS advisor

• ICB students: please see the International Studies advisor

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 18 credit hours.
- 2. Students must complete a minimum of 15 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.5 for all courses applied to minor requirements.
- 4. Students must complete all minor courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Please note: Students cannot take more than two upper-division courses from the same department for the minor.
- 2. The maximum amount of credit hours a student could receive through independent study courses is 6.
- 3. The maximum amount of credit hours a student could receive through pass/fail courses is 3.
- 4. Students may be able to complete all 18 credits via online courses.
- Students who did not select INTS 2020 Foundations of International Studies for their introductory course are permitted to take that course to fulfill one of the five upperdivision courses slots.

Take **one** introductory class from Political Science or History:

- INTS 2020 Foundations of International Studies
- PSCI 3022 Political Systems of the World
- PSCI 3042 Introduction to International Relations
- HIST 4032 Globalization in World History Since 1945

Take **five** upper division courses (3000-4000 level) with an international focus.

Courses on international and global topics may come from Anthropology, Communication, Economics, Ethnic Studies, Geography, History, or Political Science, or other departments.

Students are encouraged to select as one of their courses a 3000- or 4000-level seminar in a discipline other than their major to ensure that high level work in another field is being performed. Representative seminar courses are listed below. Students may also use any relevant Travel Study course to fulfill the seminar requirement. Please meet with an advisor for approval of individual courses.

#### **ICB**

- PSCI 4186 East Asia in World Affairs
- PSCI 4216 International Politics: Human Rights
- PSCI 4236 American Foreign Policy

#### Auraria

- ANTH 3142 Cultural Diversity in the Modern World
- COMM 4720 Dynamics of Global Communication
- EDFN 3000 Undocumented Mexican Immigration
- HIST 4461 The Modern Middle East
- PSCI 4226 The United Nations in World Affairs

#### Online

- <u>PSCI 4002 Topics in Political Science</u> Globalization, Bio-colonialism, and Indigenous Rights
- PSCI 4002 Topics in Political Science Clictivism Online Social Activism

# **Law Enforcement Minor**

#### Introduction

Please click here to see School of Public Affairs information.

The undergraduate minor in Law Enforcement provides a detailed, comprehensive, and advanced education in the field of law enforcement. This program is designed for students who are employed or will work in the field of law enforcement.

The CJLE program applies a multi-faceted approach to higher education that:

- 1. Enhances analytical thinking and inclusive, relevant approaches to learning and the development of professional skills; and
- 2. Focuses on specific, yet comprehensive, substantive areas of law enforcement that students can apply to their current or future careers in the field.

Students completing the CJLE minor will have the knowledge and skills to evaluate and respond to a variety of situations in law enforcement professions that require technical, analytic, substantive, and ethical decision-making. They will understand the different environments and contexts in which law enforcement carry out their responsibilities.

## **Program Delivery**

This is an on-campus and online program.

## **Declaring This Minor**

Please see your advisor.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. A minor in Law Enforcement requires 18 semester hours of course work.
- 2. No more than 6 credit hours of transfer coursework may apply to the minor.
- 3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the minor.

Take **all** of the following required courses:

- CRJU 1000 Criminology and Criminal Justice: An Overview
- CRJU 2041 Criminological Theory
- CRJU 4043 Law Enforcement
- CRJU 4540 Evidence-Based Approaches in Law Enforcement

#### **Program Electives**

There are two elective categories, Topic Area and Professional Setting. The Topic Area electives allows the student to explore a different aspect of law enforcement. The Professional Skills elective allows the student to hone skills related to law enforcement.

#### Topic Area (students take one of the following):

- CRJU 3310 Contemporary Issues in Law Enforcement
- CRJU 3320 Police-Community Relations
- CRJU 3520 Juvenile Justice
- CRJU 3530 Juvenile Delinguency
- CRJU 4410 Criminal Law and Constitutional Procedures
- CRJU 4430 Law and Society
- CRJU 4450 Homeland Security
- HIST 4380 Crime, Policing and History
- PSCI 4427 Law, Politics and Justice
- SOCY 4340 Juvenile Delinquency
- SOCY 4700 Sociology of Law
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment.

#### Professional Skills (students take one of the following):

- ANTH 3550 Forensic Anthropology
- CRJU 4310 Leadership Roles in Criminal Justice
- CSCI 1001 Computer Forensics I
- GEOG 4080 Introduction to GIS
- <u>CRJU 4939 Internship</u> (only for Certificate or Minor and must be related to Law Enforcement and be pre-approved)
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment.

# **Law Studies Minor**

<sup>\*</sup>Students must adhere to departmental pre-requisites, if applicable.

<sup>\*</sup>Students must adhere to departmental pre-requisites, if applicable.

#### Introduction

Please click here to see Law Studies department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

 To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 1030.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 18 credit hours.
- 2. Students must complete a minimum of 18 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 3.0 for all courses applied to major requirements.
- 4. Students must complete all minor courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- Students must complete a minimum of 18 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- All courses must be taken in residence at CU Denver from CU Denver faculty. No transfer courses apply.
- 2. Courses taken for the minor cannot serve to fulfill requirements of the university general education or the CLAS undergraduate core graduation requirements. Courses taken for

- a student's major cannot be used to fulfill any requirements for the minor unless prior permission is granted by the minor coordinator.
- 3. Every course used to complete minor requirements must be upper-division (3000-level and above).

Take the following Foundations course:

- HUMN 4251 Introduction to Legal Studies
- SSCI 4325 First Amendment: Theory and Context

Take **two** of the following Constitutional Thought courses:

- PSCI 4477 Constitutional Law I
- PSCI 4487 Constitutional Law II
- SSCI 4050 Special Topics in Law Studies First Amendment: Theory and Context

Take **two** of the following Social Context of Law courses:

- COMM 3231 Famous U.S. Trials
- CRJU 4430 Law and Society
- ECON 4230 Law and Economics
- HIST 4308 Crime, Policing, and Justice in American History
- SSCI 4050 Special Topics in Law Studies Gender and the Law
- PHIL 4260 Philosophy of Law
- PSYC 3505 Psychology and the Law
- SOCY 4700 Sociology of Law

# **Linguistics Minor**

#### Introduction

Please click here to see information about the Department of Modern Languages.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

The minor in Linguistics is an interdisciplinary program awarded through the Department of Modern Languages. The minor is designed to guide students through an exact and structured discipline that examines various aspects of the nature of human language. A Linguistics minor may be of particular interest to students majoring in a Foreign Language, as well as majors in fields such as Anthropology, English, Communication, Education, Philosophy, and Sociology. The Linguistics minor is open to all undergraduate students at CU Denver.

#### **Program Delivery**

This is an oncampus program.

#### **Declaring This Minor**

 Please see your advisor. To be admitted to minor status in Linguistics, students must have an overall GPA of C+ (2.3)

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 15 credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.5.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. A minimum of 9 credit hours must be taken from CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- Upon declaring a minor in Linguistics, each student will be assigned to a faculty advisor
  with whom the student should consult at least once per semester thereafter. It is
  especially important that students have their transcripts reviewed by their advisor before
  enrolling in their final 30 credit hours at CU Denver. Failure to do so may result in delay
  of graduation.
- 2. Courses taken at other institutions may be applied to the minor, but only with approval of a Linguistics faculty advisor in the Department of Modern Languages.

Take **both** of the following courses:

- LING 2000 Foundations of Linguistics
- LING 3100 Language in Society

#### Take **nine credit hours** from the following elective courses:

- ANTH 3121 Language, Culture, and Communication
- CLDE 1000 Language, Identity, & Power: International Perspectives
- CLDE 4030 Language Development of Multilingual Learners
- CLDE 4820 Teaching Multilingual Learners
- ENGL 3160 Language Theory
- ENGL 4080 History of English Language
- ENGL 4190 Advanced Topics in Writing & Digital Studies
- ENGL 4601 Principles and Practices of Second Language Acquisition
- ENGL 4651 Second Language Writing
- FREN 3010 French Phonetics and Pronunciation
- FREN 4600 History of the French Language
- GRMN 3050 Phonetics and Pronunciation of German
- GRMN 4050 Advanced German Phonetics and Language History
- MLNG 4690 Methods of Teaching Modern Languages
- MLNG 4691 Methods of Teaching Modern Languages II
- PHIL 2441 Logic, Language and Scientific Reasoning
- SPAN 3060 Hispanic Phonetics: Theory and Practice
- SPAN 3270 Bilingual Communities: Spanish as a Language of Contact
- SPAN 4010 History of the Spanish Language
- SPAN 4020 Spanish Sociolinguistics
- SPAN 4060 Dialects of the Spanish-Speaking World
- SPAN 4070 Spanish Applied Linguistics & Second Language Acquisition
- SPAN 4076 Spanish in Colorado
- SPAN 4080 Spanish in the United States
- SPAN 4099 Special Topics in Linguistics

# **Literature Minor**

#### Introduction

Please click here to see English department information.

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works. The literature minor allows students to complement their area of major study with systematic experience in literature.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

## **Declaring This Minor**

Please see your CLAS advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 15 ENGL credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) ENGL credit hours
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7).
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Students must take ENGL 1020 before beginning the minor.
- 2. Courses in a minor cannot be counted toward the English major or English Writing major.
- 3. A minimum of 9 upper division level ENGL credits must be taken with CU Denver English faculty.
- 4. Course requirements may not be met by independent study.

**Note:** Students are advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division literature courses.

Take the following **required** courses:

- ENGL 2450 Introduction to Literature
- ENGL any level, Literature/Film course (includes 1601 and 2600)

Take three courses:

Any ENGL 3000/4000 Literature/ Film course

\*Courses are repeatable if taken as a different genre/author/topic.

•

Students are encouraged to cluster their courses around a special interest, such as:

- Major Authors
  - Chaucer, Shakespeare, Milton, Austen, Cather, Nobel Authors, etc.
- Genre
  - Any Drama, Speculative Fiction, Short Story, Young Adult Fiction, American or British Novel, American or History of English Poetry, Literature to Film, Memoir
- Self and Social Identity
  - Harlem Renaissance, Feminist Thought, Women Writers, African American Literature
- The Modern World through Literature
  - 20th Century Literature, Contemporary World Literature, Modernism, Major Authors-any 20th century, Modern Drama
- History through Literature
  - Medieval, Renaissance, Romantic, Victorian, American Literature
- Modes of Narrative
  - Storytelling
  - Poetics

# **Mathematics Minor**

#### Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

• This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 21 MATH credit hours.
- 2. Students must complete a minimum of 6 upper division (3000-level and above) MATH credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. At least 9 MATH credit hours must be taken at CU Denver.

#### **Program Restrictions, Allowances and Recommendations**

- 1. Students must complete at least 15 of their upper-division level MATH credits with CU Denver faculty.
- 2. Students may not use any of the following MATH courses to count toward minor requirements: MATH 3040, MATH 4012, MATH 4013, MATH 4014 and MATH 4015.

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III

Take **three** approved upper-division MATH courses worth three or more credit hours each, above 3000, excluding MATH 3040, 4012, 4013, 4014 and 4015.

# **Music Industry Studies Minor**

#### Introduction

Please click here to see general Music & Entertainment Industry Studies information.

Music is a rapidly evolving field that requires practitioners to have a broad understanding of the main functional areas and intimate knowledge of the creation and operation of music organizations. The music industry studies minor provides students with a strong foundation in the functional operations of the music industry. At the completion of the minor, students will have an in-depth knowledge of music marketing, artist management, concert promotion and music publishing.

## **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements. Contact the Music Department at <a href="MEIS.Dept@ucdenver.edu">MEIS.Dept@ucdenver.edu</a> for more information on the minor.

Take **all** of the following Music Industry Studies Minor courses (15 semester hours/5 courses total):

- MUSC 2750 Introduction to Music Business
- MUSC 3250 Music and Entertainment Marketing
- MUSC 3260 Artist Management
- MUSC 3699 Concert Promotion, Tour and Venue Management
- MUSC 3760 Music Publishing

There is a recommended sequence for the Music Industry Studies course work. Please contact the College of Arts & Media at <a href="CAM@ucdenver.edu">CAM@ucdenver.edu</a> for course sequencing and any prerequisite updates.

# **Nonprofit Management Minor**

#### Introduction

A minor in Nonprofit Management is expected to be popular with students from fields in which nonprofit organizations play a significant role such as psychology, public health, environmental studies, and ethnic studies. Through this minor, a student can focus on the fundamentals of nonprofit management, and also has the option to participate in extracurricular activities leading to the Certified Nonprofit Professional (CNP) designation through the Nonprofit Leadership Alliance. Contact <a href="mailto:BAPS@ucdenver.edu">BAPS@ucdenver.edu</a> for more information about earning the Certified Nonprofit Professional designation as part of the Nonprofit Management minor.

## **Program Delivery**

This is an online program.

## **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

## **Program Requirements**

- 1. A minor in Nonprofit Management requires 15 credit hours of course work.
- 2. A maximum of 6 transfer credits may be applied to the minor.
- 3. Please note that the Certified Nonprofit Professional designation also requires completion of an internship and other extracurricular activities, along with the coursework listed below. Contact <a href="mailto:BAPS@ucdenver.edu">BAPS@ucdenver.edu</a> for more information on the certificate program.

Take the following required courses:

- PUAD 3003 Introduction to Nonprofit Organizations
- PUAD 3004 Managing Nonprofit Organizations

Choose **three** courses from the following list of Nonprofit electives:

- PUAD 3005 Collaboration Across Sectors
- PUAD 4004 Building Public and Financial Support for Nonprofit Organizations
- PUAD 4007 Nonprofit HR: Governance, Staff, Volunteer Management
- PUAD 4020 Social Entrepreneurship

# **Painting and Drawing Minor**

#### Introduction

Please click here to see general Visual Arts information.

The painting and drawing minor is designed for students interested in broadening their skills in the production of painterly and hand-drawn works of art. Undergraduates are introduced to a variety of techniques and ideas, exposed to several historical and contemporary art practices, and experience studio practice and participate in art dialogue. This minor allows students to complement their major area of study with applied visual problem-solving strategies and techniques, as well as with an ability to enhance their interests through studio art practice and discourse.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

#### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Painting and Drawing Minor courses:

- FINE 1100 Drawing I
- FINE 2200 Painting I
- FINE 3200 Intermediate Painting and Drawing
- FINE 3556 Concepts in Painting and Drawing

Take **two** of the following Painting and Drawing Minor courses:

- FINE 2030 Life Drawing
- FINE 3030 The Media of Drawing OR FINE 3995 Travel Study "Drawing in Italy"
- FINE 3300 Painting, Drawing and the Printed Image
- FINE 3450 Digital Painting
- FINE 3556 Concepts in Painting and Drawing (Note: course concept must be different than previously taken)
- FINE 4215 Advanced Art Practices

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# **Philosophy Minor**

#### Introduction

Please click here to see Philosophy department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 15 PHIL credit hours.
- Students must complete a minimum of 6 upper-division (3000-level and above) PHIL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 PHIL credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

- 1. For those students who major in philosophy, up to two courses can satisfy the requirements for both programs.
- 2. Religious Studies courses cannot be used to fulfill the requirements for the minor.
- Courses taken at other institutions must either be transferred as direct equivalent to a CU Denver course or be approved by an advisor in the Philosophy Department for application towards the minor.
- 4. Courses not specifically listed here but offered by the Department may count toward the degree upon the approval of the Department Undergraduate Advisor.

Take **all** of the following required courses:

- PHIL 1012 Introduction to Philosophy: Relationship of the Individual to the World
- PHIL 3002 Ancient Greek Philosophy
- PHIL 3022 Modern Philosophy
- (It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

Take **two** additional PHIL courses, one of which must be at the upper-division level.

# **Philosophy of Science Minor**

#### Introduction

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

Please see your advisor.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete a minimum of 15 PHIL credit hours.
- Students must complete a minimum of 6 upper-division (3000-level and above) PHIL credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 PHIL credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

- 1. For those students who major in philosophy, up to two courses can satisfy the requirements for both programs.
- 2. Religious Studies courses cannot be used to fulfill the requirements for the minor.
- 3. For a particular PHIL 4812/4980 (Special Topics) course to serve as an elective, the course material must be relevant to the minor and advisor approval to use the course as an elective is required.
- 4. It is possible to use PHIL courses not listed below to fulfill elective requirements but requires advisor approval.
- Courses taken at other institutions must either be transferred as direct equivalent to a CU Denver course or be approved by an advisor in the Philosophy Department for application towards the minor.
- 6. Courses not specifically listed here but offered by the Department may count toward the degree upon the approval of the Department Undergraduate Advisor.

Take **all** of the following required courses:

- PHIL 2441 Logic, Language and Scientific Reasoning
- PHIL 2550 Investigating Nature: Introduction to the Philosophy of Science
- PHIL 4350 Philosophy of Science

Take **six credit hours** from the following elective courses:

- PHIL 3032 Twentieth Century Analytic Philosophy
- PHIL 3350 Metaphysics
- PHIL 3360 Epistemology
- PHIL 3440 Introduction to Symbolic Logic
- PHIL 4101 Pragmatism: Classical American Philosophy
- PHIL 4300 Philosophy of Mind

- PHIL 4740 Empiricism
- PHIL 4920 Philosophy of Media and Technology

# **Photography Minor**

#### Introduction

Please click here to see general Visual Arts information.

Students in the photography minor develop a broad range of technical and conceptual skills that expand their knowledge of image-making. The curriculum of the minor emphasizes photography as a tool for creative expression while integrating the history of photography and contemporary artistic practices. Through an exploration of both digital and analog processes, students select intermediate level courses that enable them to successfully employ a variety of photographic strategies.

## **Program Delivery**

This is an on-campus program.

#### **Declaring This Minor**

• Students who wish to declare this minor should contact the College of Arts & Media at CAM@ucdenver.edu.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Photography Minor courses (entry level):

- FINE 1150 Introduction to Darkroom Photography
- FINE 2155 Introduction to Digital Photography
- FINE 3630 History of Photography

Take **three** of the following Photography Minor courses:

- FINE 3115 Mixed Media and Photography
- FINE 3135 Historic Photographic Processes in Italy
- FINE 3156 Photography Studio and Lighting
- FINE 3160 Color and the Constructed Image
- FINE 3161 The Silver Fine Print
- FINE 3162 The Digital Fine Print
- FINE 3171 Concepts and Processes in Photography
- FINE 3172 Photography and Community
- ARCH 3602 Architecture Photography (available only to architecture majors)

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# **Physics Minor**

#### Introduction

Please click here to see Physics department information.

Students are strongly encouraged to consult with the Physics advisor, meet physics faculty engaged in Pure & Applied Physics research, attend departmental seminars, and explore ways that Physics relates to research undertaken by faculty in other disciplines.

For more information, contact:

Clyde Zaidins (Physics advisor)

Clyde.zaidins@ucdenver.edu

Office: North Classroom 3123B

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

• This is an on-campus program.

## **Declaring This Minor**

Please see your advisor.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 16 PHYS credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) PHYS credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- Students must complete a minimum of 9 PHYS credit hours with CU Denver faculty.

## **Program Restrictions, Allowances and Recommendations**

1. A student majoring in physics cannot earn a minor in physics.

Take **either one** of the following sequences:

- PHYS 2010 College Physics I
- PHYS 2020 College Physics II
- PHYS 2030 College Physics Lab I
- PHYS 2040 College Physics Lab II

or

- PHYS 2311 General Physics I: Calculus-Based
- PHYS 2321 General Physics Lab I
- PHYS 2331 General Physics II: Calculus-Based
- PHYS 2341 General Physics Lab II

Take **six** upper division (3000-level or higher) PHYS credit hours of electives.

# **Political Science Minor**

#### Introduction

Please click here to see Political Science department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

• This is both an on-campus program and online program.

### **Declaring This Minor**

Please see your advisor.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 15 PSCI credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) PSCI credit hours.
- 3. Students must achieve a minimum GPA of 2.0 courses applied to major requirements.

4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.

Take **one** of the following courses:

- PSCI 1001 Introduction to Political Science: The Quest for Freedom and Justice
- PSCI 1101 American Political System

Take **one** of the following American Politics courses:

- PSCI 4009 Politics of the Budgetary Process
- PSCI 4014 Media and Politics
- PSCI 4024 State Politics: Focus Colorado
- PSCI 4025 Local Governance and Globalization
- PSCI 4034 Political Parties and Pressure Groups
- PSCI 4044 The Presidency
- PSCI 4074 Urban Politics
- PSCI 4075 Gentrification and Social Equity
- PSCI 4084 Local Government and Administration
- PSCI 4085 Comparative Governance: Environment and Society
- PSCI 4094 Seminar: American Politics
- PSCI 4124 Denver Politics
- PSCI 4236 American Foreign Policy
- PSCI 4237 American National Security
- PSCI 4324 Politics, Public Policy and Leadership
- PSCI 4330 U.S. Health Policy
- PSCI 4354 Environmental Politics
- PSCI 4374 Public Priorities for the 21st Century
- PSCI 4414 Non-Profits and Social Change
- PSCI 4444 Contemporary Culture and Politics in America
- PSCI 4477 Constitutional Law I
- PSCI 4487 Constitutional Law II
- PSCI 4494 Judicial Politics
- PSCI 4535 Labor and Working Class Politics
- PSCI 4545 Immigration Politics
- PSCI 4554 Chicano and Latino Politics
- PSCI 4644 Ethical Responsibilities of Leaders
- PSCI 4726 Seminar on U.S. and China Relations
- PSCI 4827 Women and the Law
- PSCI 4837 Contemporary Issues in Civil Liberties
- PSCI 4914 Community Organizing and Community Development

Take **one** of the following Comparative Politics courses:

PSCI 4085 - Comparative Governance: Environment and Society

- PSCI 4105 Comparative Politics: Europe
- PSCI 4115 Third World Politics
- PSCI 4144 Indigenous Political Systems
- PSCI 4146 Indigenous Politics
- PSCI 4150 Gender Politics in the Middle East: Beyond Orientalism & Islamism
- PSCI 4155 Political Systems of the Middle East and North Africa
- PSCI 4156 The Arab-Israeli Peace Process
- PSCI 4165 Islamic Politics and Culture
- PSCI 4186 East Asia in World Affairs
- PSCI 4195 Political Systems of Sub-Saharan Africa
- PSCI 4206 Social Movements, Democracy and Global Politics
- PSCI 4215 Women's Rights, Human Rights: Global Perspectives
- PSCI 4225 Democracy and Democratization
- PSCI 4248 Gender, Globalization and Development
- PSCI 4265 Social Justice And Globalization
- PSCI 4446 Advanced Indigenous Peoples' Politics
- PSCI 4505 Political System of Russia and Its Neighbors
- PSCI 4555 International Women's Resistance
- PSCI 4605 Politics and Governments of South Asia
- PSCI 4615 Politics and Government of China
- PSCI 4645 Comparative Political Leadership
- PSCI 4914 Community Organizing and Community Development

#### Take **one** of the following International Politics courses:

- PSCI 4025 Local Governance and Globalization
- PSCI 4105 Comparative Politics: Europe
- PSCI 4115 Third World Politics
- PSCI 4126 Introduction to International Political Economy
- PSCI 4144 Indigenous Political Systems
- PSCI 4146 Indigenous Politics
- PSCI 4150 Gender Politics in the Middle East: Beyond Orientalism & Islamism
- PSCI 4155 Political Systems of the Middle East and North Africa
- PSCI 4156 The Arab-Israeli Peace Process
- PSCI 4165 Islamic Politics and Culture
- PSCI 4176 Gandhi's Legacy: Non-Violent Resistance Today
- PSCI 4185 Corruption in the U.S. and Abroad
- PSCI 4186 East Asia in World Affairs
- PSCI 4195 Political Systems of Sub-Saharan Africa
- PSCI 4206 Social Movements, Democracy and Global Politics
- PSCI 4215 Women's Rights, Human Rights: Global Perspective
- PSCI 4216 International Politics: Human Rights
- PSCI 4225 Democracy and Democratization
- PSCI 4224 Dictatorships in 21st Century

- PSCI 4226 The United Nations in World Affairs
- PSCI 4235 Politics and Markets in Latin America
- PSCI 4236 American Foreign Policy
- PSCI 4237 American National Security
- PSCI 4240 International Security
- PSCI 4248 Gender, Globalization and Development
- PSCI 4265 Social Justice And Globalization
- PSCI 4266 International Law
- PSCI 4274 Conflict Resolution and Public Consent Building
- PSCI 4276 Conflicts and Rights in International Law
- PSCI 4280 The Politics of War Law
- PSCI 4286 International Relations: War or Peace?
- PSCI 4326 Advanced International Political Economy: Globalization
- PSCI 4365 Global Ecological Crises
- PSCI 4446 Advanced Indigenous Peoples' Politics
- PSCI 4505 Political System of Russia and Its Neighbors
- PSCI 4555 International Women's Resistance
- PSCI 4605 Politics and Governments of South Asia
- PSCI 4615 Politics and Government of China
- PSCI 4726 Seminar on U.S. and China Relations
- PSCI 4736 The Middle East in World Affairs
- PSCI 4807 Political Violence
- PSCI 4808 Strategies of Peacebuilding
- PSCI 4878 War, Film, and International Law

#### Take **one** of the following Political Theory courses:

- PSCI 4057 Religion and Politics
- PSCI 4207 Theories of Social and Political Change
- PSCI 4407 Early Political Thought
- PSCI 4417 Modern Political Thought
- PSCI 4427 Law, Politics and Justice
- PSCI 4437 Coercion and the State
- PSCI 4457 American Political Thought
- PSCI 4477 Constitutional Law I
- PSCI 4487 Constitutional Law II
- PSCI 4564 Gender and Politics
- PSCI 4807 Political Violence

# **Psychology Minor**

#### Introduction

Please click here to see Psychology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their minor advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus and online program.

## **Declaring This Minor**

Please see your CLAS advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 15 PSYC credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) PSYC credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 PSYC credit hours with CU Denver faculty, at least 6 of which must be upper division (3000-level and above).

#### **Program Restrictions, Recommendations and Allowances**

- 1. Because the minor is optional, there are no substitutions allowed to these requirements.
- 2. Students cannot earn a Psychology minor, if they are also seeking a Psychology degree.
- Students must complete 6 upper-division (3000-level and above) credit hours with CU Denver faculty.

Take **all** of the following required courses:

- PSYC 1000 Introduction to Psychology I
- PSYC 1005 Introduction to Psychology II

Take **one** of the following courses:

- PSYC 3222 Principles of Learning and Behavior
- PSYC 3144 Human Cognition

Take **one** of the following courses:

- PSYC 3205 Human Development I: Child Psychology
- PSYC 3305 Abnormal Psychology
- PSYC 3415 Experimental Social Psychology

Take **one** additional PSYC course as an elective (any PSYC course that is not listed above and that is not already counting toward another requirement may be used). Students should see their minor advisor regularly to make sure they are completing the correct coursework.

# **Public Health Demography Minor**

#### Introduction

Please click here to see Health and Behavioral Sciences department information.

The undergraduate minor in Public Health Demography will introduce students to population-based approaches to health and wellbeing. Both demography and public health draw on theories and methods from across the social and behavioral sciences, to understand population level outcomes. Collectively, the courses in the minor will strengthen skills in analytical thinking, critical thinking, and quantitative reasoning, as related to topics including fertility, mortality, migration, maternal and child health, health disparities, and population health.

The minor in Public Health Demography will help to prepare students for graduate training in public health, demography, epidemiology, or biostatistics. Further, the minor will help to prepare students for jobs that require an understanding of population dynamics. Demographic skills are useful in fields including actuarial studies, marketing, consulting, non-profits, and various agencies in the local, state, and federal government.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

• This is an on-campus program.

## **Declaring This Minor**

Please see your advisor.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 17 credits drawn from the approved course lists (see below).
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements, including ancillary courses
- 4. Students must complete all minor courses, including ancillary courses, taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

1. Due to substantial overlap in coursework, students who complete the major in Public Health shall not also be awarded the minor in Public Health Demography.

Note: Students should check for prerequisites when enrolling in courses.

Take **all** of the following General Public Health courses:

- PBHL 2001 Introduction To Public Health
- PBHL 3001 Introduction to Epidemiology

Take **all** of the following Core Demography courses:

- PBHL 2052 Global Demography and Health
- SOCY 4220 Population Change and Analysis

Take **one** of the following electives with Demographic and Statistical themes:

- PBHL 3070 Perspectives in Global Health
- PBHL 4040 Social Determinants of Health
- MATH 2830 Introductory Statistics

# **Public Health Minor**

#### Introduction

Please click here to see Health and Behavioral Sciences department information.

The undergraduate minor in Public Health is designed to provide students with a basic understanding of the social, cultural, and biological dimensions of health. The minor curriculum provides students with the intellectual and methodological tools needed to understand the joint bio-cultural determinants and contexts of health, health care and public health. Graduates with a minor in Public Health will be prepared for pursuit of graduate degrees in a broad range of fields, including the natural, social and behavioral sciences, public health, law, medicine, dentistry, pharmacy, nursing, business administration, and health services research. The program is especially appropriate for students intending to pursue careers in public health, as well as primary care specialties in medicine, nursing, or health policy and administration.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

#### **Program Requirements**

- 1. Students must complete a minimum of 24 semester credit hours.
- 2. Students must complete a minimum of 12 upper- division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements, including ancillary courses.
- 4. Students must complete all minor courses, including ancillary courses, taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 12 credit hours with CU Denver faculty.

#### **Program Restrictions, Allowances and Recommendations**

- 1. No more than 6 credit hours may be counted toward a major or minor in another department and counted toward the minor in Public Health.
- 2. Due to substantial overlap in coursework, students who complete the major in Public Health cannot also be awarded the minor in Public Health.
- 3. Students must complete a minimum of 12 upper-division level credit hours with CU Denver faculty.

Take **both** of the following required courses:

- PBHL 2001 Introduction To Public Health
- PBHL 3001 Introduction to Epidemiology

Take **at least two** of the following courses. All four may be taken in lieu of two of the elective courses listed below.

- PBHL 3020 Introduction to Environmental Health
- PBHL 2052 Global Demography and Health
- PBHL 3030 Health Policy
- PBHL 3070 Perspectives in Global Health
- PBHL 4040 Social Determinants of Health

Take **one** of the following courses:

- ANTH 1303 Introduction to Biological Anthropology
- BIOL 1550 Basic Biology: Ecology and the Diversity of Life
- BIOL 1560 Basic Biology: From Cells to Organisms

#### Take **two** of the following elective courses:

- PBHL 3021 Fundamentals of Health Promotion
- PBHL 3031 Health, Human Biology and Behavior
- PBHL 3041 Health, Culture and Society
- PBHL 3071 Global Topics In Sexual and Reproductive Health
- PBHL 4080 Global Health Practice
- PBHL 4200 The Global HIV/AIDS Epidemic
- ANTH 4090 Drug Syndemic
- ANTH 4260 Human Reproductive Ecology
- COMM 4500 Health Communication
- COMM 4620 Health Risk Communication
- GEOG 4235 GIS Applications in the Health Sciences
- PSYC 3235 Human Sexuality
- PSYC 3262 Health Psychology
- SOCY 3520 Topics in Sociology (when Medical Sociology is the topic)

# **Public Service Minor**

#### Introduction

A minor in Public Service, offered by the School of Public Affairs, will provide needed competencies to a generation looking for meaningful work consistent with their social values. Public Service courses provide students with the skills and content knowledge to work in public, private, and nonprofit sectors and the emerging fourth sector that blends social and environmental concerns with business approaches. This minor is particularly useful for students majoring in substantive areas (such as environmental studies, education and human development, and criminal justice) who plan on applying their expertise in public service organizations such as governmental agencies or nonprofit organizations.

### **Program Delivery**

This is an online program.

## **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. A minor in Public Service requires **15** credit hours of course work.
- 2. A maximum of 6 transfer credits may be applied to the minor.

Take the following required course:

• PUAD 1001 - Introduction to Leadership and Public Service

#### **Electives**

 Take a total of 12 credit hours of electives, 6 of which must be Public Service core required courses offered by the School of Public Affairs, and 6 of which must be upper-division public service electives offered by the School of Public Affairs.

# **Religious Studies Minor**

### Introduction

Please click here to see Religious Studies department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

• This is an on-campus program.

### **Declaring This Minor**

Please see your advisor, or the Program Director, Sharon Coggan.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 18 credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied toward the minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

1. A maximum of 9 credits hours of independent study courses may be applied to the minor.

### **Required Course**

- Take the following required course:
- RLST 1610 Introduction to Religious Studies

### **Western Religion**

Take **one** course from the following approved list:

- RLST 2660 World Religions \*
- RLST 2700 The Bible as Literature or
- ENGL 2520 The Bible as Literature
- RLST 3000 Judaism, Christianity and Islam: Affinity and Difference

- RLST 3060 History of Early Christianity
- RLST 3120 Islamic Traditions
- RLST 3740 Biblical Traditions: Old Testament
- RLST 3760 Biblical Studies: New Testament
- RLST 3770 Archaeological Discoveries Relating to the Bible
- RLST 4070 Western Religious Thought or
- PHIL 4710 Western Religious Thought
- RLST 4400 Differing Concepts of God or \*
- PHIL 4650 Differing Concepts of God \*
- RLST 4440 Concepts of the Soul \* or
- PHIL 4470 Concepts of the Soul \*
- RLST 4460 Death and Concepts of Afterlife \*
- RLST 4462 Islam in Modern History or
- HIST 4462 Islam in Modern History

### **Eastern Religion**

Take **one** course from the following approved list:

- RLST 2660 World Religions \*
- RLST 3410 Asian Philosophies and Religions or
- PHIL 3410 Asian Philosophies and Religions
- RLST 3500 Religions of India
- RLST 3660 Chinese Philosophy and Culture or
- PHIL 3981 Chinese Philosophy and Culture
- RLST 4080 Eastern Religious Thought or
- PHIL 4720 Eastern Religious Thought
- RLST 4160 Mysticism
- RLST 4400 Differing Concepts of God or \*
- PHIL 4650 Differing Concepts of God \*
- RLST 4440 Concepts of the Soul or \*
- PHIL 4470 Concepts of the Soul \*

<sup>\*</sup> Fulfills requirement for either Eastern or Western religion, but not both simultaneously

- RLST 4460 Death and Concepts of Afterlife \*
  - \* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

#### **Elective courses**

Take **three** courses from the following list. Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor with pre-approval from the minor advisor.

- RLST 1010 Greek I: Biblical or
- GREK 1010 Greek I: Biblical
- RLST 2660 World Religions
- RLST 2680 The American Indian Experience or
- ETST 2606 The American Indian Experience
- RLST 2700 The Bible as Literature or
- ENGL 2520 The Bible as Literature
- RLST 3000 Judaism, Christianity and Islam: Affinity and Difference
- RLST 3060 History of Early Christianity
- RLST 3100 Islamic Politics and Culture or
- PSCI 4165 Islamic Politics and Culture
- RLST 3120 Islamic Traditions
- RLST 3300 Shamanic Traditions or
- ETST 3300 Shamanic Traditions
- RLST 3410 Asian Philosophies and Religions or
- PHIL 3410 Asian Philosophies and Religions
- RLST 3486 Renaissance and Reformation or
- HIST 3486 Renaissance and Reformation
- RLST 3500 Religions of India
- RLST 3660 Chinese Philosophy and Culture or

- PHIL 3981 Chinese Philosophy and Culture
- RLST 3720 Religious Narratives or
- ENGL 3520 Religious Narratives
- RLST 3740 Biblical Traditions: Old Testament
- RLST 3760 Biblical Studies: New Testament
- RLST 3770 Archaeological Discoveries Relating to the Bible
- RLST 4000 Religion and Cultural Diversity
- RLST 4010 Comparative Religious Systems
- RLST 4020 Sociology of Religion or
- SOCY 4610 Sociology of Religion
- RLST 4030 Race, Religion and Belonging in the United States or
- ETST 4030 Race, Religion and Belonging in the U.S.
- RLST 4040 Psychology of Religion
- RLST 4060 Philosophy of Religion or
- PHIL 4600 Philosophy of Religion
- RLST 4070 Western Religious Thought or
- PHIL 4710 Western Religious Thought
- RLST 4080 Eastern Religious Thought or
- PHIL 4720 Eastern Religious Thought
- RLST 4100 Special Topics in Religion
- RLST 4160 Mysticism
- RLST 4250 Spirituality and Ecology in Global Societies
- RLST 4300 Myth and Symbol
- RLST 4320 Spirituality in the Modern World
- RLST 4340 The Hero's Journey
- RLST 4360 Freudian and Jungian Perspectives in Dream Analysis
- RLST 4400 Differing Concepts of God or
- PHIL 4650 Differing Concepts of God
- RLST 4420 Goddess Traditions or
- WGST 4420 Goddess Traditions
- RLST 4440 Concepts of the Soul or
- PHIL 4470 Concepts of the Soul
- RLST 4460 Death and Concepts of Afterlife
- RLST 4462 Islam in Modern History or
- HIST 4462 Islam in Modern History
- RLST 4480 Perspectives on Good and Evil or
- PHIL 4480 Perspectives on Good and Evil

- RLST 4500 Religion and Politics or
- PSCI 4057 Religion and Politics
- RLST 4710 Women and Religion or
- WGST 4710 Women and Religion
- RLST 4730 Whores and Saints: Medieval Women or
- ENGL 4510 Whores and Saints: Medieval Women or
- WGST 4510 Whores and Saints: Medieval Women
- RLST 4840 Independent Study: RLST
- RLST 4880 Directed Research

# **Risk Management and Insurance Minor**

### Introduction

Please click here for more information about this program.

Students in other undergraduate schools and colleges at CU Denver wishing to complete the Risk Management and Insurance minor need to complete the course work described below.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

• To declare the RMI minor, students must have a 3.0 GPA, either cumulative or from their last 24 completed semester hours.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

1. Students must maintain or exceed a 2.0 GPA to graduate with the minor.

- 2. Up to 6 of the 18 semester hours required for the minor may be completed at another institution.
- Students must have declared the Risk Management and Insurance minor to register for any of the courses or petition separately to take each of these courses.

Take **all** of the following required prerequisite and proficiency courses:

- ISMG 2050 Introduction to Business Problem Solving
- MATH 1070 College Algebra for Business or
- MATH 1110 College Algebra
- BANA 2010 Business Statistics
- \*(BANA 2010 can be substituted with an upper division stats course such as <u>ECON</u> 3811 or MATH 3800)
- ECON 2012 Principles of Economics: Macroeconomics
- ECON 2022 Principles of Economics: Microeconomics
- ACCT 2200 Financial Accounting and Financial Statement Analysis

#### Take **all** of the following required courses:

- FNCE 3000 Principles of Finance
- FNCE 3500 Management of Business Capital
- RISK 3809 Introduction to Risk Management
- RISK 4809 Property & Casualty Insurance

#### Take **two** of the following courses:

- FNCE 3700 Investment and Portfolio Management
- RISK 4909 Corporate Risk Management
- RISK 4129 Practical Enterprise Risk Management
- RISK 4509 Global Risk Management
- RISK 4609 Claims Management
- RISK 4709 Life & Health Insurance
- RISK 4950 Special Topics: Cyber Risk Management & Cyber Warfare

#### **Notes**

- 1. Some of the prerequisite courses may be substituted on a case by case basis. Please see an advisor for details.
- 2. All RISK courses have a fixed tuition rate. However, students have the option to apply for RMI scholarships for each RISK course they take (one scholarship per semester).

## **Social Justice Minor**

#### Introduction

Please click here to see Social Justice department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 credit hours.
- 2. Students must complete a minimum of 9 upper-division (3000-level and above) credit hours in the minor.
- Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all major courses, including ancillary courses, taken at CU Denver and all transfer courses applying to major requirements with a minimum grade of C-(1.7). Students cannot complete major or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

Take the following required course:

SJUS 2000 - Foundations in Social Justice

Take **three** courses from those listed below. This is a sample list of upper division courses, but other courses may be considered.

#### Anthropology

- ANTH 3000 Globalization, Migration and Transnationalism
- ANTH 3142 Cultural Diversity in the Modern World
- ANTH 3200 Human Migration: Nomads, Sojourners, and Settlers
- ANTH 4070/ ANTH 5070 Culture of Development and Globalization
- ANTH 4300/ ANTH 5300 Migrant Health

#### Communication

- COMM 2020 Communication, Citizenship, and Social Justice
- COMM 2082 Introduction to Environmental Communication
- COMM 3271 Communication and Diversity
- COMM 4040 Communication, Prisons, and Social Justice
- COMM 4260 Communication and Conflict
- COMM 4265 Gender and Communication
- COMM 4282 Environmental Communication
- COMM 4558 Digital Health Narratives
- COMM 4610 Communication, media, and sexuality
- COMM 4710 Topics in Communication

#### Education

• EDFN 4001/ EDFN 5001 - Problematizing Whiteness: Educating for Racial Justice

#### **English**

- ENGL 3330 Topics in Literature (Literature, Mysteries and Spies)
- ENGL 4190/ ENGL 5190 Special Topics (Rhetorics of the Body)
- ENGL 4190/ ENGL 5190 Special Topics (Rhetoric of Disability in Contemporary Film)
- ENGL 4280/ ENGL 5280 Proposal and Grant Writing
- ENGL 4308 Contemporary Feminist Thought
- ENGL 4770 Topics in English: Film and Literature (Mental Difference & Disorders)

#### Ethnic Studies

- ETST 3002 Ethnicity, Health and Social Justice
- ETST 3110 Indigenous Studies
- ETST 3272 Global Media
- ETST 3274 Power, Poverty, Culture
- ETST 3396 History of the American Indian
- ETST 3297 Social History of Asian Americans
- ETST 3704 Culture, Racism and Alienation
- ETST 3794 Ethnicity and Race in Contemporary American Culture

#### Geography & Environmental Sciences

- GEOG 4301 Population, Culture, and Resources
- GEOG 3401 Geography of Food and Agriculture
- GEOG 3412 Globalization and Regional Development
- GEOG 3501 Geography of Health
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4420 The Politics of Nature
- GEOG 4640/ GEOG 5640 Urban Geography: Denver and the U.S.
- GEOG 4680 Urban Sustainability: Perspectives and Practice

#### History

- HIST 3235 U.S. Labor History, 1800 to the Present
- HIST 3343 Women in U.S. History
- HIST 3345 Immigration and Ethnicity in American History
- HIST 3349 Social Movements in 20th Century America
- HIST 4028/ HIST 5028 Nations and Classes: 19th Century Europe
- HIST 4217/ HIST 5217 Consumer Culture
- HIST 4306/ HIST 5306 Survey of Feminist Thought
- HIST 4308/ HIST 5308 Crime, Policing, and Justice in American History
- HIST 4455/ HIST 5455 African Struggle for Independence

#### Landscape Architecture

- LDAR 3601 Intro to Landscape Arch: Engaging Designed Landscape
- LDAR 4486/ LDAR 6686 Special Topics: Landscape Architecture (Site, Society & Environment)
- LDAR 4486/ LDAR 6686 Special Topics: Landscape Architecture (Food in the Urban Landscape)

#### Philosophy

- PHIL 3200 Social and Political Philosophy
- PHIL 3280 War and Morality
- PHIL 3500 Ideology and Culture: Racism and Sexism
- PHIL 3550 Philosophy of Death and Dying
- PHIL 4101/ PHIL 5101 Pragmatism: Classical American Philosophy
- PHIL 4812/ PHIL 5812 Special Topics in Philosophy (Prisons, Punishment, and Social Justice)
- PHIL 4812/ PHIL 5812 Special Topics in Philosophy (Gender and Sexuality)
- PHIL 4812/ PHIL 4812 Special Topics in Philosophy (The Woman Question)
- PHIL 4920/ PHIL 5920 Philosophy of Media and Technology

#### Political Science

- PSCI 3034 Race, Gender, Law and Public Policy
- PSCI 3035 Political Movements: Race and Gender
- PSCI 3075 Community Organizing and Community Development
- PSCI 3914 The Urban Citizen
- PSCI 4002 Topics in Political Science
- PSCI 4025/ PSCI 5025 Local Governance and Globalization
- PSCI 4144 Indigenous Political Systems
- PSCI 4146 Indigenous Politics
- PSCI 4207 Theories of Social and Political Change
- PSCI 4265/ PSCI 5265 Social Justice And Globalization
- PSCI 4437 Coercion and the State
- PSCI 4535 Labor and Working Class Politics
- PSCI 4545 Immigration Politics
- PSCI 4555 International Women's Resistance
- PSCI 4808/ PSCI 5808 Strategies of Peacebuilding

#### Public Service

- PUAD 4001 Ethics in Public Service
- PUAD 4002 Leading for the Public Good

#### Religious Studies

RLST 4000 - Religion and Cultural Diversity

#### Sociology

SOCY 3001 - Urban Sociology

- SOCY 3020 Race and Ethnicity in the U.S.
- SOCY 3140 Sociological Theory
- SOCY 3720 Global Perspectives on Social Issues
- SOCY 4700 Sociology of Law

#### Social Justice

• SJUS 4050/ SJUS 5050 - Special Topics: Social Justice

#### Social Sciences

- SSCI 4050/ SSCI 5050 Topics in Social Science (1<sup>st</sup> Amendment in American Culture Wars)
- SSCI 4050/ SSCI 5050 Topics in Social Science (Critical Public Humanities)
- SSCI 4050/ SSCI 5050 Topics in Social Science (Narratives of Americas)

#### Women's and Gender Studies

- WGST 4306/ WGST 5306 Survey of Feminist Thought
- WGST 4308/ WGST 5308 Contemporary Feminist Thought

#### Take a **3 semester hour** capstone seminar:

Work on a project related to a social justice issue that is important to you with a faculty member in an independent study. Your advisor must approve this course in advance.

# **Sociology Minor**

#### Introduction

Please click here to see Sociology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This program is offered on-campus and online.

### **Declaring This Minor**

Please consult with College of Liberal Arts and Sciences (CLAS) Advising.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 SOCY credit hours.
- 2. Students must complete a minimum of 6 upper-division (3000-level and above) SOCY credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 SOCY credit hours with CU Denver faculty.

### **Program Allowances and Restrictions**

1. Students may count up to 9 semester credits of independent study or internship coursework toward the Sociology minor.

Take the following **required** course:

SOCY 1001 - Introduction to Sociology

Take **one** of the following courses:

- SOCY 2001 Inequalities in Social World
- SOCY 3115 Quantitative Methods & Analysis
- SOCY 3119 Qualitative Methods
- SOCY 3140 Sociological Theory

Take **nine** credit hours of additional Sociology electives at any level.

# **Spanish Minor**

#### Introduction

Please click here to see information about the Department of Modern Languages.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

· Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 SPAN credit hours.
- 2. Students must complete a minimum of 15 upper-division (3000-level and above) SPAN credit hours.
- Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-(1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 SPAN credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- Students may count up to 3 credit hours of Independent Study or Internship courses toward the minor.
- 2. Students must declare this minor prior to their final semester of coursework.
- 3. All course work must be taught in Spanish.

#### Take **one** of the following courses:

- SPAN 3212 Spanish American Culture and Civilization
- SPAN 3213 Contemporary Latin American Culture and Institutions
- SPAN 3221 Culture and Civilization of Spain I
- SPAN 3222 Culture and Civilization of Spain II
- SPAN 3223 Contemporary Spanish Culture and Institutions
- SPAN 3225 Special Topics In Hispanic Culture
- SPAN 3230 Ibero-American Cultures through Film
- SPAN 3240 Food Metaphors: Ibero-American Cuisine and Culture
- SPAN 3270 Bilingual Communities: Spanish as a Language of Contact
- SPAN 4330 Modern Culture of Spain through Film and Narrative

Take **four** additional upper-division (3000-level and above) SPAN courses.

### **Studio Art Minor**

#### Introduction

Please click here to see general Visual Arts information.

This general minor in studio art offers students the opportunity to explore creative studio practice in one or multiple areas (e.g., photography, transmedia sculpture, painting and drawing) along with an introduction to art history.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **two** of the following Studio Art Minor courses:

- FINE 1100 Drawing I
- FINE 1150 Introduction to Darkroom Photography
- FINE 1400 Two-Dimensional Design
- FINE 1500 Three-Dimensional Design
- FINE 2155 Introduction to Digital Photography
- FINE 2200 Painting I
- FINE 3500 Installation Art

Take **six** semester hours of Studio Arts electives.

Take **three** semester hours of upper-division Studio Arts elective.

Take **three** semester hours of Art History elective.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, prerequisite updates and for lists of approved electives and more information about this minor.

# **Sustainability Minor**

### Introduction

Please click here to see Sustainability department information.

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team who will present sustainability concepts from socioecological and systems perspectives.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- Students must complete a total of 18 credit hours, distributed as follows: two core
  courses that introduce students to how living things affect and are affected by their
  environments, a capstone course and three electives chosen from an approved list of
  CLAS courses.
- 2. Students must complete a minimum of 12 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.5 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C-. Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- Students should consult with the Sustainability advisor before registering for any courses applicable toward the minor. \*Graduate-level courses and cross-lists may be used with prior consent from the advisor.
- 2. Credits counted for another major or minor program can be counted toward the Sustainability Minor with approval from the advisor, though no course may be used to fulfill more than two graduation requirements.

Take all of the following Core courses:

- ENVS 1342 Environment, Society and Sustainability
- SUST 3010 Sustainability: Past, Present, and Future
- SUST 4960 Capstone in Sustainability

Take **three** from the following list of pre-approved elective courses:

#### Anthropology

- ANTH 1302 Introduction to Archaeology
- ANTH 1303 Introduction to Biological Anthropology
- ANTH 2102 Culture and the Human Experience
- ANTH 3006 Sustainable Development and Equity
- ANTH 3301 World Prehistory
- ANTH 3512 Human Evolution
- ANTH 4030 Ethnobiology
- ANTH 4060 Evolutionary Medicine

- ANTH 4070 Culture of Development and Globalization
- ANTH 4170 Culture and the Environment
- ANTH 4450 Development and Conservation: Contemporary Issues
- ANTH 4460 Development and Conservation: Theory and Practice
- ANTH 4560 Human Ecology

#### **Biology**

- BIOL 1550 Basic Biology: Ecology and the Diversity of Life
- BIOL 3330 Plant Diversity
- BIOL 3411 Principles of Ecology
- BIOL 3521 Vertebrate Biology
- BIOL 4154 Conservation Biology

#### **Business**

- MGMT 4950 Special Topics in Management (when offered as Business and Sustainability)
- MKTG 4950 Special Topics (when offered as Nonprofit and Social Marketing)

#### Chemistry

- CHEM 1474 Core Chemistry: Chemistry for Everyday
- CHEM 4700 Environmental Chemistry

#### **Economics**

- ECON 4530 Economics of Natural Resources
- ECON 4540 Environmental Economics
- ECON 4770 Economic Development-Theory and Problems
- ENVS 3082 Energy and the Environment
- GEOG 1202 Introduction to Physical Geography
- GEOG 3412 Globalization and Regional Development
- GEOG 4010 Landscape Geochemistry
- GEOG 4020 Earth Environments and Human Impacts
- GEOG 4090 Environmental Modeling with Geographic Information Systems
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4265 Sustainability in Resources Management
- GEOG 4335 Contemporary Environmental Issues
- GEOG 4350 Environment and Society in the American Past
- GEOG 4640 Urban Geography: Denver and the U.S.

#### • GEOL 4030 - Environmental Geology

#### History

- HIST 3350 Colonial Latin America
- HIST 3360 Denver History
- HIST 3366 Nature and Power in American History
- HIST 3451 Introduction to African History
- HIST 3460 Modern Latin American History
- HIST 3470 Intro to East Asia: Since 1800
- HIST 3606 Science, Technology, and Society in the Modern World
- HIST 4217 Consumer Culture
- HIST 4226 Capitalism in America
- HIST 4227 American West
- HIST 4236 Colorado Mining and Railroads
- HIST 4240 National Parks History
- HIST 4411 Modern Mexico
- HIST 4417 Commodities and Globalization
- HIST 4421 Modern China
- HIST 4431 Modern Japan
- HIST 4451 Southern Africa
- HIST 4461 The Modern Middle East
- HIST 4503 Topics in History of Science
- HIST 4504 Animals in U.S. History

#### **Physics**

- PHYS 3082 Energy and the Environment
- PHYS 4400-4499 Topics in Scientific Instrumentation and Laboratory
- PHYS 4850 Physics for Design and Innovation I
- PHYS 4852 Physics for Design and Innovation II
- \*Note: PHYS 4850 is a prerequisite for PHYS 4852

#### Philosophy

PHIL 4250 - Environmental Ethics

#### Political Science

- PSCI 4354 Environmental Politics
- PSCI 4146 Indigenous Politics

- PSCI 4365 Global Ecological Crises
- PSCI 5217 Human Rights in Theory and Practice
- PSCI 5276 Conflicts and Rights in International Law
- PSCI 5468 Research Methods in Political Science

#### Public Health

- PBHL 3020 Introduction to Environmental Health
- PSCI 3034 Race, Gender, Law and Public Policy
- PSCI 3035 Political Movements: Race and Gender
- PSCI 3042 Introduction to International Relations
- PSCI 3914 The Urban Citizen
- PSCI 4009 Politics of the Budgetary Process
- PSCI 4014 Media and Politics
- PSCI 4025 Local Governance and Globalization
- PSCI 4085 Comparative Governance: Environment and Society
- PSCI 4144 Indigenous Political Systems
- PSCI 4206 Social Movements, Democracy and Global Politics
- PSCI 4207 Theories of Social and Political Change
- PSCI 4215 Women's Rights, Human Rights: Global Perspectives
- PSCI 4226 The United Nations in World Affairs
- PSCI 4248 Gender, Globalization and Development
- PSCI 4324 Politics, Public Policy and Leadership
- PSCI 4326 Advanced International Political Economy: Globalization
- PSCI 4374 Public Priorities for the 21st Century
- PSCI 4545 Immigration Politics
- PSCI 4555 International Women's Resistance
- PSCI 4645 Comparative Political Leadership

# Theatre, Film and Television Minor

#### Introduction

Please click here to see general Theatre, Film & Video Production information.

In this minor, students explore theatre, film and television in both studio and lecture formats.

### **Program Delivery**

• This is an on-campus program.

### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students may transfer up to six semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
- 3. Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Theatre, Film and Television Minor courses:

- FITV 1005 Introduction to Theatre & Arts in the Community
- FITV 1200 The Culture of Television
- FITV 3550 World Theatre

Take **one** of the following courses:

- FITV 3200 Film History 1
- FITV 3300 Film History 2

Take **twelve** semester hours of Theatre, Film and Television Minor electives, chosen in consultation with a Film & Television faculty advisor.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# **Transmedia Sculpture Minor**

### Introduction

Please click here to see general Visual Arts information.

The transmedia sculpture minor provides experiences that span digital practice, traditional metal casting, mold making, woodwork and fabrication processes. Students learn how to use a wide variety of equipment that encompass the breadth of sculpture today, from metal, wood and assembled sculpture, to installation and performance work, to live media and interactive digital work.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

 To declare this minor, please see College of Arts & Media Advising and Student Services in Arts Building, 177. Consult the College of Arts & Media at <u>CAM@ucdenver.edu</u> for more information.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- Students may transfer up to six semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
- 2. A minimum grade of C (2.0) is required for each course applied toward a College of Arts & Media major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

 Students may use up to six semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take **all** of the following Transmedia Sculpture Minor courses:

- FINE 1500 Three-Dimensional Design
- FINE 2500 Bronze Casting
- FINE 2510 Wood and Metal Sculpture

Take **three** of the following Transmedia Sculpture Minor courses:

- FINE 3500 Installation Art
- FINE 3510 Mold Design & Casting
- FINE 3555 Concepts in Sculpture
- FINE 4505 Sculptural Drawing
- FINE 4515 Interdisciplinary Studio

Take **three** semester hours of Art History elective.

Please contact the College of Arts & Media at <u>CAM@ucdenver.edu</u> for course sequencing, any prerequisite updates and for more information about this minor.

# **Urban and Regional Planning Minor**

#### Introduction

Please click here to see Geography and Environmental Sciences Department information.

The urban and regional planning minor in the Department of Geography and Environmental Sciences provides non-geography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the Master of Urban and Regional Planning (MURP)

degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree and if interested in this option should work closely with the minor advisor in the selection of coursework. (Please see the Graduate Catalog for more information on this graduate program.)

All core courses are offered on a yearly basis.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

### **Program Delivery**

• This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 15 credit hours.
- 2. Students must complete a minimum of 12 upper-division (3000- level and above) credit hours in the minor.
- Students must achieve a minimum GPA of 2.0 for all courses applied to minor requirements.
- 4. Students must complete all minor courses taken at CU Denver and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor course requirements as pass/fail.
- 5. Students must complete a minimum of 9 GEOG credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes.
- 2. All undergraduate students, except geography majors, are eligible for this minor.
- 3. Students interested in applying for the articulated MURP degree program must achieve a grade of B (3.0) or higher in required courses.
- 4. All upper-division courses must be completed at CU Denver.

Take all of the following required courses:

- GEOG 1602 Urban Studies and Planning
- GEOG 4640 Urban Geography: Denver and the U.S.
- GEOG 4680 Urban Sustainability: Perspectives and Practice

#### Take **two** of the following courses:

- GEOG 4000/ <u>URPL 5010 Planning Methods</u>
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4230 Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 GIS Applications in the Health Sciences
- GEOG 4400 Regional Economic Systems
- GEOG 4450 Urban Food and Agriculture: Perspectives and Research
- GEOG 4630/ URPL 6550 Transportation Planning/Policy
- URPL 5000 Planning History and Theory
- URPL 5050 Urban Development
- URPL 6300 Community and Environmental Health Planning
- URPL 6555 Transportation, Land Use, and the Environment
- URPL 6650 International Development Planning: Theory and Practice

## **Victims and Victim Studies Minor**

#### Introduction

Please click here to see School of Public Affairs information.

The undergraduate minor in Victims and Victim Services provides a detailed, comprehensive, and advanced education in fields related to victims and victim services. This program is designed for students who are employed or plan to work in a field related to victim services.

The CJVS program applies a multi-faceted approach to higher education that:

- 1. Enhances analytical thinking and inclusive, relevant approaches to learning and the development of professional skills; and
- 2. Focuses on specific, yet comprehensive, substantive areas of victims and victim services that students can apply to their current or future careers in the field.

Students completing the CJVS minor will have the knowledge and skills to evaluate, manage, and respond to a variety of situations and issues that professionals in fields related to victims and victim services face. Specifically, they will possess technical, analytic, substantive, and ethical proficiencies that will facilitate their professional interactions and development. They will understand the different environments and contexts in which victim advocates and other professionals in this field and related ones carry out their responsibilities.

### **Program Delivery**

This is an on-campus and online program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. A minor in Victim and Victim Studies requires 18 semester hours of course work.
- 2. No more than 6 credit hours of transfer coursework may apply to the CJVS certificate.
- 3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the certificate.

Take **all** of the following required courses:

- CRJU 1000 Criminology and Criminal Justice: An Overview
- CRJU 2041 Criminological Theory
- CRJU 3285 Trauma in the Criminal Justice System
- CRJU 4170 Victimology

#### **Program Electives**

There are two elective categories, Violence Focus and Professional Setting. The Violence Focus electives allows the student to learn about an area of violence in a more in-depth capacity. The Professional Setting elective allows the student to hone skills related to service delivery.

#### Violence Focus (students take one of the following):

- CRJU 3250 Violence in Society
- CRJU 3280 Trauma Among Correctional Populations
- CRJU 4140 Domestic Violence and Crime
- ETST 2115 Genocide in the 21st Century: Darfur and Beyond
- PSCI 4807 Political Violence
- SOCY 4460 Hate Groups and Group Violence
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment.

#### Professional Setting (students take one of the following):

- CRJU 4939 Internship
- HDFR 4090 Helping Profession Skills in HDFR
- PUAD 4009 Human Service Organizations
- PUAD 3110 Seminar in Nonprofit Management
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment.

### Women's and Gender Studies Minor

#### Introduction

Please click here to see Women's and Gender Studies department information.

The Women's and Gender Studies Minor gives students the opportunity to explore gender issues in the humanities and social sciences.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

For more information about this minor, contact the Women's and Gender Studies Director, Gillian Silverman, 303-556-4529.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Minor**

Please see your advisor.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Students must complete a minimum of 18 WGST-related credit hours.
- 2. Students must complete a minimum of 12 upper-division (3000-level and above) credit hours in the minor.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all minor courses taken at CU Denver with a minimum grade of C (2.0) and all transfer courses applying to minor requirements with a minimum grade of C- (1.7). Students cannot complete minor or ancillary course requirements as pass/fail.
- 5. Students must complete a minimum of 9 credit hours with CU Denver faculty.

### **Program Restrictions, Allowances and Recommendations**

- 1. All courses for the minor must be approved by a WGST advisor. Students may double count up to six credits being applied to other graduation requirements (major, certificate or general education).
- 2. Students are strongly urged to take at least one course that focuses on international perspectives on women's and gender issues.
- 3. Students have the option to complete an internship working in the community around issues related to women and gender. The alternative to this is a WGST capstone course at the 4000 level.
- 4. Students who major in Sociology and complete the Gender and Society option will automatically earn a Women's and Gender Studies Minor

Take **all** of the following required courses (6 credits):

- WGST 1050 Introduction to Women's and Gender Studies
- WGST 3939 Internship (3 credit hours) or
- WGST course at the 4000 level

Take **12 credits** of WGST-related courses at the 3000-level or above. Eligible courses include, but are not limited to:

#### Humanities

- WGST 3020 Gender, Sexuality and Race in American Popular Culture
- ENGL/ WGST 3450 Contemporary Women Writers
- ENGL/ WGST 4510 Whores and Saints: Medieval Women
- FREN 4510/ WGST 4511 French Women Writers
- HIST/ WGST 3343 Women in U.S. History
- HIST/ HIST/ WGST 4230 Women in the West
- HIST/ WGST 4303 Sex and Gender in Modern Britain
- HIST/ WGST 4307 History of Sexuality
- HIST/ WGST 4345 Gender, Science, and Medicine: 1600 to the Present
- PHIL 3500 Ideology and Culture: Racism and Sexism
- PHIL/ WGST 4500 Feminist Philosophy
- PHIL/ WGST 4933 Philosophy of Eros
- RLST/ WGST 4420 Goddess Traditions
- RLST/ WGST 4710 Women and Religion
- SPAN 4340/ WGST 4540 Race, Class, and Gender in Spanish Golden Age Literature
- WGST/ENGL/ HIST 4306 Survey of Feminist Thought
- WGST/ENGL/ PHIL 4308 Contemporary Feminist Thought

#### Social Sciences

- ANTH 4200 Gender in Cross-Cultural Perspective
- ANTH 4260 Human Reproductive Ecology
- COMM 3275 Family Communication
- COMM 4020 Feminist Perspectives on Communication
- COMM 4265 Gender and Communication
- COMM 4268 Communication and Diversity in U.S. History
- COMM/ WGST 4610 Communication, media, and sexuality
- ECON 3100 Economics of Race and Gender
- ECON 3400 Economics of Sex and Drugs
- PSCI 3034 Race, Gender, Law and Public Policy
- PSCI 3035 Political Movements: Race and Gender
- PSCI/ WGST 4215 Women's Rights, Human Rights: Global Perspectives
- PSCI/ WGST 4248 Gender, Globalization and Development

- PSCI/ WGST 4555 International Women's Resistance
- PSCI/ WGST 4564 Gender and Politics
- PSCI/ WGST 4827 Women and the Law
- PSYC 3235 Human Sexuality
- PSYC 3405 Family Psychology
- PSYC 3611 Psychology of Women
- PSYC 3612 Domestic Abuse
- SOCY/ WGST 3010 Sociology of Human Sexuality
- SOCY/ WGST 3080 Sex and Gender
- SOCY/ WGST 3700 Sociology of the Family

### **Dual Degree Programs**

# 4+1 International Studies BA to Political Science MA

#### Introduction

Students will follow the undergraduate curriculum for International Studies and work closely with their faculty advisor to begin taking Political Science graduate level coursework as they complete their undergraduate degree. They will complete no more than 15 credits as an undergraduate that will apply to both their undergraduate and graduate degrees. Students should officially declare their intent to complete this program by their junior year and apply to the graduate program during their senior year. Application requirements may differ from the traditional 2 year MA, which is why students need to work closely with faculty advisors and the political science graduate program director for more information and to ensure they are following the best track to complete coursework so that they only have one year after completing the undergraduate degree, to complete the graduate requirements.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Major**

Click here to go to information about declaring a major.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click <u>here</u> for information about Academic Policies

# 4+1 International Studies to Masters in Humanities or Social Sciences

#### Introduction

The International Studies BA/MHMSS (Master of Humanities/Master of Social Science Program) in the College of Liberal Arts and Sciences provides an expedited interdisciplinary program of study that allows participating students to complete an interdisciplinary Bachelor degree in International Studies and an interdisciplinary Master degree in Humanities or Social Science through the MHMSS program in five years. INTS students interested in participating apply for either the MH or MSS degree no earlier than their first semester of junior-year standing as an undergraduate. Students may further choose to concentrate in one of the MH or MSS tracks. (For track information, see descriptions of the MH and MSS degree programs in the graduate catalog.) Upon acceptance, students take five graduate-level courses beginning the second semester of their junior year (or its equivalent) and through the whole of their senior year. Because these classes "double count," they fulfill requirements for both the BA major and the Master degree in Humanities or Social Science. Students then continue graduate studies exclusively in the chosen degree plan, either MH or MSS, to complete their master degree by the end of their fifth year in CLAS at CU Denver.

### **Program Delivery**

• This is an on-campus program.

### **Declaring This Major**

Click here to go to information about declaring a major.

#### **Admissions Requirements and Process**

- Interested students should contact their INTS advisor and the MH or MSS advisor as early as possible to ensure proper planning for the five year degree.
- To qualify, students must have a 3.0 or higher GPA in CLAS. All courses taken at the 4000- and 5000-level must be completed with at least a B or higher.
- Students may apply to the program during the semester in which they will successfully complete 90 semester hours, and should have most of their general education and major requirements completed by this time.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click <u>here</u> for information about Academic Policies

### **Program Requirements**

#### **Program Requirements**

Students in the 5-year INTS BA/MHMSS Program must satisfy all existing requirements for both an undergraduate degree in CLAS with a major in International Studies and a Master of Humanities or Social Science degree. These requirements can be fulfilled through multiple possible paths through the department's curriculum:

Students must maintain a 3.0 GPA in CLAS course work.

#### **Program Options**

BA/MHMSS students may choose to do a general MH or MSS degree or select a track concentration within the degree plan, including Social Justice, Philosophy and Theory, Visual Studies, Women's and Gender Studies, Ethnic Studies, International Studies, Community Health, and Society and Environment.

#### **Degree Confirmation**

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MHMSS will be conferred once the student has completed all requirements of the Master of Humanities or Master of Social Science degree, including at least 36 hours of graduate level course work.

### 4+1 Political Science BA to MA

#### Introduction

Please click here to see Political Science department information.

Students will follow the undergraduate curriculum for Political Science and work closely with their faculty advisor to begin taking Political Science graduate level coursework as they complete their undergraduate degree. They will complete no more than 15 credits as an

undergraduate that will apply to both their undergraduate and graduate degrees. Students should officially declare their intent to complete this program by their junior year and apply to the graduate program during their senior year. Application requirements may differ from the traditional 2 year MA, which is why students need to work closely with faculty advisors and the political science graduate program director for more information and to ensure they are following the best track to complete coursework so that they only have one year after completing the undergraduate degree, to complete the graduate requirements.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Program**

- Click here to go to information about declaring a major.
- Application process: Interested students would submit a short application to the Department early on during or after the first semester of their junior year. The application will include:
  - A letter of interest that describes the student's reasons for applying into the program.
  - Undergraduate transcripts.
  - The names of at least two faculty members in the CU Denver Political Science Department who can attest to applicant's advanced levels of reading, writing and analytical skills, and to their outstanding intellectual curiosity and work ethic.
  - Following review and admission by the faculty, students would begin their 4+1 curriculum during the second semester of their junior year, or in a subsequent semester.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

- 1. Hours for major: 39 (minimum)
- 2. GPA Requirement: 2.0
- 3. Minimum Grade: C- or better
- 4. Residency requirements: 15 credit hours
- 5. Upper-Level Division Requirements: at least 21 credit hours
- 6. Ancillary Coursework: None Required
- 7. Additional Unclassified Rules

- 1. All majors must complete the following Political Science course "distribution" requirements:
  - Complete both <u>PSCI 1001</u> (Intro to Political Science) and <u>PSCI 1101</u> (American Political System)
  - Complete PSCI 2011 (Logic of Inquiry) within the first 24 hours of the program
  - Complete two Political Theory courses (see course distribution list)
  - Complete one 4000-level American Politics course (see course distribution list)
  - Complete one 4000 level Comparative Politics (see course distribution list)
  - Complete one 4000 level International Relations course (see course distribution list)
  - <u>PSCI 4960 Capstone in Political Science</u> (students can only enroll in the capstone course after completing at least 27 credit hours in the major)
  - Experiential Learning Course: Complete one of the following options
  - PSCI 3939 Internship
  - PSCI 3914 The Urban Citizen
  - PSCI 4934 CU at the Capitol
  - Significant Experiential Learning project completed in any Political Science course, as certified by faculty member responsible for that course.

Significant civic leadership, service, or political engagement work outside of formal course work, as certified by Department undergraduate advisor.

# 4+1 Sociology BA to MA

#### Introduction

The Combined BA/MA (4+1) program in Sociology provides a coherent, progressive educational experience that prepares students for either immediate entry to a master's level career or continued study in a PhD program. The BA/MA application process is competitive, as the program is designed for highly-qualified students who are capable of an expedited program. Students choose from two options for their Comprehensive Paper that completes the master's degree: either a 6-credit thesis, or a 3-credit applied experience plus a 3-credit paper. The program also offers 3 concentration areas (Crime, Law & Deviance; Health & Society; Family, Social Services & Community) for students seeking specialization in high-demand career areas.

### **Program Delivery**

This is an on-campus program.

### **Declaring This Major**

Click here to go to information about declaring a major.

### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements**

#### Tier 1 Knowledge

Take **all** of the following required undergraduate courses:

- SOCY 1001 Introduction to Sociology
- SOCY 2001 Inequalities in Social World
- SOCY 3115 Quantitative Methods & Analysis
- SOCY 3119 Qualitative Methods
- SOCY 3140 Sociological Theory

Take **all** of the following required graduate courses:

SOCY 5000 must be the first graduate course taken (may be taken concurrently with other graduate courses); SOCY 5024 must be taken before SOCY 5183 and SOCY 5193. Students must earn a *B* or better in all graduate core courses.

- SOCY 5000 Professional Seminar: Sociological Inquiry
- SOCY 5016 Social Theory
- SOCY 5024 Seminar: Research Methods I
- SOCY 5183 Seminar: Quantitative Data Analysis
- SOCY 5193 Seminar: Qualitative Data Analysis

#### **Tier 2 Knowledge Applied to Substantive Areas**

Five elective courses, one of which may be taken at the undergraduate level. Graduate credit requirements are fulfilled only for those courses earning a minimum grade of B-.

#### **Tier 3 Comprehensive Paper**

Take one of the following Comprehensive Paper options:

- SOCY 5955 Master's Thesis or
- SOCY 5939 Internship or
- SOCY 5840 Independent Study: SOCY and
- SOCY 5964 Master's Report

#### **Plans of Study**

#### THESIS OPTION REQUIREMENTS

Core course requirements 15 Credits

Four substantive area courses 12 Credits

Master's Thesis 6 Credits

• SOCY 5955 - Master's Thesis

BA/MA Thesis Option Total: 53 Credits

#### APPLIED PROJECT REQUIREMENTS

Core course requirements 15 Credits

Four substantive area courses 12 Credits

Applied Experience (internship or independent study) 3 Credits

Master's Paper 3 Credits

- SOCY 5939 Internship
- SOCY 5840 Independent Study: SOCY
- SOCY 5964 Master's Report

BA/MA Applied Project Total: 53 Credits

#### **Substantive Area Requirements (12 credits for both options)**

Students can take an unlimited number of sociology graduate (5000-level) seminars to fulfill their 15 elective credits requirement, or a combination of the following:

- Independent study: maximum 6 semester hours
- Graduate level courses in other departments: maximum 6 semester hours

Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the <u>Sociology website</u>.

# 5 year BA/BS and Masters in Public Health

#### Introduction

Please click here to see Health and Behavioral Sciences department information. Please click here to see the overview of the Public Health undergraduate program. Please click here to see the overview of the Masters in Public Health graduate program.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

PBHL Director: Jimi Adams, Associate Professor

Office: North Classroom 3018 Telephone: 303-315-7177

**Fax:** 303-556-8501

Email: jimi.adams@ucdenver.edu

CSPH Contact: Lori Crane, Associate Professor

Office: Bldg 500, Dean's Suite, Room D

**Telephone:** 303-724-4385

Email: Lori.Crane@ucdenver.edu

### **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

- Click here to go to information about declaring a major.
- To be eligible, students must be declared PBHL majors (BA or BS).
- Ideal candidates will have a GPA of 3.5 or higher, and will have completed a minimum of 12 credit hours toward their undergraduate PBHL degree including Introduction to Public

- Health (PBHL 2001), General Biology I with lab (BIOL 2051/2071) and General Biology II with lab (BIOL 2061/2081), each completed with grades of B+ or higher.
- Complete an application via SOPHAS (NOTE: GREs are not required). Students should apply by the January preferred deadline in their Sophomore or Junior year.
- Upon application, declare a provisional MPH concentration (NOTE: some concentrations may establish additional eligibility criteria).

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. Undergraduate degree requirements follow either the BA (found <u>here</u>) or BS (found <u>here</u>).
- 2. Students in this program will be conferred both degrees (BA or BS, and MPH) simultaneously upon completion of all requirements.
- 3. Each class must be completed with a grade of C- or higher to count towards the major, and students must maintain a minimum 3.5 GPA in the undergraduate major and MPH courses
- 4. The following are exceptions and/or substitutions that are applicable to the BA/BS requirements for students in the BA/BS MPH program:

Take the following Core course:

• PBHL 2001 - Introduction To Public Health (in lieu of PUBH 6600 requirement for MPH program)

Take **two** graduate-level classes from the following list, which will count toward both degrees:

- PBHL 3020 Introduction to Environmental Health can be replaced by EHOH 6614
- PBHL 3001 Introduction to Epidemiology can be replaced by EPID 6630
- PBHL 3030 Health Policy can be replaced by HSMP 6603
- PBHL 4040 Social Determinants of Health can be replaced by CBHS 6610

Take the following Quantitative Methods course:

- MATH 5830 Applied Statistics (in lieu of BIOS 6601 requirement for MPH program)
- Additional Notes
  - 1. To facilitate timely completion of the program, students are expected to take 6 credits in each of 2 summers.
  - 2. If students apply late to this program, (including having already completed additional PBHL core requirements), they may not be able to benefit from all of the substitution-based time savings, and therefore may not be able to complete the program in 5 years.

## 5 Year Mathematics BS/Statistics MS

#### Introduction

This is a unique program where a student can obtain both a BS in Mathematics and MS in Statistics in five years through a specialized course sequence. The program requires 12 fewer credits than if both degrees were earned separately.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

### **Program Requirements for Mathematics BS**

- A C- or better is needed in each class counted towards your major and your grade point average must be at least 2.25 in these MATH classes. You must take at least 15 upper division (3000 or above) MATH credits (5 classes) at CU Denver.
- 2. The semester you graduate, you must:

- a. Complete the MFAT Exam and participate in an exit interview. These requirements will be scheduled through the department Administrative Assistant (303-315-1702).
- b. Complete a senior survey.
- 3. To graduate as a Mathematics major, must have a minimum of 30 hours of resident credit (letter grades received at CU Denver). Furthermore, 21 out of the last 30 hours must be taken in CU Denver CLAS courses. Finally, at least 15 upper-division mathematics credits must be taken at CU Denver. For the most current CLAS residency requirements, please visit: <a href="http://www.ucdenver.edu/academics/colleges/CLAS/clas-advising">http://www.ucdenver.edu/academics/colleges/CLAS/clas-advising</a>
- 4. Students with at least a 3.5 major grade point average, at least 3.2 overall grade point average, and who have done an honors project are eligible to graduate with honors. See an advisor (or the honors advising sheet) for details.

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3000 Introduction to Abstract Mathematics
- MATH 3191 Applied Linear Algebra
- MATH 3382 Statistical Theory
- MATH 4310 Introduction to Real Analysis I
- MATH 5310 Probability
- MATH 5320 Introduction to Mathematical Statistics
- MATH 5387 Applied Regression Analysis
- MATH 6330 Workshop in Statistical Consulting

Take **both** of the following Computer Science courses:

- CSCI 1410 Fundamentals of Computing
- CSCI 1411 Fundamentals of Computing Laboratory

Take **two** additional MATH classes (and at least 6 credits) above 3000 excluding 3040, 3195, 3511, 3800, 4012, 4013, 4014, 4015 and 4830.

## **Program Requirements for Statistics MS**

- 1. Students must apply for admission into the 5-year B.S./M.S. program to the Director of the Program in Statistics after completing MATH 1401, 2411, 2421, 3000, 3191, and 3382.
- 2. Students must present 30 hours of course work (which are broken into 4 components as detailed below) and maintain a 3.0 GPA or above for the M.S. degree.
- 3. At least 24 of these hours must consist of graduate level (numbered 5000 or higher) courses with the MATH prefix.

- 4. The remaining 6 hours must be either MATH courses numbered 5000 or above or preapproved courses outside the department numbered 4000 or above.
- 5. Students must complete a written project and pass a final oral exam.

Note that the MATH 5310, MATH 5320, MATH 5387, and MATH 6330 courses used for the B.S. portion of the degree apply to the 30 hours of course work and satisfy the core requirement discussed below.

Up to 9 semester hours of prior course work may be transferred in (subject to approval); these must be at the 5000 level or above with a B- or better grade. Courses already applied toward a prior degree (graduate or undergraduate) cannot be used toward the M.S. degree in Statistics. Additionally, the following MATH courses will NOT count toward a graduate degree: MATH 5000-5009, 5010, 5012-5015, 5017, 5198, 5250, and 5830.

Following completion of course work, all students must complete a written project and pass a final oral exam. The project is developed as a student-centered independent research component within MATH 5960 unless the student has chosen the thesis option. For students choosing the thesis option, 4 to 6 hours (of the 30 required hours) may be devoted to the writing of a thesis through MATH 5950. According to Graduate School policies, Masters students, whether enrolled full-time or part-time, must complete all degree requirements within 7 years of matriculating into the graduate program.

The MS degree in Statistics consists of 4 components: 1) core courses, 2) statistics electives, 3) other electives, and 4) MATH5960 (Master's project) or MATH5950 (Master's thesis).

#### The **4** core courses include:

- MATH 5310 Probability
- MATH 5320 Introduction to Mathematical Statistics
- MATH 5387 Applied Regression Analysis
- MATH 6330 Workshop in Statistical Consulting
- and are satisfied during the completion of the B.S. portion of the degree.

Students must take **at least three** additional *statistics electives* courses from the list below:

- MATH 5394 Experimental Designs
- MATH 6376 Statistical Computing
- MATH 6380 Stochastic Processes
- MATH 6384 Spatial and Functional Data Analysis
- MATH 6388 Statistical and Machine Learning
- MATH 7393 Bayesian Statistics
- MATH 7384 Mathematical Probability
- MATH 7826 Topics in Probability and Statistics
- Additional courses given prior approval by the student's advisor and the Director of the Program in Statistics

Students must take **two** *Other Electives*: Any MATH prefix course that can be used for an M.S. or Ph.D. degree in Applied Mathematics can be used as another Elective. While these courses could be additional statistics-focused courses, the added flexibility allows students to direct their coursework into other areas of mathematics and/or science. The following courses will not count toward the M.S. in Statistics: MATH 5000-5010, MATH 5012-5015, MATH 5017, MATH 5198, MATH 5250 and MATH 5830.

Students must take **either** MATH 5950 or MATH 5960 as part of completing their written project.

# **Chemistry BS/MS**

### Introduction

Please click here to see Chemistry department information.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry by participating in the BS/MS program using the following guidelines:

- The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree in consultation with both the undergraduate and graduate advisors.
- Up to 12 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree. In addition, up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.
- The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of B (3.0) or better for each course.
- The student must apply for and be admitted to the MS program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

The BS/MS program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the MS program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II MS degree options.

## **CLAS BA/MPA**

#### Introduction

The BA/MPA degree program offered by the College of Liberal Arts and Sciences and the School of Public Affairs provides students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an

opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

## **Admissions Requirements and Process**

Interested students should contact their CLAS advisor and the School of Public Affairs' MPA director as early as possible to ensure proper planning for the five year degree. To qualify, students must have a 3.5 or higher GPA in CLAS.

Students may apply to the program during the semester in which they will successfully complete 90 semester hours, and should have most of their general education and major requirements completed by this time. Students must complete all the required MPA application materials for the School of Public Affairs.

## **Program Requirements**

Students must fulfill all the requirements for graduation for CLAS:

CLAS Graduation Requirements (Take in addition to the University Core)

- Communicative Skills (3 hours)
- Foreign Language- Second semester proficiency (0-10 hours)
- Humanities (3 hours)
- Behavioral Sciences (3 hours)
- Social Sciences (3 hours)
- Biological and Physical Sciences, Mathematics (3-4 hours)
- Total Hours of CLAS Graduation Requirements: 15-26

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA graduate course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

- Total of 36-39 semester hours in public affairs
- Six core courses (PUAD 5001 PUAD 5006)
- Five elective courses at the graduate level (5000 and 6000 level courses)
- Nine of the 15 elective semester hours must be PUAD courses
- An internship (3 hours) is required from those who do not have significant work experience in the field
- Successful completion of the capstone course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

## **Program Options**

- 1. BA/MPA students may choose from any CLAS major.
- BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

## **Degree Confirmation**

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. BA/MPA students may choose from any CLAS major.
- BA/MPA students may choose to do a general MPA or select an MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.
- 3. Students must maintain a 3.5 GPA in CLAS coursework.
- 4. Students may complete a maximum of 18 semester hours of SPA graduate course work while classified as an undergraduate student.
- 5. Students must maintain a 3.0 or higher GPA in public affairs coursework.
- Student must successfully complete the capstone course in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.
- Students may apply to the program during the semester in which they will successfully complete 90 semester hours, and should have most of their general education and major requirements completed by this time.

Students must fulfill all the requirements for graduation for CLAS:

- 30 hours in the core curriculum
- 30-48 hours to satisfy major requirements
- Writing proficiency (1 7 hours)
- Mathematics proficiency (0 3 hours)

Level III foreign language (0 - 13 hours)

**Note:** It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must fulfill **all** the requirements for graduation from SPA:

- Total of 36-39 semester hours in public affairs
- Six core courses (PUAD 5001 PUAD 5006)
- Five elective courses at the graduate level (5000 and 6000 level courses)
- Nine of the 15 elective semester hours must be PUAD courses
- An internship (3 hours) is required from those who do not have significant work experience in the field.

## **Criminal Justice BA/MCJ**

#### Introduction

Please click here to see School of Public Affairs information.

The Pathways BA/MCJ program is designed to allow students to work concurrently toward the BA in Criminal Justice and the MA in Criminal Justice (MCJ). Graduate credit hours earned while enrolled in the BA/MCJ program can be counted toward both the Bachelor of Arts and Master of Arts in Criminal Justice. This program offers high-achieving students the opportunity to complete their undergraduate and graduate degrees in criminal justice in less time than completing both separately.

## **Program Delivery**

• Courses are offered on campus, online, and in hybrid formats.

## **Declaring This Major**

Both current CU Denver students and new transfer students are eligible to apply to the Criminal Justice BA/MCJ after meeting the following:

- Currently enrolled in the School of Public Affairs as a criminal justice major
- Completed the University of Colorado Denver's undergraduate core curriculum
- Completed 60 semester credit hours
- Completed the following 12 semester credit hours in criminal justice: CRJU 1000 Criminology & Criminal Justice: An Overview, CRJU 2041 Criminological Theory,
  CRJU 3100 Criminal Justice Research Methods, and CRJU 3150 Statistics for
  Criminal Justice (transfer criminal justice courses must have been approved and
  accepted toward the major).

- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in criminal justice courses

Interested students should contact their BA academic advisor as early as possible to ensure proper planning.

There are two applications. The first application is seeking approval to begin taking graduate level criminal justice courses as an undergraduate student. Approval to take graduate level courses as an undergraduate student is not formal admission into the MCJ program. The second application is seeking full admission to the Master of Criminal Justice (MCJ) program.

# First Application

Students should submit the first application between the accumulation of 75-90 credit hours. The following steps should help in the application process:

- Plan ahead when scheduling courses through the junior year. All four of the required criminal justice courses listed above and all of the student's core education requirements must be completed by the end of the student's junior year.
- At the beginning of the semester in which the student is submitting the first application, the student should approach a criminal justice faculty member about writing a letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
  - Length: 1 to 2 pages. The statement should describe:
  - Applicant's reasons for undertaking graduate study in criminal justice
  - Applicant's future career plans
  - Planned area of concentration within criminal justice
- The student must submit the following items to the criminal justice academic advisor:
  - Personal statement of purpose
  - One letter of recommendation from a faculty member
  - o School of Public Affairs' BA/MCJ application form

The student's first application will be evaluated by the Master of Criminal Justice Program Director and a decision will be sent to the student's CU Denver email address. If the student is approved to begin taking MCJ level courses, they will work with their undergraduate criminal justice academic advisor each semester on the selection and enrollment in courses. Students in the Pathways BA/MCJ program can take up to 2 MCJ courses per semester, with the total accumulation of 4 MCJ courses completed as an undergraduate. Students must earn a minimum passing grade at the graduate level for the MCJ course(s) to apply towards both the BACJ and MCJ degree.

Students in the Pathways BA/MCJ program may be eligible to complete the MCJ level internship only after successfully passing two MCJ level courses. The MCJ level internship may fulfill both the BACJ and MCJ internship requirement.

Admission to the BA/MCJ program is competitive. Applicants will be evaluated on the following:

• Grade point average (overall and in criminal justice course work)

- Grade trend (improving, consistent, or declining)
- Total number of credit hours completed
- Likelihood of success and persistence based from the personal statement and letter of recommendation
- Students who are not admitted to the BA/MCJ program are eligible to reapply after completing an additional 12 semester credit hours. Students can apply and be considered for admission to the BACJ/MCJ program a maximum of two times.

#### Second Application

Students will submit the second application, seeking full admission to the MCJ program, during the final semester of their undergraduate senior year. The application can be found online. The following are waived for students in the BA/MCJ program:

- GRE or LSAT scores
- \$50 application fee
- Official transcripts
- Two additional letters of recommendation are required. The third letter of recommendation will be the letter used as part of the first application.

While submitting the second application, seeking full admission to the MCJ program, students should work directly with their Graduate level Student Services Coordinator.

Students in the Pathways BA/MCJ program must enroll in the MCJ program the semester immediately following completion of their BACJ degree.

#### **Degree Conferral**

The undergraduate and graduate degrees are conferred upon completion of each degree requirements.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- School of Public Affairs Graduation Requirements
- · Click here for information about Academic Policies

## **Program Requirements**

- 1. Student must have a minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work.
- 2. Students must have a minimum of a B (3.0) in each required core MCJ course.

- 3. A minimum of 3.0 CU cumulative grade point average is required in all graduate level courses.
- 4. Students must successfully complete master of criminal justice capstone or thesis.
- 5. Students must fulfill all college and major requirements.
- Students are eligible to receive the BA in criminal justice degree once they have successfully completed 120 semester hours and all CU Denver undergraduate degree requirements.
- 7. Students must have a full acceptance to the Graduate School and the master in criminal justice program.
- 8. Students must have a minimum of a 3.0 CU cumulative grade point average in undergraduate criminal justice courses.
- 9. The MCJ will be conferred once the student has completed all requirements of the master of criminal justice degree.

## **Economics BA/MA**

#### Introduction

Please click here to see Economics department information.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major.

#### **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

#### **Course requirements**

Undergraduate required courses (30 or 31 credit hours):

- ECON 2012 Principles of Microeconomics
- ECON 2022 Principles of Macroeconomics
- ECON 4071 Intermediate Microeconomic Theory
- ECON 4081 Intermediate Macroeconomic Theory
- ECON 4811 Introduction to Econometrics
- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3382 Statistical Theory (3 hours) or ECON 3811 Statistics with Computer Applications (4 hours)

Undergraduate electives (9 credit hours):

Three undergraduate economics courses and at least 2 of them must be at 4000-level

Graduate courses (18 credit hours):

- ECON 5073 Microeconomic Theory (3 credits)
- ECON 5083 Macroeconomic Theory (3 credits)
- ECON 5813 Econometrics I (3 credits)
- ECON 5823 Econometrics II (3 credits)
- ECON 6053/6054 Seminar In Applied Economics<sup>1</sup> (3 credits)
- ECON 6073 Research Seminar (3 credits)

<sup>1</sup>The "Seminar in Applied Economics" (ECON 6053, 6054) are 8-week 1.5 credit modules. After completing 3 credit hours of ECON 6053/6054 as part of the economics core, additional ECON 6053/6054 courses may be counted as electives

Graduate electives (9 credit hours):

Any course numbered 5000 or higher with an ECON prefix.

Total economics/mathematics credit hours = 66 or 67

Total credit hours for the combined degrees = 135

*Note:* the mathematics courses that students take also fulfill some of CU Denver (up to 8 hours) and CLAS (up to 4 hours) graduation requirements.

#### **Dual credits**

Students need to take only three electives at the undergraduate level; the three electives taken at the graduate level are double counted in fulfilling both BA and MA graduation requirements. ECON 5803 (Graduate Mathematical Economics) is waived or can be counted as one graduate-level elective. The total dual credits are 12 hours.

#### **Additional graduation requirements**

All other grade and GPA requirements towards the BA and MA degrees (e.g., a C- or better is needed in each undergraduate-level required course and a B- or better is needed in each graduate-level required course). Students are expected to meet all course prerequisites. Students will earn the BA degree in their fourth year upon completing all the requirements for the BA degree. Students are expected to be admitted to the Graduate School in their final two semesters prior to earning the MA degree.

#### **Admission requirements**

- 1. Meet all general admission requirements of the Graduate School
- 2. Be a current CU Denver Economics major with a GPA of 3.5 or better
- 3. The following courses must have been completed at CU Denver with a grade of B+ or better: MATH 2411, MATH 2421, ECON 4071, and ECON 4811
- 4. Students should apply in the semester when requirement 3 is satisfied (typically in the end of the fall semester of their junior year as in the sample curriculum below)
- 5. Students who do not meet requirements 2 and 3 may apply, but must submit GRE scores and two letters of recommendation; otherwise both are waived
- 6. To apply, students should submit a regular application to the MA ECON program here: <a href="https://application.admissions.ucdenver.edu/apply/">https://application.admissions.ucdenver.edu/apply/</a>. Students who meet the admission requirements are not required to pay the application fee, submit GRE scores, letters of recommendation, or a personal statement. Students must contact the graduate advisor after their application is submitted to have this material waived (brian.duncan@ucdenver.edu)

# **Economics BA/Mathematics BS Dual Degree**

#### Introduction

Please click here to see Economics department information or here for Mathematical and Statistical Sciences department information.

A solid training in the mathematical and statistical sciences is fundamental to optimally prepare economics students for graduate school. A dual degree in economics and mathematics will substantially increase program quality and career prospects for our students, as well as enhance the reputation of the economics program at CU Denver. Similarly, a solid training in quantitative and qualitative economic principles offers significant benefits to mathematics majors who seek industrial and/or consulting positions.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them

## **Program Delivery**

• This is an on-campus program.

## **Declaring This Major**

Click here to go to information about declaring a major.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. No pass/fail grades may count toward the dual degree.
- 2. The minimum grade for all economics classes taken at CU Denver and applied toward the major is C- (one D- grade is allowed for one economics elective).

- 3. A minimum GPA of 2.0 is required for all ECON courses. Note: Only courses taken at CU Denver will apply.
- 4. The minimum grade for all mathematics classes taken at CU Denver and applied toward the major is C-.
- 5. A minimum GPA of 2.25 is required for all CU Denver mathematics classes applied to the major.

#### **Program Restrictions, Allowances and Recommendations**

- 1. In addition to the CLAS residence requirements, the Economics Department requires that all courses other than Econ 2012 and Econ 2022 require written department approval to be transferred in as satisfying major requirements.
- 2. Additionally, the Mathematics Department requires that at least 15 upper division Mathematics credits must be taken at CU Denver.
- 3. The Mathematics Department requires that In the semester of graduation, students must submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency; participate in an exit interview, which may be scheduled by the department administrative assistant; and complete a senior survey, available from the department administrative assistant.

Take all of the following Economics courses:

- ECON 2012 Principles of Economics: Macroeconomics
- ECON 2022 Principles of Economics: Microeconomics
- ECON 4071 Intermediate Microeconomic Theory
- ECON 4081 Intermediate Macroeconomic Theory
- ECON 4811 Introduction to Econometrics

Take **all** of the following Mathematics courses:

- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 3000 Introduction to Abstract Mathematics
- MATH 3191 Applied Linear Algebra
- MATH 3200 Elementary Differential Equations
- MATH 3382 Statistical Theory (may be replaced by MATH 4820 Introduction to Mathematical Statistics)
- MATH 4310 Introduction to Real Analysis I
- MATH 4779 Math Clinic

Take **six** Economics elective courses or **five** Economics elective courses plus one Mathematics elective course:

- Any six three semester hour courses (four of them must be 4000-level) taken in Economics may satisfy this requirement, other than internships and independent studies (which require the approval of the department chair). Note: ECON 3801 and ECON 3811 cannot be counted as electives. And
- One of the following Mathematics courses can be counted as one Economics elective (it may also be counted as one Mathematics elective):
- MATH 3301 Introduction to Optimization in Operations Research
- MATH 3302 Simulation in Operations Research
- MATH 4387 Applied Regression Analysis
- MATH 4390 Game Theory
- MATH 4450 Complex Variables
- MATH 4650 Numerical Analysis I
- MATH 4733 Partial Differential Equations
- MATH 4810 Probability
- MATH 5350 Mathematical Theory of Interest

Take **four** Mathematics elective courses or **three** Mathematics elective course plus one Economics elective course:

- Students must choose **four** approved Mathematics electives (at least three semester hours) above 3000, excluding MATH 3800, 4012, 4013, 4014, 4015 and 4830 **or**
- One of the following Economics courses can be counted as one Mathematics elective (and can also be counted as one Economics elective):
- ECON 4030 Data Analysis with SAS
- ECON 4110 Money and Banking
- ECON 4150 Economic Forecasting
- ECON 4320 Financial Economics
- ECON 4430 Economic Growth
- ECON 4550 Game Theory and Economic Applications
- ECON 4610 Labor Economics
- ECON 4740 Industrial Organization

## Public Service BA/MPA

#### Introduction

The Pathways Bachelor of Arts in Public Service/Master of Public Administration degree allows high-performing students to earn both degrees in an accelerated timeframe, saving students both time and money. Students graduating with the Pathways BAPS/MPA degree are prepared for leadership and management roles in public service, including local, state, and federal governmental agencies and in nonprofit and nongovernmental organizations. Both the BAPS and the MPA degrees are offered fully online, providing students with the flexibility to schedule

courses around the reality of family and work demands while also engaging both local and fully online students in public service opportunities in their own communities.

The BAPS/MPA degree program offered by the School of Public Affairs allows high-performing students to count 12 credit hours towards both the BAPS and the MPA degrees. Eligible students are those who have completed at least 75 credits with a minimum 3.5 GPA in the BAPS major and a 3.0 overall GPA, completed the undergraduate Core Curriculum, and who meet the other requirements listed below.

## **Admissions Requirements and Process**

Interested students should contact their BAPS academic advisor as early as possible to ensure proper planning for the Pathway's program.

There are two applications. The first application is seeking approval to begin taking MPA level courses as a BAPS student. The second application is seeking full admission to the MPA program

Please note: Acceptance into the BAPS/MPA program does not guarantee acceptance into the MPA program.

## **Eligibility Requirements**

Both current CU Denver students and new transfer students are eligible to apply after meeting the following:

- Currently enrolled in the School of Public Affairs as a Bachelor of Arts in Public Service major
- Completed the University of Colorado Denver's undergraduate core curriculum
- Completed 75 semester credit hours
- Completed the following 15 semester credit hours in Public Service:
  - o PUAD 1001 Introduction to Public Service
  - PUAD 2001 Management for Public Service
  - o PUAD 3001 Financial Management for Public Service
  - o PUAD 3002 Program Design, Evaluation, and Decision-Making
  - PUAD 4001 Ethics and Public Service
  - Transfer Public Service courses must have been approved and accepted toward the major
- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in Public Service courses

## **Application Process**

Students must apply no later than the semester in which they first earn 20 credits toward the BAPS degree, most likely the second semester of their junior year. For full consideration, students must submit all application materials by Oct. 15 for admission to the following spring semester and by March 15 for admission to the fall semester. The following steps should help in the application process:

- 1. Plan ahead when scheduling courses through the junior year. The five required public service courses listed above and all of the student's core education requirements must be completed by the end of the student's junior year.
- 2. At the beginning of the semester in which the student is applying to the program, the student should approach a School of Public Affairs faculty member about writing a letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
  - a. Length: 1 to 2 pages
  - b. The statement should describe:
    - i. Applicant's reasons for undertaking graduate study in Public Administration
    - ii. Applicant's future career plans
    - iii. Planned area of concentration, if any, within Public Administration
- 3. By Oct 15 of the fall semester or March 15 of the spring semester the student must submit the following items to the undergraduate coordinator:
  - a. Personal statement of purpose
  - b. One letter of recommendation from a School of Public Affairs faculty member
  - c. School of Public Affairs' BAPS/MPA application form

#### **Admission Criteria**

Admission to the BAPS/MPA program is competitive. Applicants will be evaluated on the following:

- 1. Grade point average (overall and in public service coursework)
- 2. Grade trend (improving, consistent, or declining)
- 3. Total number of credit hours completed
- 4. Likelihood of success and persistence based on the Statement of Purpose and Reference Letter

Students who are not admitted to the BAPS/MPA program are eligible to reapply after completing an additional 12 semester credit hours. Students can apply and be considered for admission to the BAPS/MPA program a maximum of two times.

#### **BAPS/MPA Program Matriculation**

Students must successfully complete a minimum of 3 semester credit hours of graduate public administration course work each semester following admission to the BAPS/MPA program. A maximum of 12 graduate semester credits can be completed as an undergraduate BAPS/MPA student.

Students in the Pathways BA/MPA program may be eligible to complete the MPA level internship only after successfully passing two MPA level courses. The MPA level internship may fulfill both the BAPS and MPA internship requirement. The BAPS level internship will not fulfill the MPA level internship.

Students must maintain a minimum 3.0 cumulative grade point average for all course work and a 3.5 grade point average for the BAPS major.

The School of Public Affairs reserves the right to rescind a BAPS/MPA student's admittance to the Pathway's program if at any point the students' grade point average falls below the requirements listed above.

#### **Tuition and Fees**

Graduate level tuition is more expensive than undergraduate tuition. Students are assessed tuition at the class level.

#### **Second Application**

Students will submit the second application, seeking full admission to the MPA program, during the final semester of their undergraduate senior year. The application can be found online. The following are waived for students in the BA/MPA program:

- GRE or LSAT scores
- \$50 application fee
- Official transcripts
- Two additional letters of recommendation are required. The third letter of recommendation will be the letter used as part of the first application.

While submitting the second application, seeking full admission to the MPA program, students should work directly with their Graduate level Student Services Coordinator.

Students in the Pathways BA/MPA program must enroll in the MPA program the semester immediately following completion of their BAPS degree.

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Public Affairs Graduation Requirements
- Click here for information about Academic Policies

## **Program Requirements**

- 1. 141 total semester credit hours successfully completed
- 2. 37-38 semester credit hours in the general education core curriculum
- 3. 46-48 semester credit hours in general electives
- 4. 15 semester hours of undergraduate public service coursework
- 5. 45 total semester hours of upper-division course work (3000 and above)
- 6. Minimum 3.0 CU cumulative grade point average in undergraduate public service courses
- 7. Full acceptance to the Graduate School and the Master of Public Administration program
- 8. Minimum 36 semester hours of graduate-level course work (5000 and above)

- Minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work
- 10. Minimum of a B- (3.0 GPA) in each required core MPA course
- 11. Minimum of 3.0 CU cumulative grade point average in all graduate level courses
- 12. Successful completion of Master of Public Administration capstone or thesis
- 13. Fulfillment of all college and major requirements

#### **Degree Confirmation**

Students are eligible to receive the BA in Public Service degree once they have successfully completed 120 semester hours and all CU Denver undergraduate degree requirements. The MPA will be conferred once the student has completed all requirements of the Master of Public Administration degree.

#### Licensure

# Secondary Education Licensure - CLAS Major Pathway

#### Introduction

Please click here to see School of Education & Human Development information.

The secondary undergraduate teacher education pathway at CU Denver is a joint effort between the College of Liberal Arts and Sciences (CLAS) and the School of Education & Human Development (SEHD). Through this pathway, students earn a bachelor's degree through CLAS and complete the requirements for teacher licensure through the SEHD.

The table below lists the CLAS bachelor's degrees and associated licensure areas available to CU Denver undergraduate students pursuing secondary education licensure

CLAS Bachelor's Degree	Colorado Teaching License
BA in English, Literature Option	English Language Arts (grades 7-12)
BA in History	Social Studies (grades 7-12)
BA in Political Science	Social Studies (grades 7-12)
BA in Spanish	World Languages - Spanish (grades K-12)
BA in French	World Languages - French (grades K-12)
BA in Individually Structured Major, General Science Option	Science (grades 7-12)
BA in Geography, Environmental Science Education Option	Science (grades 7-12)

BS in Biology	Science (grades 7-12)
BS in Mathematics	Mathematics (grades 7-12)

Please note: Admission into the final year of the SEHD teacher education program, called the Professional Year, is a separate process from admission to the university or admission to CLAS. See the SEHD website for application deadlines.

## **Program Delivery**

 This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend, and online courses.

## **Declaring This Major**

Click <u>here</u> to go to information about declaring a major

## **General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- <u>CU Denver General Graduation Requirements</u>
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- School of Education and Human Development Graduation Requirements

Click here for information about Academic Policies

## **Program Requirements**

- 1. Students must complete all requirements for their CLAS major.
- 2. Students must pass the appropriate Praxis Exam prior to beginning their final semester of their Professional Year. It is recommended students complete the exam in the year prior to their Professional Year.
- 3. Application to the last year of the program, the Professional Year Residency is required. After successfully completing all other Core, CLAS, major, and elective requirements, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)
- 4. Students must complete and maintain a 3.0 minimum grade point average in Professional Year coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
- 5. A minimum grade of B- is required for all education licensure courses.

6. Transfer courses must be approved by faculty and/or advisor to apply to the education licensure courses.

Take **all** of the following education courses before beginning the Professional Year (a minimum grade of B- is required in each course):

- EDFN 4010 Social Foundations and Cultural Diversity in Urban Education
- CLDE 4020 Responsive Classroom Communities
- EDHD 3930 Diverse Learners Field Experience & Seminar
- SPED 4030 Understanding (dis)Ability in Contemporary Classrooms

Take **all** of the following Professional Year courses (a minimum grade of B- is required in each course):

- UEDU 4931 Internship & Lrng Comm I
- UEDU 4932 Internship & Lrng Comm II
- UEDU 4933 Internship & Lrng Comm III
- LCRT 4100 Secondary Literacy Instruction and Assessment
- UEDU 4040 Planning for Learning
- Two Courses in Content Methods, depending on licensure area (see list below)
- One Course for Capstone, depending on licensure area (see list below)

**Content Methods Courses by Licensure Area** (two required during Professional Year):

English Language Arts:

- LCRT 4200 Theory and Methods of Teaching Secondary English
- LCRT 4201 Adolescent Literature

Social Studies:

- UEDU 4464 Methods of Teaching Social Studies
- UEDU 4465 Methods of Teaching History

World Languages:

- MLNG 4690 Methods of Teaching Modern Languages
- CLDE 5030 Language Development of Multilingual Learners: Advanced

- CLDE 5070 Linguistic Analysis of English
- CLDE 5140 Language, Culture & Educational Equity

#### Science:

- SCED 4400 Theory and Pedagogy of Science Learning
- SCED 4401 Inquiry Science Pedagogy and Practices

#### Mathematics:

- MTED 4300 Curriculum and Methods for Teaching Mathematics
- MTED 4301 Assessment and Equity in Mathematics Instruction

Capstone Courses by Licensure Area (one required during Professional Year):

#### English Language Arts:

o <u>UEDU 4052 - English/LA & Social Studies Capstone: Secondary Ed</u>

#### Social Studies:

o UEDU 4052 - English/LA & Social Studies Capstone: Secondary Ed

#### World Languages:

UEDU 4052 - English/LA & Social Studies Capstone: Secondary Ed

#### Science:

o STME 4051 - STEM Capstone: Secondary Education

#### Mathematics:

STME 4051 - STEM Capstone: Secondary Education

# **Undergraduate Teacher Licensure**

## **Undergraduate Teacher Education Program**

Please click here to see School of Education & Human Development information.

There are several pathways that CU Denver undergraduates can take to become a licensed teacher in Colorado. The BA major in Education and Human Development (EDHD) is within the School of Education and Human Development (SEHD) and includes three licensure areas -Early Childhood, Elementary Education, and Special Education. In the College of Liberal Arts and Sciences pathway, students major in CLAS and earn their secondary teaching license in the SEHD. The Education and Human Development major focuses on engaging Colorado's rapidly diversifying student and family population. It combines cutting-edge research with real classroom experiences. You'll learn from innovative faculty members who are locally, nationally and internationally recognized for their research in elementary education. They will provide you with a robust knowledge base and relevant learning experiences in children's thinking, culturally responsive education, and supporting English language learners, as well as technology as it relates to teaching children in grades kindergarten through sixth grade. You'll engage in powerful classroom experiences and benefit from our rich 20-year history of partnerships that are a part of our Professional Development Schools. All of the teacher licensure pathways prepare educators who are culturally affirming and responsive, collaborate closely with families and communities, and have the knowledge and skills to create engaging, relevant, and rigorous classroom communities where all students can learn, achieve and grow.

#### **High Standards and Ongoing Assessment**

The coursework and the internship experiences within each program have been created to align with the Colorado Teacher Quality Standards, as well as frameworks for culturally and linguistically responsive instruction and Universal Design for Learning. Students in all programs engage in a common set of learning opportunities and internship assessments. They also engage in Program Level Assessments at different stages of the program. Colorado mandates that all teacher education programs be "performance-based" in order to recommend candidates completing the program for licensure; thus all candidates must demonstrate proficiency in both the university-based coursework and their internships. Students must also pass state content exams prior to their final semester in the program.

#### **Community College Articulation**

CU Denver honors the community college articulation agreement in elementary and early childhood education to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. Students should make sure they are following the appropriate articulation agreement and should work with their SEHD or CLAS advisor early and often to ensure that all courses are transferred properly.

#### SEHD Pathway (Elementary, Early Childhood and Special Education):

The CU Denver bachelor's degree with a major in Education and Human Development is a fouryear, 126-credit-hour, interdisciplinary program with a licensure track in Elementary Education, Early Childhood Education, and Special Education. It focuses on engaging Colorado's rapidly diversifying student and family population and combines cutting-edge research with real classroom experiences.

The program is offered in a hybrid format with both in-class and online coursework that support the needs of talented students from all backgrounds, including nontraditional and underrepresented students.

#### **Programs of Study**

Additional information about the three tracks can be found on the SEHD website.

#### **Clinical Experiences in SEHD Pathway**

Teacher candidates in the SEHD pathway work alongside community and P-12 partner educators from freshman to senior year. Students complete a community-based field experience block in their freshman year and school-based field experience blocks in years 2 and 3. Each block is carefully coordinated with 1-2 other teacher education courses and a biweekly seminar to provide a fully integrated learning experience between theory and practice. In their final, professional year they are placed in a full year internship within the CU Denver Professional Development School Network comprised of over 20 urban schools across numerous districts in the Denver metro region. Through these internships, teacher education students live the life of a teacher for an entire academic year while enrolled in the program. The internships begin gradually with two days a week early on and increase over time to five days per week by the end of the final semester of the program. University courses are closely integrated with the sequence of clinical internship experiences providing teacher candidates with multiple opportunities to engage in the authentic work of teachers. Teacher candidates coteach closely with practicing teachers in the school and gradually assume full responsibility for teaching by the end of the program. The schools are located in several Denver metropolitan districts serving large populations of low-income and/or culturally and linguistically diverse students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each school is supported by a team of university and school-based educators who collaboratively support the development of each candidate through weekly coaching feedback and the facilitation of collaborative learning community seminars on-site at the school to integrate theory and practice.

#### **Professional Year Admissions**

After successfully completing all other Core, CLAS, major, and elective requirements, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)

#### **Advising**

Students in the SEHD have a dedicated team of staff and faculty committed to their success. This includes an academic advisor and teams of faculty who support the different licensure programs.

The SEHD accepts applications from incoming freshmen, current students at CU Denver, transfer students from community colleges or four-year institutions, individuals who are working as paraprofessionals, assistant teachers or developmental intervention assistants in early childhood centers or elementary schools and people who are interested in working in community-based organizations serving diverse families.

Email <u>education@ucdenver.edu</u> for more information. We encourage students to take advantage of the scholarships and grants that are available in this major.

#### **CLAS Major Pathway:**

The secondary undergraduate teacher education route at CU Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Through this pathway, students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

Please note: The admission into the School of Education & Human Development teacher education program for CLAS majors is a separate process from admission to the university or CLAS majors. See the SEHD website for application deadlines.

#### **CLAS Undergraduate Teacher Education Pathways**

The table below lists the CLAS bachelor's degrees and associated licensure areas available to CU Denver undergraduate students pursuing secondary education licensure.

CLAS Bachelor's Degree	Colorado Teaching License
BA in English, Literature Option	English Language Arts (grades 7-12)
BA in History	Social Studies (grades 7-12)
BA in Political Science	Social Studies (grades 7-12)
BA in Spanish	World Languages - Spanish (grades K-12)
BA in French	World Languages - French (grades K-12)
BA in Individually Structured Major, General Science Option	Science (grades 7-12)
BA in Geography, Environmental Science Education Option	Science (grades 7-12)
BS in Biology	Science (grades 7-12)
BS in Mathematics	Mathematics (grades 7-12)

#### **Program Structure**

The School of Education & Human Development collaborates closely with faculty and administration in the College of Liberal Arts & Sciences to ensure rigorous content preparation in areas of study aligned to the content knowledge necessary for licensed teachers. Students focus primarily on their major in CLAS during the first three years with the opportunity to engage in four early education courses and a semester-long internship in a partner school. If admitted to the final professional year of teacher education, students will then spend two semesters

simultaneously enrolled in teacher education coursework specific to their licensure area and a sequence of year-long internships in one of the program's Professional Development Schools.

#### **Clinical Experiences in CLAS Pathway**

CLAS students engage in a full-semester early field experience block, spending one day a week in a metro area partner school in order to gain experience in a diverse classroom working with students with varying cultures, languages, and abilities. This field experience block also includes a coordinated teacher education course and a bi-weekly seminar. In their final, professional year students are placed in a full year internship within the CU Denver Professional Development School Network comprised of over 20 urban schools across numerous districts in the Denver metro region. Through these internships, teacher education students live the life of a teacher for an entire academic year while enrolled in the program. The internships begin gradually with two days a week early on and increase over time to five days per week by the end of the final semester of the program. University courses are closely integrated with the sequence of clinical internship experiences providing teacher candidates with multiple opportunities to engage in the authentic work of teachers. Teacher candidates co-teach closely with practicing teachers in the school and gradually assume full responsibility for teaching by the end of the program. The schools are located in several Denver metropolitan districts serving large populations of lowincome and/or culturally and linguistically diverse students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each school is supported by a team of university and school-based educators who collaboratively support the development of each candidate through weekly coaching feedback and the facilitation of collaborative learning community seminars on-site at the school to integrate theory and practice.

#### **Professional Year Admissions**

After successfully completing the first 3 years of the program, all students must apply for admission into the professional year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please see SEHD website.)

#### Advising

Undergraduate teacher candidates from CLAS will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

#### College of Liberal Arts and Science (CLAS) Education Advisor

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-licensure curriculum, eligibility requirements for the licensure program and transfer credits.

#### **Major/Faculty Advisor**

A major/faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within

their academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

#### School of Education and Human Development (SEHD) Advisor

During the Professional Year, all CLAS teacher candidates will be supported by an SEHD advisor to ensure licensure completion (Lawrence St. Center Bldg., 701; 303-315-6300). The Advisor in SEHD is also available early on to help with questions about program completion, taking the state content exams and other general questions.

#### **CLAS Pathway Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and SEHD teacher education program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

#### **Programs of Study**

Due to the complex nature of state mandated influences on teacher preparation courses and consistently evaluating this program for students, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

## **Undergraduate Certificate Programs**

## **American Indian Studies Certificate**

#### Introduction

Please click here to see Ethnic Studies department information.

A 12-credit online program with opportunities in American Indian related internships.

This certificate is designed to appeal to undergraduate students with a background in any major. The certificate is also targeted to nondegree-seeking professionals. Courses will examine historical and contemporary tribal experiences. Students will be encouraged to think critically about the stereotypes of American Indians and tribal governments. A certificate in American Indian Studies offers students an enduring intellectual base to understand both the foundations of America and diversity among tribes with different languages, histories, and cultures. The courses provide students the opportunity to encounter theories posited by a rich history of American Indian intellectuals.

## **Program Delivery**

This is an on-online program.

## **General Requirements**

• Click here for information about Academic Policies

### **Certificate Requirements**

- 1. Students must complete a minimum of 12 credit hours.
- 2. Students must complete a minimum of 12 upper-division (3000-level and above) credit hours.
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to major requirements.
- 4. Students must complete all courses with a minimum grade of B-. Students cannot complete course requirements as pass/fail.
- 5. Students must complete all credit hours applying to the certificate with CU Denver faculty.

The Curriculum and Coursework

#### Required Courses:

- ETST 3036 American Indian Cultural Images offered online fall and spring semesters
- ETST 3110 Indigenous Studies offered online fall, spring and summer semesters
- <u>ETST</u> /<u>HIST 3396 History of the American Indian</u> offered online spring and summer semesters
- <u>ETST 3939 Internship</u> offered every semester, contact faculty advisor for placement in the community

Additional information about the undergraduate certificate in American Indian Studies may be obtained from ethnic studies Plaza Building, Suite 102

Phone: 303.315.7207 <a href="https://clas.ucdenver.edu/ethnicstudies/certificates">https://clas.ucdenver.edu/ethnicstudies/certificates</a>

Faculty Advisor: Professor Donna Martinez donna.martinez@ucdenver.edu

# **Applied Statistics Undergraduate Certificate**

#### Introduction

Please click here to see Mathematical and Statistical Sciences department information.

There is a growing need for qualified statistical analysts of the ever-increasing amounts of data collected in business, industry, and government. The Certificate in Applied Statistics program is designed to give students a strong background in statistical methodology and data analysis in preparation for opportunities in the workforce or for graduate studies.

Students will gain competence in such topics as descriptive statistics, estimation, confidence intervals, probability and inferential techniques, simple and multiple regression, analysis of variance, and more advanced topics. Students can focus on a particular application area such as economics, psychology, sociology, geology or environmental science through the choice of an elective course and the data analysis project.

Programs are offered at the undergraduate and graduate level.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Certificate**

- Admission requirements: Completion of calculus 1, 2 and 3 as well as linear algebra, each at a B- or above. Students enrolled in the certificate program will be expected to utilize concepts from calculus and linear algebra without the use of technology, e.g., evaluation of limits, derivatives and integrals.
- Click here to see and print the application form.

#### **General Requirements**

Click here for information about Academic Policies.

## **Certificate Requirements**

Four courses and a 1 hour independent study are required as detailed below.

One fundamental course in probability from:

- MATH 3800 Probability and Statistics for Engineers
- MATH 4810 Probability (recommended)

A fundamental course in mathematical statistics:

MATH 3382 - Statistical Theory

An advanced applications course:

• MATH 4387 - Applied Regression Analysis

One elective from:

- Any statistics course in the Department of Mathematical and Statistical Sciences at the 4000 level or higher (must be pre-approved by the Certificate Coordinator). MATH 4830 cannot apply toward the certificate.
- ECON 4030 Data Analysis with SAS
- ECON 4150 Economic Forecasting
- ECON 4811 Introduction to Econometrics
- GEOG 4770 Applied Statistics for the Natural Sciences

#### **Project requirement**

An independent data analysis project is required with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840, Independent Study, or in an equivalent course pre-approved by the Certificate Coordinator.

#### Additional requirements

- 1. Students must maintain a 3.0 GPA or above in certificate courses with no credit given for courses with grades below B-.
- 2. Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

- 3. Students much be enrolled in one course per year to maintain their status in the certificate program.
- 4. Certificates must be completed within 3 years from matriculation.

# **Biochemistry Certificate**

#### Introduction

Please click here to see Chemistry department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with the Chemistry advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus program.

## **Declaring This Certificate**

Students should meet with the Biochemistry major advisor Dr. Vanessa Fishback to file a
certificate plan prior to the semester of graduation. The certificate is available to degreeseeking undergraduates, non-degree seeking students and students pursuing a
chemistry minor.

## **General Requirements**

Click here for information about Academic Policies

## **Certificate Requirements**

- The required courses including electives must be completed with a grade of C (2.0, not C-) or better in each class, and a minimum GPA of 2.7 across all courses applied to the certificate is required.
- 2. All courses must be taken within ten years of receipt of the Biochemistry Certificate.
- 3. Prerequisite courses do not have to be completed at CU Denver. Required courses including electives must be completed in residency at CU Denver. Any residency exemptions need to be approved in writing by the Biochemistry advisor prior to the course(s) being taken at another institution.

Take the following prerequisite courses:

- CHEM 2031 General Chemistry I or
- CHEM 2081 Honors General Chemistry I
- CHEM 2038 General Chemistry Laboratory I or
- CHEM 2088 Honors General Chemistry I Laboratory
- CHEM 2061 General Chemistry II or
- CHEM 2091 Honors General Chemistry II Lecture
- CHEM 2068 General Chemistry Laboratory II or
- CHEM 2098 Honors General Chemistry II Laboratory
- BIOL 2051 General Biology I or
- BIOL 2095 Honors General Biology I
- BIOL 2061 General Biology II or
- BIOL 2096 Honors General Biology Lab I
- BIOL 2071 General Biology Laboratory I or
- BIOL 2097 Honors General Biology II
- BIOL 2081 General Biology Laboratory II or
- BIOL 2098 Honors General Biology Lab II
- CHEM 3411 Organic Chemistry I or
- CHEM 3481 Honors Organic Chemistry I
- CHEM 3418 Organic Chemistry Lab I or
- CHEM 3488 Honors Organic Chemistry Laboratory I
- CHEM 3421 Organic Chemistry II or
- CHEM 3491 Honors Organic Chemistry II

Take **one** of the following Biochemistry courses:

- CHEM 3810 Biochemistry
- CHEM 4810 General Biochemistry I
- CHEM 5810 Graduate Biochemistry I

Take **one** of the following Biochemistry courses:

- CHEM 4815 Structural Biology of Neurodegenerative Diseases
- CHEM 4820 General Biochemistry II
- CHEM 4825 Biochemistry of Metabolic Disease

- CHEM 4835 Biochemistry of Gene Regulation and Cancer
- CHEM 5830 Graduate Biochemistry II

Take the following course:

BIOL 3611 - General Cell Biology

Take **two** of the following Electives courses not already chosen from the Biochemistry list:

- CHEM 3011 Inorganic Chemistry
- CHEM 3111 Analytical Chemistry
- CHEM 4121 Instrumental Analysis
- CHEM 4511 Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4521 Physical Chemistry: Quantum and Spectroscopy
- CHEM 4815 Structural Biology of Neurodegenerative Diseases
- CHEM 4820 General Biochemistry II
- CHEM 4825 Biochemistry of Metabolic Disease
- CHEM 4828 Biochemistry Lab
- CHEM 4835 Biochemistry of Gene Regulation and Cancer
- CHEM 5830 Graduate Biochemistry II
- BIOL 3124 Introduction to Molecular Biology
- BIOL 3832 General Genetics
- BIOL 4125 Molecular Biology Laboratory
- BIOL 3225 Human Physiology
- BIOL 3763 Biostatistics
- BIOL 3804 Developmental Biology
- BIOL 4024 Introduction to Biotechnology
- BIOL 4064 Cell Biology of Disease
- BIOL 4165 Neurobiology
- BIOL 4144 Medical Microbiology
- BIOL 4068/ BIOL 5068 The Cell Cycle
- BIOL 4126 Molecular Genetics
- BIOL 4550 Cell Signaling
- PHYS 3151 Biophysics Outlook I and
- PHYS 3161 Biophysics Outlook II
- (these two 1-credit courses together fulfill one elective requirement)
- PHYS 3452 Biophysics of the Cell NM
- PSYC 3832 Neural Basis of Learning

### **Biotechnology Certificate**

#### Introduction

Please click here to see Integrative Biology department information.

Biotechnology is a rapidly growing field in Colorado and nationally that encompasses many disciplines. Agriculture, biofuels, biomedical biotechnology, pharmaceuticals, microbiology, and medical device development are all well-represented areas of biotechnology in Colorado. The Department of Integrative Biology offers a Certificate program in Biotechnology that allows students to acquire foundational knowledge and specialized skills relevant to these research areas. The certificate is designed to provide a strong background in biochemistry and molecular biology, with an emphasis on applied training via lab work and research experiences. Upon completion of the requirements, students obtain recognition in the form of a Certificate and official designation on their transcript.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

Students may earn the certificate while working on their Bachelors Degree; or, the courses may be taken through non-degree admission. All admissions questions should be directed to the Registrar's office (303-556-2389). All questions regarding tuition and fees should be directed to the Bursar's office (303-556-2710).

#### Prerequisites:

Individual courses used to earn the Biotechnology Certificate carry prerequisites that must be met before enrolling.

Students interested in completing the Biotechnology certificate should contact the Department of Integrative Biology. A certificate will be issued and noted on your transcript upon proof of satisfactory completion of the course work. You must contact the Biotechnology Certificate faculty advisor no later than the start of the semester of graduation in order for the certificate recognition to appear on your transcripts.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Certificate Requirements**

- 1. Individual courses used to earn the Biotechnology Certificate carry prerequisites that must be met before enrolling.
- 2. All courses used to satisfy the requirements for the Certificate must be completed with a grade of C or better.
- 3. All courses used to satisfy the requirements for the Certificate must be completed at CU Denver.
- 4. All courses used to satisfy the requirements for the Certificate must be completed within a five year period.

Take all of the following courses:

- BIOL 4024 Introduction to Biotechnology
- BIOL 3124 Introduction to Molecular Biology
- BIOL 4125 Molecular Biology Laboratory
- CHEM 4820 General Biochemistry II or
- CHEM 3810 Biochemistry
- BIOL 3939 Internship or
- BIOL 4880 Directed Research

Take **one** elective from among those listed below, or a course pre-approved by Biotechnology Certificate faculty advisor:

- BIOL 3612 Cell Biology Laboratory
- BIOL 3763 Biostatistics
- BIOL 4055 Virology
- BIOL 4126 Molecular Genetics
- BIOL 4144 Medical Microbiology
- BIOL 4225 Genomics and Bioinformatics
- BIOL 4622 Topics in Immunology
- BIOL 4634 Biology of Cancer
- BIOL 4064 Cell Biology of Disease
- CHEM 3111 Analytical Chemistry
- CHEM 4121 Instrumental Analysis
- CHEM 4828 Biochemistry Lab
- CHEM 4835 Biochemistry of Gene Regulation and Cancer

You must contact the Biotechnology Certificate faculty advisor (Dr. Chris Miller) no later than the start of the semester of graduation in order for the certificate recognition to appear on your transcripts.

#### **Commodities Certificate**

#### Introduction

The Business Schools undergraduate certificates are primarily intended for students currently pursuing a degree in any undergraduate discipline that want to expand their business knowledge to give themselves a leg up when they enter the work force. However, they can also be taken by students with only a high school diploma.

Students can pursue one of our undergraduate certificates, even if they are not CU Denver students. Credit earned as a part of the certificate DOES count towards your undergraduate degree, should you choose to pursue a degree here.

The Business School awards a Certificate (of completion) in Commodities to students completing three finance and commodities courses. Students completing the certificate will have an improved understanding of the complex commodities market. Topics covered include regulation, trading, fundamentals, investing, risk management and ethics on commodity markets. Please contact the Commodities Center for more information.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

Please contact the Commodities Center for more information.

## **Criminology Certificate**

#### Introduction

Please click here to see Sociology department information.

Crime and society's responses to it represent core concerns for social scientists, policy makers, civic leaders, community organizations, and citizens across the globe. Criminology is the field of study dedicated to understanding crime as a social phenomenon. Criminologists study the social construction of laws, nature and causes of crime, reactions to the breaking of laws, and the prevention, control and treatment of crime. The Department of Sociology's Criminology Certificate offers an essential foundation for students pursuing careers in criminal justice, victim and community services, criminal law, and non-profit organizations in local and international contexts. The certificate also prepares interested students for law school and graduate programs in sociology and criminology. Students may ultimately use this training to conduct

social research on crime, influence public policy, and inform government decisions about crime and law.

Upon successful completion of the certificate, students will:

- Understand the theoretical explanations for the social and behavioral causes of crime and crime reduction
- Possess a fundamental understanding of the criminal-legal and political institutions responsible for crime control and policy
- Be familiar with currents trends in criminological thought, research, and activism
- Be able to apply the technical skills of their methodological training to conduct crime analyses and outcomes assessments for programs aimed at crime prevention
- Engage in original research projects involving criminological topics

#### **Program Delivery**

This is an on-campus or online program.

#### **Declaring This Certificate**

- Eligibility: While housed in Sociology, criminology is in fact a multidisciplinary field that
  draws from diverse liberal arts fields, including Psychology, Political Science,
  Communications, History, Philosophy, among others. Thus, CU Denver undergraduate
  students in any discipline can enroll in the certificate program. The certificate is also
  available to non-degree-seeking students who already have earned a BA or BS degree,
  either at CU Denver or elsewhere.
- Application procedures: Students are encouraged to apply for the Criminology Certificate
  at any point in their undergraduate studies. To apply, students should print and attach a
  completed Criminology Certificate Application to an unofficial transcript. These
  documents should be submitted to the Criminology Certificate Administrator. Once the
  application is approved, students will be contacted about their acceptance into the
  program.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Program Requirements**

- 1. A minimum of 15 hours is required for this certificate.
- 2. To obtain the certificate, students must achieve a 2.0 GPA average in all approved criminology courses, with no grade less than a C.
- Credits applied to the certificate must be earned at CU Denver. (If students have completed a course required for the certificate elsewhere, they may add the needed credits in the form of additional elective credits drawn from the approved elective courses.)
- 4. The certificate will be awarded when the student graduates with the bachelor's degree.

Take the following **required** course:

SOCY 3490 - Criminology

Take **two** of the following courses:

- SOCY 3115 Quantitative Methods & Analysis and
- SOCY 3119 Qualitative Methods
- OR

<u>2 approved methods courses</u> in the student's major discipline, one on quantitative methods and one on qualitative methods (e.g. PSYC 2090, PSYC 3090, PSCI 3011, PHIL 3440, PHIL 2441, ECON 3801, ECON 3811, GEOG 2080, GEOG 4080). Questions about eligible methods course substitutions should be directed to the criminology certificate administrator.

Take **two** of the following approved elective courses:

- SOCY 2440 Deviance and Social Control
- SOCY 3040 Drugs, Alcohol & Society
- SOCY 4340 Juvenile Delinquency
- SOCY 4460 Hate Groups and Group Violence
- SOCY 4700 Sociology of Law
- SOCY 4780 Violence in Relationships
- ANTH 4090 Drug Syndemic
- COMM 4040 Communication, Prisons, and Social Justice [Prerequisite: COMM 2020, or instructor consent]
- COMM 4680 Mass Media Law And Policy
- ECON 3400 Economics of Sex and Drugs [Prerequisite: ECON 2022]
- ETST 3704 Culture, Racism and Alienation
- HIST 3231 Famous U.S. Trials
- HIST 4308 Crime, Policing, and Justice in American History
- PHIL 3280 War and Morality
- PHIL 4260 Philosophy of Law
- PHIL 4812 Special Topics in Philosophy
- PSCI 3034 Race, Gender, Law and Public Policy
- PSCI 4185 Corruption in the U.S. and Abroad [Prerequisite: PSCI 1001 or 3022]
- PSCI 4427 Law, Politics and Justice
- PSCI 4807 Political Violence
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3612 Domestic Abuse

## **Cultural Diversity Studies Undergraduate Certificate**

#### Introduction

Please click here to see Ethnic Studies department information.

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to non-degree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies department at 303-556-6560 or email: <a href="mailto:ethnic\_studies@ucdenver.edu">ethnic\_studies@ucdenver.edu</a>

#### **Program Delivery**

This is an on-campus program and all courses are available online.

#### **Declaring This Certificate**

Please see your advisor.

#### **General Requirements**

• Click here for information about Academic Policies.

#### **Certificate Requirements**

- 1. The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).
- A minimum grade of C must be earned in each of the four courses completed as part of the certificate.
- 3. All credits for the certificate must be earned at CU Denver.
- 4. A minimum of 6 semester hours for the certificate must be completed at the upper division level.

Take the following **required** Cultural Diversity Studies course:

• ETST 2000 - Introduction to Ethnic Studies

Choose **three** Elective courses from any Ethnic Studies Department courses, including the following:

- ETST 2155 African American History
- ETST 2294 Race and the Media
- ETST 3254 Race and Ethnicity in the Inner City
- ETST 3297 Social History of Asian Americans
- ETST 3396 History of the American Indian
- ETST 3704 Culture, Racism and Alienation
- ETST 4558 Chicano and Latino Politics

There are cross-listed courses in a variety of departments, including history, political science and sociology. Any cross-listed course is acceptable, but the student should register for it under the ETST subject code. A complete listing of department offerings and cross-listed courses can be obtained every semester from the Ethnic Studies Department web page or by calling our office for a copy.

## Democracy and Social Movements Undergraduate Certificate

#### Introduction

Please click here to see Political Science department information.

The Democracy and Social Movements (DSM) certificate program in political science introduces students to current research and practice concerning the complex interplay between social movements and the processes for initiating and consolidating democracies. While contentious political activities have historically contributed to democratization, they have also led to repression, ethnic conflict and substantive human rights violations. Among the several DSM issues requiring scholarly investigation are:

- Viable ways to contest authoritarian regimes;
- The means for constituting a cohesive civil society after a civil war or revolution;
- The relationships between social equality, distributive justice and democracy;
- The relative efficacy of violence and of nonviolent strategies to institute and sustain regime change;
- The challenges of peacebuilding, transitional justice and democratization in societies torn by internal conflict;
- The growth of transnational social movements in response to globalization;
- The contextual factors determining the specific character of any social movement and of democratic regimes;
- The means by which democratic regimes are consolidated and deepened; and
- The ways in which democratization processes and social movements influence law and public policy, public discourse and culture, the use and design of public/private spaces and the socio-economic outcomes.

Students in the DSM program examine relevant theoretical and methodological literature in these aforementioned areas and apply it to current circumstances by taking specified courses in each of the four major subfields of political science: American, comparative, international politics and political theory.

The DSM certificate program is designed to appeal to persons who want to focus their studies on the recent state of democratization processes around the world, including explorations of the ways in which social movements can catalyze or even threaten those democratization processes. Students in the program will explore how globalization is simultaneously fragmenting and uniting the globe, enhancing wealth and impoverishing people, consolidating human rights regimes and transgressing them and provoking questions about the boundaries of our ethical commitments and the means whereby communities strive for democracy and justice.

By permitting students to devise a curriculum that integrates academic and experiential, the DSM program should enhance students' scholarship, civic engagement and prospects for further study and employment in rapidly growing fields like international/community development, the non-governmental organization sector, civic education/engagement and human rights.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

Please see your advisor.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Certificate Requirements**

- The undergraduate certificate requires five program courses (15 credits, with at least 6 credits at the upper division level), one in each of the four political science subfields and the capstone seminar, as well as completion of an appropriate experiential learning requirement.
- 2. All courses for the certificate must be taken in residency at CU Denver, and completed with a grade of C or higher.
- 3. A minimum GPA of 2.0 is required for the undergraduate certificate.
- 4. Topics courses approved by the program advisor can also satisfy course requirements.
- 5. All students, whether working toward a degree or as a non-degree student, are eligible for the certificate.

Take **one** of the following International Politics courses\*:

- PSCI 4216 International Politics: Human Rights
- PSCI 4225 Democracy and Democratization
- PSCI 4265 Social Justice And Globalization
- PSCI 4808 Strategies of Peacebuilding

Take **one** of the following Comparative Politics courses\*:

- PSCI 4146 Indigenous Politics
- PSCI 4224 Dictatorships in 21st Century
- PSCI 4225 Democracy and Democratization
- PSCI 4555 International Women's Resistance
- PSCI 4808 Strategies of Peacebuilding

Take **one** of the following American Politics courses\*:

PSCI 3035 - Political Movements: Race and Gender

- PSCI 3914 The Urban Citizen
- PSCI 4074 Urban Politics

Take **one** of the following Political Theory courses\*:

- PSCI 4207 Theories of Social and Political Change
- PSCI 4265 Social Justice And Globalization

\*Note: Some courses appear more than once in different subfields; students should choose four different subfield courses, not count one toward two subfields.

Take the following **Capstone** course:

PSCI 4206 - Social Movements, Democracy and Global Politics

#### Complete the **Experiential Learning Requirement**:

Like the existing departmental experiential learning requirement for majors, this requirement can be fulfilled without taking course credits, for example, by documenting the inclusion of significant experiential learning/field work in regular course work, or by documenting significant relevant field work in one's professional life.

## **Digital Studies Certificate**

#### Introduction

From social media and mobile phones to the algorithms in self-driving cars, digital and information technologies are everywhere. The Digital Studies Certificate provides students with the opportunity to investigate the relationships between new communication technologies and society and to develop skills creating digital media messages and products.

Social sciences and humanities majors can use this certificate to develop and demonstrate their technical skills, while science and engineering students can use it to build expertise in understanding the social and cultural aspects of new technologies. Students from any CU Denver school or college who earn the Digital Studies Certificate will be able to demonstrate to a wide range of potential employers or graduate schools that they have both technical skills and

the ability to critically analyze new media. Students who successfully complete the Digital Studies Certificate will be able to:

- Describe and analyze the relationships between digital media and their cultural, social, political, and ethical contexts
- Use digital media to communicate messages to a variety of audiences
- Use digital media to solve problems in a range of disciplines and situations
- Use digital media and related analytical skills as career-building tools

#### **Program Delivery**

This is a hybrid program, with courses on-campus and online.

#### **Declaring This Certificate**

- Eligibility: CU Denver students in any discipline can enroll in the program at any point in their undergraduate studies.
- CLAS's Interdisciplinary Studies program sponsors the certificate, and the CLAS
  Director of Digital Initiatives will provide advising and administrative management.
- Application Procedures: Students are encouraged to apply for the Digital Studies Certificate at any point in their undergraduate studies. To apply, students should print and complete a Digital Studies Certificate Application and submit it to the CLAS Director of Digital Initiatives.

#### **General Requirements**

• Click here for information about Academic Policies.

#### **Program Requirements**

- 1. A minimum of 12 hours of required credits: 1 course (3 credits) from each of the 3 clusters (for a total of 9 credits), plus the remaining 3 credits from any one of the three clusters. At least 6 credits must be upper-division. (See below for courses in the three clusters.)
- 2. Co-curricular requirement: Students must attend at least 3 Career Center sessions, which can include events, workshops, or 1-on-1 appointments.
- 3. To obtain the certificate, a student must achieve a 3.0 GPA average in all approved Digital Studies courses.
- 4. Credits applied to the certificate must be earned at CU Denver.
- 5. The certificate will be awarded when a student graduates with the bachelor's degree.

#### **Digital Studies Certificate Course Clusters**

 Theory and Analysis: Courses in this cluster focus on theorizing, explaining, and describing the relationships between digital, media, and communication technologies and society. They enable students to critically assess and analyze digital media and

- information, such as understanding the biases in seemingly neutral Google search results or examining how people use Twitter to build social movements
- **Digital Media Production:** Courses in this cluster focus on developing hands-on skills in the use of digital, media, and communication technologies. They provide opportunities for students to develop their skills with a variety of digital tools, such as digital photography, mapping, and social media management.
- **Integration:** Courses in this cluster bring together both understanding and using digital, media, and communication technologies.

**Other courses** may apply to each cluster with the approval of the Director of Digital Initiatives certificate advisor.

#### **Theory and Analysis Cluster**

- ANTH 2400 Exploring Culture through Social Media
- BUSN 6610 & ISMG 6180 Information Systems Management and Strategy
- COMM 2030 Digital Democracy
- COMM 3650 Media And Society
- COMM 4760 / 5760 New Media and Society
- ENTP 6022 Digital Strategy for Entrepreneurs
- GEOG 2080 Introduction to Mapping and Map Analysis
- ISMG <u>2050</u> Introduction to Business Problem Solving
- ISMG 3000 Technology In Business
- MUSC 3700 Music and Entertainment Business in the Digital Age
- PHIL 4920 /5920 Philosophy of Media and Technology
- INTE 5320 Games and Learning

#### **Digital Media Production Cluster**

- COMM 2071 Media Writing Skills
- COMM 2081 New Media Production and Management
- FINE 1810 PREDAC: 3D Foundations
- FINE 1820 PREDAC: Animation Foundations
- FINE 2155 Introduction to Digital Photography
- FINE 2405 Introduction to Digital Design
- GEOG 4080 / 5080 Introduction to GIS
- GEOG 4081 / 5081 Cartography and Computer Mapping
- INTE 5340 Learning with Digital Stories
- INTE 5680 Producing Media for Learning
- IWKS 2300 / 5350 Computational Foundations of Innovation
- IWKS 3100 / 5170 3D Design, Computation and Prototyping

- COMM 2051 Introduction to Strategic Communication
- COMM 3660 Social Media for Social Change
- COMM 4558 / 5558 Digital Health Narratives
- ENGL 3084 Multimedia Composition
- ENGL 4190 Advanced Topics in Writing & Digital Studies
- ENGL 5165 Literacy and Technology
- HIST 3260 / 5260 Digital Studies and Strategies
- INTE 5665 Social Media and Digital Cultures
- INTE 5711 Creative Designs for Instructional Materials
- IWKS 2100 Human-Centered Design, Innovation and Prototyping
- IWKS 3180 / 5180 Choose Your Own Adventure
- IWKS 3200 / 5200 Data Science for Innovators
- IWKS 3700 / 5700 Innovation and Society
- PUAD 4003 Effective Communication for Public Service

## **Entrepreneurship Certificate**

#### Introduction

The Business Schools undergraduate certificates are primarily intended for students currently pursuing a degree in any undergraduate discipline that want to expand their business knowledge to give themselves a leg up when they enter the workforce. However, they can also be taken by students with only a high school diploma.

Students can pursue one of our undergraduate certificates, even if they are not CU Denver students. Credit earned as a part of the certificate DOES count towards your undergraduate degree, should you choose to pursue a degree here.

The Jake Jabs Center for Entrepreneurship is offering an affordable program in one of the fastest growing business segments in the country-Innovation and Entrepreneurship. All courses are taught by faculty from the Jake Jabs Center for Entrepreneurship at CU Denver. You will find many opportunities including scholarships, mentoring, and networking. You will gain skills that prepare you to start a successful business or become an entrepreneurial asset to an existing company.

#### Benefits:

- Experiential opportunities
- Cost effective Scholarships available
- No GPA requirements or prerequisites

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

For more details about courses and registration, visit the Launchpad Certificate page.

#### **Certificate Requirements**

Take **all** of the following required courses:

- ENTP 3299 Business Model Development & Planning
- ENTP 3200 Essentials in Entrepreneurship
- ENTP 3230 Small Business Accounting and Finance

# **Environmental Stewardship of Indigenous Lands Undergraduate Certificate**

#### Introduction

The Environmental Stewardship of Indigenous Lands (ESIL) certificate is an exciting educational opportunity at the University of Colorado Denver (CU Denver), where Indigenous comprises the terms Native American, American Indian, Alaskan Native, and Hawaiian Native. The ESIL certificate provides a unique training opportunity for students to combine a passion for protecting natural resources with a desire to communicate across diverse cultures and schools of thought. This unique program provides training, internships, and job placement for students interested in environmental issues involving tribal and non-tribal entities.

The certificate is available to current CU Denver undergraduate students, post-baccalaureate students, and transfer students. While the certificate is open to students from all educational backgrounds, ESIL targets students majoring in science, technology, engineering, and mathematics (STEM), with special emphasis on biology, civil engineering, and geography and environmental sciences. Accordingly, the ESIL certificate includes a broad and rigorous selection of STEM coursework.

Additionally, the ESIL certificate incorporates professional training through extracurricular activities and internships. The extracurricular activities provide students with culturally-relevant training in topics such as tribal sovereignty, environmental law, transcultural competency, and traditional ecological knowledge (TEK). Both the STEM curriculum and these professional skills are applied during internships in which students practice facilitation as tribal liaisons with partner organizations including Indigenous tribes and government agencies (State and Federal).

These degree requirements are subject to periodic revision by the ESIL certificate advisors. Exceptions and substitutions for individual cases will be made by ESIL advisors only. Students in the ESIL program are required to meet with their assigned advisor before the start of each semester to confirm best plans of study.

The ESIL program is offered at the undergraduate level.

#### ESIL Academic Advisors

- Dr. Timberley Roane (<u>Timberley.Roane@ucdenver.edu</u>) in the Department of Integrative Biology
- Dr. David Mays (David.Mays@ucdenver.edu) in the Department of Civil Engineering
- Dr. Rafael Moreno-Sanchez (<u>Rafael.Moreno@ucdenver.edu</u>) in the Department of Geography and Environmental Sciences

#### **Program Delivery**

This is an on-campus program, with an off-campus internship requirement.

#### **Declaring This Certificate**

Admission requirements: Students must officially enroll in the ESIL certificate program. Students eligible for the ESIL certificate (1) may have a previous STEM degree, (2) may be a current undergraduate student in biology, civil engineering, or geography and environmental sciences at CU Denver, or (3) may be a major in other academic disciplines willing and able to complete the coursework detailed below. All students are also required to complete any required course prerequisites.

Upon enrollment in the ESIL certificate program, students complete required coursework and one required internship as described below. Information on how to enroll in the ESIL certificate can be found at https://clas.ucdenver.edu/esil

**Eligibility**: While housed in the Departments of Integrative Biology, Civil Engineering, and Geography and Environmental Sciences, the training needed for a tribal liaison draws from diverse liberal arts and STEM fields. Thus, students in any discipline can enroll in the certificate as long as the certificate course prerequisites have been met.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Program Requirements**

1. ESIL internships are designed to expose students to the professional practice of facilitation and offer important connections and networking opportunities directly with agencies who hire tribal liaisons. Assignment and completion of the internship must be pre-approved by an ESIL advisor. The ESIL certificate requires a written report and

- presentation to demonstrate proficiency for each internship. The ESIL certificate requires at least one internship through the ESIL program. Biology students may earn academic credit for their internship through BIOL 3939. Geography and environmental sciences students may earn academic credit for their internship through GEOG 3939.
- 2. For students who are concurrently completing their degree in biology, civil engineering, or geography and environmental sciences, with proper curriculum planning at the start of the degree, these courses can be applied toward the degree, such that the ESIL certificate does not significantly increase the number of credit hours required for the baccalaureate degree. Students in these three majors should immediately and regularly work with an ESIL advisor for curriculum planning. Each course applied to the ESIL certificate may carry prerequisites that must be met prior to course enrollment.
- 3. Students must maintain a 2.0 GPA or above in certificate courses with no credit given for courses with grades below C-.
- 4. Since a certificate is a CU Denver certification of a student's specialized knowledge in an advanced subject area, a minimum of 12 credits are required to be taken in residency at the CU Denver.
- 5. Students must be enrolled in one course per year to maintain active status in the certificate program.
- 6. For the certificate recognition to appear on the student's transcript, students must meet with an ESIL advisor no later than the start of the semester of graduation.

Take **all** of the following Group 1 courses:

- MATH 1401 Calculus I
- MATH 2830 Introductory Statistics
- or
- CVEN 3611 Engineering Statistics
- BIOL 2051 General Biology I and
- BIOL 2071 General Biology Laboratory I
- Or
- BIOL 2095 Honors General Biology I and
- BIOL 2097 Honors General Biology II
- CHEM 2031 General Chemistry I and
- CHEM 2038 General Chemistry Laboratory I
- O
- CHEM 2081 Honors General Chemistry I and
- CHEM 2088 Honors General Chemistry I Laboratory
- PHYS 2010 College Physics I and
- PHYS 2030 College Physics Lab I
- or
- PHYS 2311 General Physics I: Calculus-Based and
- PHYS 2321 General Physics Lab I
- GEOL 1073 Physical Geology: Surface Processes and

- GEOL 1074 Physical Geology: Surface Processes Laboratory
- or
- CVEN 3718 Geotechnical Engineering I
- CVEN 5381 Introduction to Geographic Information Systems
- or
- GEOG 4080 Introduction to GIS

Take **one** of the following Group 2 courses:

- ENVS 1342 Environment, Society and Sustainability
- PBHL 2001 Introduction To Public Health

Take **one** of the following Group 3 courses:

- COMM 3271 Communication and Diversity
- MGMT 4100 Leveraging Diversity and Inclusion in Business

## **Ethics Undergraduate Certificate**

#### Introduction

Please click here to see Philosophy department information.

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

Please see your advisor.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Certificate Requirements**

- 1. A total of 12 semester hours is required for an Ethics certificate.
- 2. A minimum of 6 semester hours completed for the certificate must be upper division.
- 3. All courses for this certificate must be taken at CU Denver and must have a C or higher.

#### **Program Restrictions, Allowances and Recommendations**

1. Courses not specifically listed here but offered by the Department may count toward the degree upon the approval of the Department Undergraduate Advisor.

#### Take **four** of the following Ethics courses:

- PHIL 1020 Introduction to Ethical Reasoning
- PHIL 3002 Ancient Greek Philosophy
- PHIL 3150 History of Ethics
- PHIL 3200 Social and Political Philosophy
- PHIL 3250 Business Ethics
- PHIL 3280 War and Morality
- PHIL 3500 Ideology and Culture: Racism and Sexism
- PHIL 3550 Philosophy of Death and Dying
- PHIL 4150 Twentieth Century Ethics
- PHIL 4242 Bioethics
- PHIL 4250 Environmental Ethics
- PHIL 4260 Philosophy of Law
- PHIL 4500 Feminist Philosophy
- PHIL 4700 Seminar in a Major Philosopher
- PHIL 4812 Special Topics in Philosophy
- PHIL 4833 Existentialism

### **Families and Social Welfare Certificate**

#### Introduction

Please click here to see Sociology department information.

Families play a significant part in individuals' lives and society. In sociology, one approach is to view families as a small group, focusing on relational processes like support, socialization, conflict, and intimacy that constitute interactions among family members. Another approach views the family as a major social institution that interacts closely with other institutions including those affecting education, law, healthcare, religion, the economy, criminal justice, and welfare. The family-in its varied and diverse forms-is also key to understanding how inequality is experienced and reproduced in society, as substantial responsibility for caring, nurturing, and raising others is delegated to families. The interplay of these multiple levels-the micro or interpersonal, the meso or institutional, and the macro or structural-also interest sociologists, as individuals influence social structures and institutions, and the latter, in turn, affect family interactions and relationships. This certificate provides students a foundation for understanding the complex role of families and family members at multiple levels, as well as the social systems and organizations responsible for supporting families and individuals. The content and methods courses will prepare students for direct service positions working with individuals and families (e.g., human and social services), or research, policy or advocacy positions addressing family issues (e.g., housing, violence and abuse, parenting, social welfare). Students earning the certificate also will be well-positioned to pursue advanced degrees in social work, public health, counseling, law, sociology, or related disciplines.

Upon successful completion of the certificate, students will:

- Recognize the diversity of family structures within and across cultures
- Understand the theoretical perspectives explaining family behavior and relationships, and those addressing differences in the institution of the family across cultures and over time
- Be familiar with current trends in family structure, and recent research on family functioning and well-being, and how family research informs advocacy and policy work, and social welfare programs
- Be able to apply the technical skills of their methodological training to conduct analyses about families and family life, and outcomes assessments for social welfare programs aimed at helping families
- Engage in original research projects involving family-related issues

#### **Program Delivery**

This is an on-campus or online program.

#### **Declaring This Certificate**

Eligibility: While housed in Sociology, the study of families and social welfare is in fact a
multidisciplinary field that draws from diverse liberal arts fields, including Psychology,
Political Science, Communications, and History, among others. Thus, CU Denver
undergraduate students in any discipline can enroll in the certificate program. The

- certificate is also available to non-degree-seeking students who already have earned a BA or BS degree, either at CU Denver or elsewhere.
- Application procedures: Students are encouraged to apply for the Families and Social Welfare Certificate at any point in their undergraduate studies. To apply, students should print and attach a completed Families and Social Welfare Certificate Application to an unofficial transcript. These documents should be submitted to the Families and Social Welfare Certificate Administrator. Once the application is approved, students will be contacted about their acceptance into the program.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Program Requirements**

- 1. A minimum of 15 hours is required for this certificate.
- 2. To obtain the certificate, students must achieve a 2.0 GPA average in all approved families and social welfare-related courses.
- Credits applied to the certificate must be earned at CU Denver. (If students have completed a course required for the certificate elsewhere, they may add the needed credits in the form of additional elective credits drawn from the approved elective courses.)
- 4. The certificate will be awarded when the student graduates with the bachelor's degree.

Take the following **required** course:

• SOCY 3700 - Sociology of the Family

Take **two** of the following courses:

- SOCY 3115 Quantitative Methods & Analysis
- SOCY 3119 Qualitative Methods
- <u>OF</u>

<u>2 approved methods courses</u> in the student's major discipline, one on quantitative methods and one on qualitative methods (e.g. PSYC 2090, PSYC 3090, PSCI 3011, PHIL 3440, PHIL 2441, ECON 3801, ECON 3811, GEOG 2080, GEOG 4080). Questions about eligible methods course substitutions should be directed to the criminology certificate administrator.

Take **two** of the following approved elective courses:

- SOCY 3010 Sociology of Human Sexuality
- SOCY 3080 Sex and Gender
- SOCY 4270 Social Meanings of Reproduction
- SOCY 4290 Aging, Society and Social Policy
- SOCY 4640 Sociology of Childhood and Adolescence
- SOCY 4650 Sociology of Adulthood and Aging
- SOCY 4780 Violence in Relationships
- COMM 1041 Interpersonal Communication
- COMM 3275 Family Communication
- COMM 4262 Mediation
- ECON 1010 Economics of Social Issues
- ECON 3100 Economics of Race and Gender
- ECON 4210 Public Finance
- ETST 2125 The Bi-Racial Family
- ETST 3230 African American Family
- HIST 3488 Tudor-Stuart England
- HIST 4219 Depression, Affluence and Anxiety: U.S. History, 1929 to the Present
- HIST 4222 U.S. Society and Thought to 1860
- HIST 4223 U.S. Society and Thought Since 1860
- HIST 4303 Sex and Gender in Modern Britain
- HIST 4492 United States History, 1919-1945
- HIST 4493 United States History, 1945-1973
- HIST 4494 Red and Blue America: U.S. History, 1973-Present
- PHIL 3200 Social and Political Philosophy
- PSCI 4009 Politics of the Budgetary Process
- PSCI 4024 State Politics: Focus Colorado
- PSCI 4084 Local Government and Administration
- PSCI 4085 Comparative Governance: Environment and Society
- PSCI 4324 Politics, Public Policy and Leadership
- PSYC 3205 Human Development I: Child Psychology [Prerequisite: PSYC 1000, 1005]
- PSYC 3215 Human Development II: Adolescence and Adulthood [Prerequisite: PSYC 1000, 1005 or 3205]
- PSYC 3235 Human Sexuality [Prerequisite: PSYC 1000, 1005]
- PSYC 3405 Family Psychology [Prerequisite: PSYC 1000, 1005]
- PSYC 4485 Psychology of Cultural Diversity
- CHIN 1000 China and the Chinese

## Fundamentals of Business Alumni Certificate

#### Introduction

The AACSB accredited CU Denver Business School provides a business certificate designed to introduce recent graduates from any major to the fundamentals of business and to equip them with the knowledge and skills that complement their major, helping launch their careers.

The business certificate consists of three courses designed for recent college graduates with a bachelor's degree in an area other than business. Emphasis is placed on developing the knowledge and skills that provide a practical business foundation.

Many hiring managers are looking for employees with business skills which may not be acquired in other highly specialized areas of study. The business fundamentals certificate gives you business knowledge and skills that employers want.

Over 300 business partners participate on boards and advisory councils, provide scholarships, advise on curriculum and provide internships and jobs to business school students.

When you are enrolled, you have access to Business School resources including:

- career coaching
- job opportunities
- networking
- paid internships
- job search boot camps
- career fairs

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

For more information and for assistance declaring this certificate, please contact the Business School at <a href="mailto:undergrad.advising@ucdenver.edu">undergrad.advising@ucdenver.edu</a> or 303-315-8100.

## Geographic Information Science Undergraduate Certificate

#### Introduction

Please click here to see Geography and Environmental Sciences department information.

Certificate Advisor: Matt Cross Email: matthew.cross@ucdenver.edu

The Geographic Information Science (GISci) Certificate in the Department of Geography and Environmental Sciences is designed to provide CU Denver undergraduates and graduates, as well as non-degree seeking students interested in professional development, with proficiency in

the application of spatial thinking, geographic information science, and geo-technologies in the social and physical sciences, spanning the natural, built and human environments and emphasizing human-environment interconnections. The GISci Certificate core establishes a broad foundation in spatial technologies and methodologies, including geographic information systems, remote sensing, cartography, spatial extensions to database management systems, and statistics. From this base, students can delve into various specialization areas depending on their interests.

Upon successful completion of the certificate, students will be able to:

- articulate and apply basic theoretical underpinnings of spatial analytical principles, methodologies, and techniques;
- effectively utilize at least three different types of software used for spatial analysis;
- apply geospatial thinking, geographic information science, and geo-technologies appropriately; and
- analyze diverse real-world problems that have a spatial dimension and develop alternative solutions to them.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus program.

#### **Declaring This Certificate**

- CU Denver undergraduate students in any discipline or major may be admitted to the program.
- Of the four core requirements, only the statistics class has prerequisites, including algebra and introductory calculus. Because of the technical nature of the GIS and remote sensing course work, however, some mathematical experience is desirable prior to beginning the program.
- Students may begin the program in any semester or during the summer by making
  arrangements with the GISci certificate coordinator, and completing and signing the
  Application for GISci Certificate. This application is required to be formally registered in
  the GISci Certificate program, and must be completed no later than the semester prior to
  the scheduled completion of the certificate.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Certificate Requirements**

- 1. Students must earn a 3.0 GPA average with no course below a "C" in any approved courses for the certificate.
- 2. The certificate will be awarded when the student graduates with the bachelor's degree.
- 3. To obtain the certificate, students must complete five core courses and one elective course, totaling 18 hours.
- 4. Although the five core courses may be taken in any order, it is advisable to begin with GEOG 2080 Mapping and Map Analysis followed by GEOG 4080 Introduction to GIS, since these courses familiarize students with many key concepts used in the other classes.
- 5. All core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the GISci Coordinator.
- 6. Because a certificate is a CU Denver certification of a students' specialized knowledge in an advanced subject matter, all courses in a certificate program are expected to be taken in residency at CU Denver. Only in rare circumstances will exceptions be made regarding this policy. Courses taken within the GISci Certificate Program may be used towards one other degree requirement. Any changes to the standard curriculum program must be approved in writing by the GISci Certificate Coordinator and filed with the GISci Certificate Application Form. Please pay close attention to prerequisites for specific courses.

Take **all** of the following Geographic Information Science courses:

- GEOG 2080 Introduction to Mapping and Map Analysis
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4080 Introduction to GIS
- GEOG 4081 Cartography and Computer Mapping

#### Take **one** of the following Electives courses:

- GEOG 4070 Remote Sensing II: Advanced Remote Sensing
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4090 Environmental Modeling with Geographic Information Systems
- GEOG 4091 Open Source Software for Geospatial Applications
- GEOG 4092 GIS Programming and Automation
- GEOG 4095 Deploying GIS Functionality on the Web
- GEOG 4235 GIS Applications in the Health Sciences
- CVEN 5382 Geospatial Data Development
- CVEN 5385 GIS Relational Database Systems or
- an elective approved by the GISci Certificate Coordinator.
- Although only one elective is required to complete the Undergraduate GISci Certificate, it is strongly recommended that additional elective courses are taken to broaden the experience and knowledge of the student in GIS analysis and applications. A three-credit hour internship with a geospatial faculty sponsor is highly recommended.

### **Health Communication Certificate**

#### Introduction

Please click here to see Communication Department information.

The Undergraduate Certificate in Health Communication (CHC) offers learners the opportunity to acquire and demonstrate expertise in health communication. The certificate program will provide students with a theoretically rich and practically relevant education in how health messages are generated, negotiated, assessed, and understood across a wide range of communication contexts, spanning intrapersonal communication to digital and mass media.

The Undergraduate Certificate in Health Communication serves as a gateway for internships and careers related to health, wellness, and medicine, and further the Communication Department's mission to guide students toward developing the skills, knowledge, and abilities necessary to use communication to create a more civil and humane world.

Beginning in the Fall of 2019, the CHC requires students to complete 15 semester hours (five courses) in a structured manner.

These requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

#### **Program Delivery**

This is an on-campus and online program.

#### **Declaring This Certificate**

- Students should apply for the Undergraduate Certificate in Health Communication after the completion of the required courses.
- To apply, students must complete the certificate application (see the Communication Department website) and return it to Dr. Tamara Powell in room 3311 of the Student Commons Building, or mail to Department of Communication;
  - P.O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student after final grades are posted for the semester.
- Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions.

Additional information about the undergraduate certificate in Health Communication may be obtained from Dr. Tamara Powell, Student Commons Building 3311, 303-315-0310, or tamara.powell@ucdenver.edu.

#### General Requirements

Click here for information about Academic Policies

#### **Certificate Requirements**

- 1. The Undergraduate Certificate in Health Communication requires 15 semester hours (five courses).
- 2. A grade of B must be earned in each course completed as part of the certificate (a grade of B- is not acceptable).
- 3. All of the credit hours for the certificate must be earned at the University of Colorado Denver and may be completed face-to-face or online.
- 4. Courses may not count for more than two graduation requirements.

#### **Required Courses**

To build on a shared set of foundational theories, norms, and skills, all CHC-seeking students take three required courses (9 units) in Communication:

- COMM 2500 Introduction to Health Communication
- COMM 4500 Health Communication
- COMM 4575 Designing Health Messages

#### **Interdisciplinary Health Electives**

CHC-seeking students will then broaden their perspective on health communication by taking an interdisciplinary health elective. Students must complete at least one elective (3 units) from the following courses:

- ANTH 4600 Medical Anthropology
- COMM 4525 Health Communication and Community
- COMM 4550 Rhetorics of Medicine & Health
- COMM 4558 Digital Health Narratives
- COMM 4620 Health Risk Communication
- ENGL 4290 Rhetoric and the Body
- ENGL 4745 Humanistic Writing About Medicine and Biology
- ETST 3002 Ethnicity, Health and Social Justice
- GEOG 3501 Geography of Health
- PBHL 4040 Social Determinants of Health

- PBHL 3030 Health Policy
- PBHL 3041 Health, Culture and Society
- PBHL 3070 Perspectives in Global Health
- PHIL 4242 Bioethics
- PSCI 4330 U.S. Health Policy
- PSYC 3262 Health Psychology
- SOCY 3440 Medical Sociology
- SOCY 3570 Death & Dying: Social & Medical Perspectives
- SOCY 4050 Health Disparities
- SOCY 4110 Sociology of Health Care
- SOCY 4220 Population Change and Analysis
- SOCY 4270 Social Meanings of Reproduction
- Another elective with a health communication focus may be approved for the CHC in consultation with certificate advisor

#### **Required Capstone Project**

CHC-seeking students will complete their certificate by undertaking a semester-long capstone project (3 units) using experiential learning or high impact practice. Students have the choice of taking:

- COMM 3660 Social Media for Social Change
- COMM 3939 Internship
- COMM 4051 Advanced Strategic Communication
- COMM 4525 Health Communication and Communities

(Service Learning)

• COMM 4558 - Digital Health Narratives

(Service Learning)

COMM 4550 - Rhetorics of Medicine & Health

(Writing Intensive)

• COMM 4620 - Health Risk Communication

(Writing Intensive)

Discipline-specific health methods class approved by certificate advisor

### **Immigration Studies**

#### Introduction

Issues of immigration are at the center of modern policy and political debates and are thus a core concern for social scientists, policy makers, civic leaders, community organizations, and citizens. The objective of the History Department's Undergraduate Immigration Studies Certificate is to offer both traditional academic training through coursework and research and also practical experience working with immigrant and refugee communities through an internship. The Immigration Studies Certificate will ultimately prepare students to conduct immigration research, influence immigration public policy, and inform immigrant-related government decisions.

Upon successful completion of the certificate, students will:

- Understand the theoretical explanations for immigration flows, immigrant assimilation and exclusion, and ethnic formation
- Possess a fundamental understanding of the legal and political institutions responsible for immigration policy
- Be familiar with currents trends in immigration studies thought, research, and activism
- Be able to apply the content and methodological skills to engage in original research projects involving immigration topics
- Be able to apply the theories and examples from coursework to conduct immigrationfocused internships in the workforce

#### **Program Delivery**

• This is an on-campus program.

#### **Declaring This Certificate**

- Eligibility: While housed in the History Department, Immigration Studies is a multidisciplinary field that draws from Ethnic Studies, Anthropology, Political Science, Education, and Sociology. Thus, CU Denver undergraduate students in any discipline can enroll in the program.
- Application Procedures: Students are encouraged to apply for the Immigration Studies
  Certificate at any point in their undergraduate studies. To apply, students should print
  and attach a completed Immigration Studies Certificate Application to an official
  transcript. These documents should be submitted to the Immigration Studies Certificate
  Administrator. Once the application is approved, students will be contacted about their
  acceptance into the program.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Program Requirements**

1. A minimum of 12 hours is required for this certificate.

- 2. To obtain the certificate, students must achieve a 3.0 GPA average in all approved Immigration Studies courses.
- 3. Credits applied to the certificate must be earned at CU Denver.
- 4. The certificate will be awarded when the student graduates with the bachelor's degree

Take **both** of the following required courses:

- HIST 3345 Immigration and Ethnicity in American History
- HIST 3939 Internship (Students must take HIST 3345 prior to enrolling in HIST 3939. For HIST 3939, students will work with the Immigration Studies Certificate Administrator and the Experiential Learning Center to secure an immigration- or refugee-related Internship.)

Take **two** related electives from the following approved courses:

- ANTH 4300 Migrant Health
- ANTH 4350 Anthropology of Globalization
- EDFN 3000 Undocumented Mexican Immigration
- ETST 3108 Chicano/a and Latino/a History
- ETST 3297 Social History of Asian Americans
- ETST 3697 Contemporary Asian American Experience
- ETST 3704 Culture, Racism and Alienation
- HIST 4412 Mexico and the United States: People and Politics on the Border
- PSCI 4545 Immigration Politics

If departments offer additional courses that fit within the themes of the Immigration Studies Certificate, those courses can be counted for credit with the Immigration Certificate Administrator's approval.

#### **Law Enforcement Certificate**

#### Introduction

Please click here to see School of Public Affairs information.

The undergraduate certificate in Law Enforcement provides a detailed, comprehensive, and advanced education in the field of law enforcement. This program is designed for students who are employed or will work in the field of law enforcement.

The CJLE program applies a multi-faceted approach to higher education that:

- 1. Enhances analytical thinking and inclusive, relevant approaches to learning and the development of professional skills; and
- 2. Focuses on specific, yet comprehensive, substantive areas of law enforcement that students can apply to their current or future careers in the field.

Students completing the CJLE certificate program will have the knowledge and skills to evaluate and respond to a variety of situations in law enforcement professions that require technical, analytic, substantive, and ethical decision-making. They will understand the different environments and contexts in which law enforcement carry out their responsibilities.

#### **Program Delivery**

This is an on-campus and online program.

#### **Declaring This Certificate**

Please contact spa.advising@ucdenver.edu

#### **General Requirements**

Click here for information about Academic Policies

#### **Program Requirements**

- 1. The CJLE Certificate will require 18 credit hours (6 courses)
- 2. No more than 6 credit hours of transfer coursework may apply to the CJLE certificate.
- 3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the certificate.

Take **all** of the following required courses:

- CRJU 1000 Criminology and Criminal Justice: An Overview
- CRJU 2041 Criminological Theory
- CRJU 4043 Law Enforcement
- CRJU 4540 Evidence-Based Approaches in Law Enforcement

#### **Program Electives:**

There are two elective categories, Topic Area and Professional Setting. The Topic Area electives allows the student to explore a different aspect of law enforcement. The Professional Skills elective allows the student to hone skills related to law enforcement.

#### **Topic Area** (Students take **one** of the following):

- CRJU 3310 Contemporary Issues in Law Enforcement
- CRJU 3320 Police-Community Relations
- CRJU 3520 Juvenile Justice
- CRJU 3530 Juvenile Delinquency
- CRJU 4410 Criminal Law and Constitutional Procedures
- CRJU 4430 Law and Society
- CRJU 4450 Homeland Security
- HIST 4380 Crime, Policing and History
- PSCI 4427 Law, Politics and Justice
- SOCY 4340 Juvenile Delinquency
- SOCY 4700 Sociology of Law
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable

- Professional Skills (students take one of the following)
- ANTH 3550 Forensic Anthropology
- CRJU 4310 Leadership Roles in Criminal Justice
- CSCI 1001 Computer Forensics I
- GEOG 4080 Introduction to GIS
- <u>CRJU 4939 Internship</u> (only for Certificate or Minor and must be related to Law Enforcement and be pre-approved)

Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable

## **Mediation Undergraduate Certificate**

#### Introduction

Please click here to see Communication department information.

Mediation is a process in which conflict parties attempt to manage their differences with the assistance of a neutral third-party. The Certificate in Mediation is designed to provide intensive and in-depth training in mediation and communication skill competencies. Trained mediators are impartial process experts who utilize communication and conflict philosophy and theories to increase the probability of more favorable outcomes between parties in conflict. The undergraduate certificate is designed for communication majors or any student interested in developing practical skills in alternative dispute resolution. The courses in this certificate focus on alternative dispute processes that include strategies for managing conflict in personal, public, legal, political, governmental, and corporate contexts. These certificate requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them. Please check spacing here and throughout.

#### **Program Delivery**

This is an on-campus or online program.

#### **Declaring This Certificate**

- Students should apply for the Undergraduate Certificate in Mediation after the completion of the required courses.
- To apply, students must complete the certificate application (see the Communication Department website) and return it to Dr. Larry Erbert in room 3008 of the Student Commons Building, or mail to Department of Communication; P.O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student after final grades are posted for the semester.
- Students who are not already enrolled at CU Denver must complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions.

Additional information about the Undergraduate Certificate in Mediation may be obtained from Dr. Larry Erbert, Department of Communication, 303-315-1918, Larry. Erbert@ucdenver.edu.

#### **General Requirements**

Click here for information about Academic Policies.

#### **Certificate Requirements**

1. The Undergraduate Certificate in Mediation requires 12 semester hours (four courses).

- 2. A minimum of 9 semester hours of upper division coursework are required for this certificate.
- 3. A grade of B or higher must be earned in each course completed as part of the certificate (a grade of B- is not acceptable).
- 4. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Take the following core course:

COMM 4262 - Mediation

Take **at least one** of the following two courses (students who take both classes take one elective rather than two; students who take only one must select two electives):

- COMM 4255 Negotiations and Bargaining
- COMM 4260 Communication and Conflict

Take **one or two** of the following Elective courses:

- COMM 3271 Communication and Diversity
- COMM 4240 Organizational Communication
- COMM 4282 Environmental Communication

## **Nonprofit Management Certificate**

#### Introduction

Please click here to see School of Public Affairs information.

The undergraduate Certificate in Nonprofit Management is designed to appeal to students with a background in any major, or non-degree students, who are interested in working in the nonprofit sector. Completion of the coursework requirements of the certificate and associated extracurricular field experiences allow the student to earn the additional credential of Certified Nonprofit Professional pursuant to standards and competencies set by the National Leadership Alliance.

The certificate is designed to allow students to demonstrate to potential employers that they have the knowledge and skills necessary to succeed in the nonprofit workplace. Competencies covered by the certificate include foundations and management of the nonprofit sector, cultural competence and diversity, and financial resource development, among others. In addition,

students have the opportunity to gain real-world experience and connections through nonprofit internships and field experiences.

Additional information about the undergraduate Certificate in Nonprofit Management may be obtained by contacting baps@ucdenver.edu.

#### **Program Delivery**

This is an online program.

#### **Declaring This Certificate**

Please contact BAPS@ucdenver.edu.

#### **General Requirements**

Click here for information about Academic Policies

#### **Program Requirements**

- 1. An undergraduate certificate in Nonprofit Management requires 18 credit hours of coursework.
- 2. All credit hours for the certificate must be completed at CU Denver. Transfer credits are not accepted.
- 3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the certificate.

Take all of the following required courses:

- PUAD 3003 Introduction to Nonprofit Organizations
- PUAD 3004 Managing Nonprofit Organizations

Choose **three** from the following list Nonprofit elective courses:

- PUAD 3005 Collaboration Across Sectors
- PUAD 3110 Seminar in Nonprofit Management
- PUAD 4140 Nonprofit Financial Management
- PUAD 4160 Nonprofit Boards and Executive Leadership
- PUAD 4020 Social Entrepreneurship

The following activities are required in addition to the above coursework courses:

- Attend the Alliance Management Institute (Conference)
  - Through SPA's partnerships with foundations, students may apply for funding to mitigate the costs of attending the conference.
- Contact <u>BAPS@ucdenver.edu</u> for additional requirements for certificate completion

The successful completion of all Nonprofit Management coursework in additional to the extracurricular activities stated above are required in order to earn the Certified Nonprofit Professional designation.

## Public, Non-Profit and Community Leadership Undergraduate Certificate

#### Introduction

Please click here to see Political Science department information.

The CU Denver Political Science Department's Public, Non-Profit and Community Leadership Certificate engages students in a focused curriculum in the local public leadership, and in the community organizing and development field, including field placements in internships with local community partners. The certificate is tailored to meet the needs of individuals in public and non-profit positions that require development of their leadership competencies and for individuals in informal community leadership positions who want to build their knowledge, skills, and effectiveness.

The program curriculum is anchored around the study and practice of local civic engagement, especially in traditionally marginalized communities. Students will be connected to meaningful work and networking opportunities in local government or in community settings, through community-based coursework, professional internships and service-learning opportunities. The certificate program provides critical education and effective skills-based training for students seeking careers in local government, in non-profit organizations, or in community organizing and development work. Students will be prepared to become change agents in their communities, while developing possible career paths in community-based advocacy/service organizations, public agencies, or international development work.

The certificate is open to non-degree seeking students (with or without an undergraduate degree) as well as students formally pursuing an undergraduate degree at CU Denver. The Certificate can be earned as a stand-alone University certificate, or it can be applied to a current or future degree program. Non-degree seeking students who successfully complete the certificate program would be allowed to transfer in the credits received in the certificate program to complete the Bachelor's Degree in Political Science.

The certificate can be earned either through our traditional on-campus courses, or entirely through classes offered in a weekend-intensive format in our New Directions program. Students may take classes in either format desired.

## **Admissions and Declaring This Certificate**

Any current or potential student wishing to declare this certificate should schedule a certificate advising appointment with either the Director of the New Directions program or with the Departmental Undergraduate Director, in order to register their intent to pursue the Public, Non-Profit and Community Leadership Certificate and to develop a curriculum plan.

## **Certificate Requirements:**

- 1. Must complete 15 credits in PSCI coursework.
- 2. 6 credits must be upper division level
- 3. All credits must be taken in residence at CU Denver. No transfer credits may apply.
- 4. A minimum GPA of 2.0 or better is required for all PSCI courses taken at CU Denver.
- 5. A minimum grade of C is required for all PSCI courses applied toward the certificate

## **Curriculum and Credit Requirements:**

Undergraduate Credit Requirement: the undergraduate certificate requires five "public and community leadership" courses (15 credits), which must include PSCI 4808 (Community Organizing and Development) and an appropriate field study course (typical courses are an academic internship or PSCI 3914, The Urban Citizen).

Take the following **required** Public and Community Leadership course:

PSCI 4808 - Strategies of Peacebuilding

Take **one** of the following field placement courses:

- PSCI 3914 The Urban Citizen
- PSCI 4944 CU in the City
- PSCI 3939 Internship

Take 9 semester hours of elective Public and Community Leadership courses:

- PSCI 3035 Political Movements: Race and Gender
- PSCI 3064 Power and Empowerment in the United States

- PSCI 4025 Local Governance and Globalization
- PSCI 4074 Urban Politics
- PSCI 4075 Gentrification and Social Equity
- PSCI 4084 Local Government and Administration
- PSCI 4124 Denver Politics
- PSCI 4206 Social Movements, Democracy and Global Politics
- PSCI 4207 Theories of Social and Political Change
- PSCI 4248 Gender, Globalization and Development
- PSCI 4265 Social Justice And Globalization
- PSCI 4274 Conflict Resolution and Public Consent Building
- PSCI 4414 Non-Profits and Social Change
- PSCI 5548 Labor Law and Collective Bargaining
- PSCI 5424 The Social Economy and Sustainable Development
- PSCI 5434 The Cooperative Movement: Politics and Policy
- PSCI 4535 Labor and Working Class Politics
- PSCI 4555 International Women's Resistance
- PSCI 4002 Topics in Political Science (with advisor approval)
- PSCI 4840 Independent Study: PSCI (with advisor approval)

# Risk Management and Insurance Certificate

## Introduction

The Business Schools undergraduate certificates are primarily intended for students currently pursuing a degree in any undergraduate discipline that want to expand their business knowledge to give themselves a leg up when they enter the workforce. However, they can also be taken by students with only a high school diploma.

Students can pursue one of our undergraduate certificates, even if they are not CU Denver students. Credit earned as a part of the certificate DOES count towards your undergraduate degree, should you choose to pursue a degree here.

Broaden your knowledge of Risk Management and Insurance (RMI) by completing a one-year Certificate in RMI Studies from the University of Colorado Denver. By completing three semester-long RMI courses, all available online, and meeting prior finance course requirements, you will be on your way to enhancing your personal knowledge and providing your employer with RMI awareness and professional skills.

## **Program Delivery**

This is an on-campus program.

# **Declaring This Certificate**

See the Risk Management and Insurance Certificate page for more information.

## **Certificate Requirements**

Take **all** of the following required courses:

- RISK 4809 Property & Casualty Insurance
- RISK 4909 Corporate Risk Management
- RISK 3809 Introduction to Risk Management

# Scientific Foundations of Technical Innovation Certificate

## Introduction

Please click here to see Physics department information.

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects-one for a client and one for the student's own pursuits-are combined with a series of six short courses to provide both context and substance for gaining the knowledge needed to create technical prototypes.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

## **Declaring This Certificate**

 Entry into the certificate program requires prior completion of two semesters of calculusbased physics and two semesters of calculus or permission of the certificate advisor.

## **General Requirements**

Click here for information about Academic Policies.

## **Certificate Requirements**

- 1. A minimum of 12 credits (may be interdisciplinary).
- 2. A minimum of 6 credits must be taken at the upper division level.
- 3. All courses are expected to be taken in residency at CU Denver. No transfer courses are allowed.
- 4. A minimum GPA of 2.0 with no course below a C.

Take **all** of the following Scientific Foundations of Technical Innovation courses:

- PHYS 4850 Physics for Design and Innovation I
- PHYS 4852 Physics for Design and Innovation II

Take **six** 1 semester-hour short courses out of the list of Topics in Scientific Instrumentation; the specific sequence must be approved by the certificate advisor.

PHYS 4400 - Scientific Instrumentation

# **Sociology of Health and Medicine Certificate**

## Introduction

Please click here to see Sociology department information.

Enhancing the health and quality of life for individuals and communities are central goals to societies the world over. Medical sociology is a subfield devoted to the study of population health, health care systems and policy, and the social dimensions of illness and healing. Medical sociologists study the causes of health inequalities, social constructions of health and illness, origins of medical authority, doctor-patient relationships, community influences on health, and the social forces that affect policy. The Sociology Department's Sociology of Health and Medicine Certificate provides training in the core research methodologies and theories of medical sociology, examining individual experience, institutional structures, laws and policies that affect health, and broader systems of inequality that lead to unequal rates of illness and access to care. This certificate provides depth of training in these areas and is ideal for students

interested in graduate-level study and social research on health and medicine as well as those interested in careers in public health, health care services, and non-profit organizations.

Upon successful completion of the certificate, students will:

- Articulate the central explanations for historical shifts in disease, including neighborhood effects and behaviors that may increase the risk of disease and mortality
- Identify social factors that contribute to population health inequalities, including race, ethnicity, gender, class, immigration status, sexuality, or disability
- Understand the social influences that shape medical authority, knowledge, and patient experiences with illness and treatment
- Be able to use different methodologies to understand the social aspects of health and medicine
- Know how to conduct original research, analyze policy, and evaluate community needs for organizations devoted to improving population health

# **Program Delivery**

This is an on-campus or online program.

# **Declaring This Certificate**

- Eligibility: While housed in Sociology, the study of health and medical issues is in fact a
  multidisciplinary field that draws from diverse liberal arts fields, including Anthropology,
  Communications, Psychology, and History, among others. Thus, CU Denver
  undergraduate students in any discipline can enroll in the certificate program. This
  certificate is also available to non-degree-seeking students who already have earned a
  BA or BS degree, either at CU Denver or elsewhere.
- Application procedures: Students are encouraged to apply for the Sociology of Health
  and Medicine Certificate at any point in their undergraduate studies. To apply, students
  should print and attach a completed the Sociology of Health and Medicine Certificate
  Application to an unofficial transcript. These documents should be submitted to the
  Sociology of Health and Medicine Certificate Administrator. Once the application is
  approved, students will be contacted about their acceptance into the program.

## **General Requirements**

Click here for information about Academic Policies.

# **Program Requirements**

- 1. A minimum of 15 hours is required for this certificate.
- 2. To obtain the certificate, students must achieve a 2.0 GPA average in all approved health and medicine-related courses.

- Credits applied to the certificate must be earned at CU Denver. (If students have completed a course required for the certificate elsewhere, they may add the needed credits in the form of additional elective credits drawn from the approved elective courses.)
- 4. The certificate will be awarded when the student graduates with the bachelor's degree.

Take the following **required** course:

SOCY 3440 - Medical Sociology

Take **two** of the following courses:

- SOCY 3115 Quantitative Methods & Analysis
- SOCY 3119 Qualitative Methods
- OR

<u>2 approved methods courses</u> in the student's major discipline, one on quantitative methods and one on qualitative methods (e.g. PSYC 2090, PSYC 3090, PSCI 3011, PHIL 3440, PHIL 2441, ECON 3801, ECON 3811, GEOG 2080, GEOG 4080). Questions about eligible methods course substitutions should be directed to the Sociology of Health & Medicine Certificate Administrator.

Take **two** of the following approved elective courses:

- SOCY 3010 Sociology of Human Sexuality
- SOCY 3040 Drugs, Alcohol & Society
- SOCY 3570 Death & Dying: Social & Medical Perspectives
- SOCY 4050 Health Disparities
- SOCY 4110 Sociology of Health Care
- SOCY 4270 Social Meanings of Reproduction
- SOCY 4290 Aging, Society and Social Policy
- ANTH 3045 Cannabis Culture
- ANTH 4010 Medical Anthropology: Global Health
- ANTH 4290 Anthropology and Public Health
- ANTH 4600 Medical Anthropology
- COMM 4500 Health Communication
- COMM 4525 Health Communication and Community
- COMM 4550 Rhetorics of Medicine & Health
- COMM 4558 Digital Health Narratives
- ECON 4660 Health Economics.
- ETST 3002 Ethnicity, Health and Social Justice
- GEOG 3501 Geography of Health
- GEOG 4235 GIS Applications in the Health Sciences
- HEHM 3100 Introduction to Health Humanities

- HIST 3606 Science, Technology, and Society in the Modern World
- HIST 4345 Gender, Science, and Medicine: 1600 to the Present
- PHIL 3550 Philosophy of Death and Dying
- PHIL 4242 Bioethics
- PSCI 4330 U.S. Health Policy
- PSYC 3262 Health Psychology
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3612 Domestic Abuse
- PSYC 3822 Aging, Brain and Behavior
- WGST 4345 Gender, Science, and Medicine: 1600 to the Present

# Spanish for International Business Certificate

## Introduction

Please click here to see Modern Languages department information.

The Department of Modern Languages offers an undergraduate Certificate in Spanish for International Business for students seeking an academic credential showing that they are prepared to meet the challenges of doing business in the Spanish-speaking world.

This certificate is available to all students across the University, as well as non-degree-seeking business professionals seeking to increase their skill set and value in the international market.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with the Chemistry advisor to confirm the best plans of study before finalizing them.

# **Program Delivery**

This is an on-campus program.

## **Declaring This Certificate**

 You must complete the Application for the Certificate (available on the Department webpage). This requires an unofficial transcript from CU Denver showing that you are a current undergraduate student, or a copy of former transcripts indicating an undergraduate degree has been previously granted. This must be completed prior to completing the coursework (and applying for graduation, if you are a degree-seeking student) for the certificate. To begin coursework, non-degree-seeking students will need to apply to the University
as a non-degree seeking student. Once accepted, you will be able to enroll in all of the
appropriate classes. The following is a link to that
information: http://www.ucdenver.edu/admissions/non-degree/Pages/ default.aspx.

## **General Requirements**

Click here for information about Academic Policies

## **Program Requirements**

- 1. A minimum grade of C or higher must be earned in each of the four courses required for the certificate.
- 2. A minimum GPA of 3.0 is required for all courses applying to the certificate.
- 3. All credits for the certificate must be earned at the University of Colorado Denver.

Take all of the following courses:

- SPAN 3700 Spanish for International Business I
- SPAN 3710 Spanish for International Business II

Take **two** of the following courses:

- SPAN 3213 Contemporary Latin American Culture and Institutions
- SPAN 3223 Contemporary Spanish Culture and Institutions
- SPAN 3782 Introduction to Translation I
- SPAN 3792 Introduction to Translation II
- Variable topics courses (e.g. SPAN 2130 or SPAN 3225) whose specific topic is applicable to Spanish for International Business can be applied to the certificate with advisor approval.

Note: SPAN 2120 (or equivalent proficiency) is a pre-requisite for all SPAN courses numbered 3xxx.

# Strategic Communication Undergraduate Certificate

## Introduction

Please click here to see Communication department information.

In keeping with worldwide transformations in information technology, media production, image consumption, message distribution, and norms of citizen engagement, the Department of Communication offers an Undergraduate Certificate in Strategic Communication (CSC).

Beginning in the Fall of 2018, the CSC requires students to complete 12 semester hours (four courses) in a structured manner.

These requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

## **Program Delivery**

This is an on-campus or online program.

# **Declaring This Certificate**

- Students should apply for the undergraduate certificate in Strategic Communication *after* the completion of the required courses.
- To apply, students must complete the certificate application (see the Communication Department website) and return it to Dr. Hamilton Bean in room 3010 ofthe Student Commons Building, or mail to Department of Communication; P.O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student after final grades are posted for the semester.
- Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions.

Additional information about the undergraduate certificate in Strategic Communication may be obtained from Dr. Hamilton Bean, 303-315-1909, or Hamilton.Bean@ucdenver.edu.

## **General Requirements**

Click here for information about Academic Policies.

# **Certificate Requirements**

1. The Undergraduate Certificate in Strategic Communication requires 12 semester hours (four courses).

- 2. A grade of B must be earned in each course completed as part of the certificate (a grade of B- is not acceptable).
- 3. A minimum of 6 credits taken at the upper division level.
- 4. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

## **Required Courses**

To build on a shared set of foundational theories, norms, and skills, all CSC-seeking students take two required courses in Communication:

- COMM 2051 Introduction to Strategic Communication
- COMM 2071 Media Writing Skills

### **Electives**

CSC-seeking students will then burnish their production skills by taking an elective from chosen areas of content expertise. Phase Two therefore includes taking at least one elective chosen from the following courses:

- COMM 2081 New Media Production and Management
- COMM 3939 Internship
- COMM 4665 Principles of Advertising
- FINE 2155 Introduction to Digital Photography
- FINE 2405 Introduction to Digital Design
- FINE 2415 Typography Studio
- FINE 3414 Motion Design I
- Another elective with a strategic communication focus may be approved for the CSC in consultation with Dr. Hamilton Bean or a Department of Communication advisor.

### **Capstone Project**

CSC-seeking students will complete their certificate by undertaking a semester-long capstone project conducted in conjunction with a community partner. This requirement will be satisfied by taking:

- COMM 4051 Advanced Strategic Communication
- FINE 4400 Design Studio III

# Sustainable Urban Agriculture Undergraduate Certificate

## Introduction

Please click here to see Geography and Environmental Sciences department information.

Certificate Advisor: Amanda Weaver Email: amanda.weaver@ucdenver.edu

The goal of the certificate program is to provide GES students advanced training in sustainable urban agriculture through the integration of university classroom study and field-based practicum conducted at the department's field research station. Requirements for the certificate are therefore divided between on-campus courses and field courses.

Upon successful completion of the certificate, students will:

- Have knowledge of the history of urban farming
- Understand the modern agro-food system
- Participate in sustainable urban agricultural practices

# **Program Delivery**

This is both an on-campus and field-based program.

# **Declaring This Certificate**

Please see the certificate advisor.

# **General Requirements**

Click here for information about Academic Policies.

## **Certificate Requirements**

- 1. Students must earn a 3.0 GPA average with no course below a "C" in any approved courses for the certificate.
- certificate will be awarded when the student graduates with the bachelor's degree.
- 3. obtain the certificate, students must complete two core courses and four elective courses, totaling 18 hours.
- 4. core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the certificate advisor.
- 5. Because a certificate is a CU Denver certification of a students' specialized knowledge in an advanced subject matter, all courses in a certificate program are expected to be

taken in residency at CU Denver. Only in rare circumstances will exceptions be made regarding this policy. Courses taken within the Sustainable Urban Agriculture Certificate Program may be used towards one other degree requirement. Any changes to the standard curriculum program must be approved in writing by the certificate advisor. Please pay close attention to prerequisites for specific courses.

Take **all** of the following courses (6 credit hours):

- GEOG 4450 Urban Food and Agriculture: Perspectives and Research
- GEOG 4460 Sustainable Urban Agriculture Field Study I

Take **four** of the following elective courses (12 credit hours):

- GEOG 4470 Sustainable Urban Agriculture Field Study II
- GEOG 4060 Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4085 GIS Applications for the Urban Environment
- GEOG 4265 Sustainability in Resources Management
- GEOG 4335 Contemporary Environmental Issues
- GEOG 4640 Urban Geography: Denver and the U.S.
- GEOG 4680 Urban Sustainability: Perspectives and Practice
- <u>GEOG 3939 Internship</u> (a sustainable agriculture internship with a local food/urban agriculture community organization)

# **Victims and Victim Studies Certificate**

## Introduction

Please click here to see School of Public Affairs information.

The undergraduate certificate in Victims and Victim Studies provides a detailed, comprehensive, and advanced education in fields related to victims and victim services. The CJVS program is designed to meet the needs of students who wish to work fields related to victim services or who are currently working in this field and would like to enrich their professional development.

The CJVS program applies a multi-faceted approach to higher education that:

- 1. Enhances analytical thinking and inclusive, relevant approaches to learning and the development of professional skills; and
- 2. Focuses on specific, yet comprehensive, substantive areas of victims and victim services that students can apply to their current or future careers in the field.

Students completing the CJVS certificate program will have the knowledge and skills to evaluate, manage, and respond to a variety of situations and issues that professionals in fields

related to victims and victim services face. Specifically, they will possess technical, analytic, substantive, and ethical proficiencies that will facilitate their professional interactions and development. They will understand the different environments and contexts in which victim advocates and other professionals in this field and related ones carry out their responsibilities.

# **Program Delivery**

• This is an on-campus and online program.

# **Declaring This Certificate**

Please contact spa.advising@ucdenver.edu

# **General Requirements**

Click here for information about Academic Policies

## **Program Requirements**

- 1. The CJVS Certificate will require 18 credit hours (6 courses).
- 2. No more than 6 credit hours of transfer coursework may apply to the CJVS certificate.
- 3. A minimum grade of 'C' must be earned in each undergraduate course applied to satisfy the certificate.

### **Program Core Courses:**

- CRJU 1000 Criminology and Criminal Justice: An Overview
- CRJU 2041 Criminological Theory
- CRJU 4170 Victimology
- CRJU 3285 Trauma in the Criminal Justice System

## **Program Electives:**

There are two elective categories, Violence Focus and Professional Setting. The Violence Focus electives allows the student to learn about an area of violence in a more in-depth capacity. The Professional Setting elective allows the student to hone skills related to service delivery.

### Violence Focus (students take one of the following):

CRJU 3250 - Violence in Society

- <u>CRJU 3280 Trauma Among Correctional Populations</u>
- CRJU 4140 Domestic Violence and Crime
- ETST 2115 Genocide in the 21st Century: Darfur and Beyond
- PSCI 4807 Political Violence
- SOCY 4460 Hate Groups and Group Violence
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable

## **Professional Setting** (students take one of the following):

- CRJU 4939 Internship
- HDFR 4090 Helping Profession Skills in HDFR
- PUAD 4009 Human Service Organizations
- PUAD 3003 Introduction to Nonprofit Organizations
- Other electives not already listed may be considered but the student must receive approval from the academic advisor prior to enrollment

Students must adhere to departmental pre-requisites, if applicable

## Post Baccalaureate Certificate

# Allied Health Sciences Post Baccalaureate Certificate

## Introduction

Please click here to see Integrative Biology Department information.

The health field offers job opportunities and rewarding careers. It is one of the fastest growing industries in the US and the Bureau of Labor Statistics has projected increasing demand and labor shortages for at least the next ten years. The CU Denver Post-Baccalaureate Allied Health Sciences Certificate was developed as an opportunity for the many students who already have a bachelor's degree and want to shift their career into this large and fast growing industry to improve employment opportunities and potential earnings.

In order to improve their position among many highly qualified applicants to health professions programs and for health science related jobs, we anticipate that many students will need to continue their higher education. The College of Liberal Arts and Sciences has developed a certificate that provides a broad foundation in STEM (Biology, Chemistry and Physics) and advanced health-oriented coursework that is essential for both graduate and professional programs and the needs of the health industry.

Students who have already completed an undergraduate degree but need additional undergraduate pre-requisite courses to apply to health professions programs (including medicine, pharmacy, dentistry, nursing, lab technicians, health research jobs and more) can benefit from the CU Denver Post Baccalaureate Allied Health Sciences Certificate. CU Denver is well-known for preparing students for applications to health careers and acceptance to health professions programs. This certificate program offers high quality, rigorous preparatory classes and exceptional health careers advising including assistance with letters of evaluation, seminars on application processes, and assistance finding clinical, research, and community service experiences to enhance applications.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their program advisor to confirm the best plans of study before finalizing them. Exceptions and substitutions must be approved by the Director of the certificate.

# **Program Delivery**

This is an on-campus program.

## **Declaring This Certificate**

When applying to CU Denver, students should select the Undergraduate Degree-Seeking option. After indicating that the student has or will have completed a bachelor's degree, the applicant should be directed to a screen that allows selection into the Allied Health Sciences Certificate. After admission, students should meet with a Health Professions Advisor (NC 3002) to work collaboratively to develop a course plan that best meets their academic and career goals.

## **Contact details**

Trishia Vasquez

trishia.vasquez@ucdenver.edu

303.315.7541

Health Professions Advising, NC 3013 C

## **General Requirements**

Click here for information about Academic Policies

# **Certificate Requirements**

- 1. Students must complete a total of 32 credit hours with a minimum of 15 credit hours at CU Denver.
- 2. Students must complete a minimum of 12 upper-division (3000-level and above) credit hours
- 3. Students must achieve a minimum GPA of 2.0 for all courses applied to certificate requirements.
- 4. Students must complete all courses taken at CU Denver and all transfer courses applying to certificate requirements with a minimum grade of C- (1.7). Students cannot complete certificate requirements as pass/fail.
- The 15 credit hours of course work listed below must be completed at CU Denver. Other
  coursework (up to 17 credit hours) used as pre-requisites or other courses applicable to
  the certificate program, may be taken at CU Denver or transferred from another
  university after evaluation and approval.

## **Program Restrictions, Allowances and Recommendations**

- 1. All upper division level courses used to satisfy the requirements for the Certificate must be completed at CU Denver.
- Students may use prior/transfer coursework to fulfill requirements and prerequisites, as long as departmental faculty evaluate the coursework and decide they are directly equivalent to the courses at CU Denver.
- 3. All courses used to satisfy the requirements for the Certificate must be completed within a five year period.
- 4. Individual courses used to earn the Certificate may carry other prerequisites that must be met before enrolling.
- 5. Students must complete all of the following courses or demonstrate equivalent credit through transfer coursework taken within the last 10 years.
- 6. A prerequisite for any course must be transferred or completed at CU Denver before enrolling in that course.
- 7. Graduate level courses can substitute for their undergraduate counterparts with approval.
- 8. Specific requirements may exist pertaining to financial aid.
- 9. Students must already have earned a Bachelor's degree to enroll for the certificate.
- 10. Students currently enrolled in Bachelor's, Master's or Doctoral degree programs are not eligible for the certificate.

CU Denver Certificate Coursework:

Complete 15 credits from the following list:

- BIOL 3225 Human Physiology
- BIOL 3244 Human Anatomy
- BIOL 3611 General Cell Biology

- BIOL 3654 General Microbiology
- BIOL 3763 Biostatistics
- BIOL 3832 General Genetics
- BIOL 4464 Exercise Physiology
- BIOL 4475 Mechanisms of Human Pathology
- BIOL 3124 Introduction to Molecular Biology
- BIOL 3521 Vertebrate Biology
- BIOL 3525 Parasitology
- BIOL 3612 Cell Biology Laboratory
- BIOL 3621 Introduction to Immunology
- BIOL 3804 Developmental Biology
- BIOL 3939 Internship
- BIOL 4051 Advanced Topics In Microbiology
- BIOL 4064 Cell Biology of Disease
- BIOL 4125 Molecular Biology Laboratory
- BIOL 4126 Molecular Genetics
- BIOL 4134 Human Genetics
- BIOL 4144 Medical Microbiology
- BIOL 4165 Neurobiology
- BIOL 4550 Cell Signaling
- BIOL 4622 Topics in Immunology
- BIOL 4634 Biology of Cancer
- BIOL 4644 Advanced Human Anatomy Laboratory
- BIOL 4674 Endocrinology
- CHEM 2300 Nutritional Chemistry
- CHEM 3810 Biochemistry
- CHEM 4810 General Biochemistry I
- CHEM 4820 General Biochemistry II
- COMM 2500 Introduction to Health Communication
- HEHM 3100 Introduction to Health Humanities
- HIST 4345 Gender, Science, and Medicine: 1600 to the Present
- LATN 3000 Medical Terminology
- PHIL 4242 Bioethics
- PBHL 1001 Race, Gender, Class, & Health
- PBHL 2001 Introduction To Public Health
- PBHL 3001 Introduction to Epidemiology
- PBHL 3031 Health, Human Biology and Behavior
- PSYC 2205 Lifespan Developmental Psychology for Health Majors
- PSYC 3205 Human Development I: Child Psychology
- PSYC 3215 Human Development II: Adolescence and Adulthood
- PSYC 3305 Abnormal Psychology
- PSYC 3262 Health Psychology
- PSYC 3265 Drugs, Brain and Behavior
- PSYC 3810 Neuropsychology
- SOCY 3440 Medical Sociology
- SOCY 4110 Sociology of Health Care

## **Other Programs**

# **CU Denver Core Curriculum**

The following represents the CU Denver Core curriculum as approved by the faculty on the Core Curriculum Oversight Committee (CCOC). The Core curriculum is a total of 34-38 semester hours.

## **English**

Students must earn a minimum grade of C- or (1.7) in each course to satisfy this core curriculum requirement.

Both courses are required.

- ENGL 1020 Core Composition I
- ENGL 2030 Core Composition II

## **Mathematics**

Students must earn a minimum grade of C- (1.7) to satisfy this core curriculum requirement.

One course is required.

- MATH 1010 Mathematics for the Liberal Arts
- MATH 1060 Finite Mathematics
- MATH 1070 College Algebra for Business
- MATH 1109 Stretch College Algebra-Part 2
- MATH 1110 College Algebra
- MATH 1120 College Trigonometry
- MATH 1130 Precalculus Mathematics
- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 2830 Introductory Statistics

## **Arts**

One course is required.

- ENGL 2156 Introduction to Creative Writing
- FINE 1000 Fostering Creativity
- FINE 1001 Introduction to Art
- FINE 1450 Visual Culture: Ways of Seeing
- FITV 1001 Fundamentals of Film and Television
- FITV 1005 Introduction to Theatre & Arts in the Community

- FITV 1115 Horror in Western Culture and Cinema
- LDAR 1015 Engaging Landscapes for Wicked Change
- PMUS 1001 Music Appreciation

## **Humanities**

One course is required.

- CHIN 1000 China and the Chinese
- ENGL 1601 Storytelling: Literature, Film, and Television
- ENGL 2600 Literary Classics
- ETST 2155 African American History
- FINE 2600 Art History Survey I (beginning Spring 2017)
- FINE 2610 Art History Survey II (beginning Spring 2017)
- FREN 1000 Introduction to Cultures of the French- Speaking World
- FREN 2003 French Language III
- FREN 2004 French Language 4: Introduction to Advanced Studies
- GRMN 1000 Germany and the Germans
- HIST 1361 U.S. History to 1876
- HIST 1362 U.S. History Since 1876
- HIST 1381 Paths to Present
- HIST 1400 Controversies in History
- LCRT 2000 Rebels, Villains, & Superheroes: How Children's Literature Shapes Our Identities
- PHIL 1012 Introduction to Philosophy: Relationship of the Individual to the World
- PHIL 1020 Introduction to Ethical Reasoning
- PHIL 2441 Logic, Language and Scientific Reasoning
- RLST 1610 Introduction to Religious Studies
- RLST 2660 World Religions
- SPAN 1000 Introduction to Cultures of the Spanish Speaking World

## **Behavioral Sciences**

One course is required.

- ANTH 1302 Introduction to Archaeology
- ANTH 2102 Culture and the Human Experience
- COMM 1011 Fundamentals of Communication
- COMM 1021 Introduction To Media Studies
- HDFR 2080 Sex, Human Development and Family Systems
- LING 2000 Foundations of Linguistics
- PSYC 1000 Introduction to Psychology I
- PSYC 1005 Introduction to Psychology II
- SPSY 2200 Child and Adolescent Mental Health in Schools and Communities

## **Social Sciences**

One course is required.

- CRJU 1000 Criminology and Criminal Justice: An Overview
- ECON 2012 Principles of Economics: Macroeconomics
- ECON 2022 Principles of Economics: Microeconomics
- EDFN 1000 Equality, Rights & Education
- ENVS 1342 Environment, Society and Sustainability
- ETST 2000 Introduction to Ethnic Studies
- GEOG 1102 World Regions Global Context
- GEOG 1602 Urban Studies and Planning
- GEOG 2202 Hazards to Disasters: Perception and Management
- HDFR 1080 Lifespan Issues in Family Violence
- HDFR 2200 Love, Family and Human Development
- INTE 2500 Digital Media and Learning
- PBHL 1001 Race, Gender, Class, & Health
- PBHL 2001 Introduction To Public Health
- PSCI 1001 Introduction to Political Science: The Quest for Freedom and Justice
- PSCI 1101 American Political System
- PUAD 1001 Introduction to Leadership and Public Service
- SJUS 2000 Foundations in Social Justice
- SOCY 1001 Introduction to Sociology
- SOCY 2462 Introduction to Social Psychology

## **Natural and Physical Sciences, Mathematics**

Two courses are required. One of the two required courses must have a laboratory.

#### Science Courses with Labs

- ANTH 1303 Introduction to Biological Anthropology
- BIOL 1550 Basic Biology: Ecology and the Diversity of Life
- BIOL 1560 Basic Biology: From Cells to Organisms
- CHEM 1474 Core Chemistry: Chemistry for Everyday
- CHEM 1494 Forensic Science
- PHYS 1052 General Astronomy I

### **Science Courses with Co-requisite Labs**

- BIOL 2051 General Biology I and
- BIOL 2071 General Biology Laboratory I
- BIOL 2061 General Biology II and
- BIOL 2081 General Biology Laboratory II
- CHEM 2031 General Chemistry I and
- CHEM 2038 General Chemistry Laboratory I
- CHEM 2061 General Chemistry II and
- CHEM 2068 General Chemistry Laboratory II
- ENVS 1044 Introduction to Environmental Sciences and

- ENVS 1045 Introduction to Environmental Sciences Laboratory
- GEOL 1073 Physical Geology: Surface Processes and
- GEOL 1074 Physical Geology: Surface Processes Laboratory
- GEOL 1083 Physical Geology: Internal Processes and
- GEOL 1084 Physical Geology: Internal Processes Laboratory
- PHYS 2010 College Physics I and
- PHYS 2030 College Physics Lab I
- PHYS 2311 General Physics I: Calculus-Based and
- PHYS 2321 General Physics Lab I
- PHYS 2020 College Physics II and
- PHYS 2040 College Physics Lab II
- PHYS 2331 General Physics II: Calculus-Based and
- PHYS 2341 General Physics Lab II

#### Science Courses without Labs and Mathematics

- CSCI 1350 Introduction to Computing in Society
- GEOG 1202 Introduction to Physical Geography
- PHYS 1100 Foundations of Physics
- PSYC 2220 Biological Basis of Behavior
- MATH A mathematics course taken to fulfill the Biological and Physical Sciences,
   Mathematics area must be from the approved Mathematics list, excluding the course taken to fulfill the Mathematics requirement.
- MATH 1010 Mathematics for the Liberal Arts
- MATH 1070 College Algebra for Business
- MATH 1080 Calculus for Social Sciences and Business
- MATH 1110 College Algebra
- MATH 1120 College Trigonometry
- MATH 1130 Precalculus Mathematics
- MATH 1401 Calculus I
- MATH 2411 Calculus II
- MATH 2421 Calculus III
- MATH 2830 Introductory Statistics

## **International Perspectives**

One course is required.

A preapproved study abroad experience may satisfy this requirement.

- ANTH 3000 Globalization, Migration and Transnationalism
- CLDE 1000 Language, Identity, & Power: International Perspectives
- ENGL 3798 International Perspectives in Literature and Film
- ENGR 3600 International Dimensions of Technology and Culture
- ETST 3110 Indigenous Studies
- ETST 3272 Global Media
- FINE 3775 Asian Art, 1850 to Now
- FITV 1120 Contemporary World Cinema
- FITV 3550 World Theatre
- FREN 3200 The Francophone World in the Post-Colonial Era
- GEOG 3412 Globalization and Regional Development
- GRMN 3200 Current German Society and Culture
- HDFR 1000 Global Human Development & Learning
- HDFR 3250 Families in Global Perspectives
- HIST 3121 The World at War, 1914-1945
- HIST 4032 Globalization in World History Since 1945
- INTB 3000 Global Perspectives
- INTB 4200 International Marketing
- INTS 2020 Foundations of International Studies
- MKTG 4200 International Marketing
- PBHL 2052 Global Demography and Health
- PHIL 3410 Asian Philosophies and Religions
- PSCI 3022 Political Systems of the World
- PSCI 3042 Introduction to International Relations
- RLST 3120 Islamic Traditions
- SOCY 3720 Global Perspectives on Social Issues

## **Cultural Diversity**

One course is required.

Cultural diversity courses are taught at the upper division level.

- ANTH 3142 Cultural Diversity in the Modern World
- COMM 3271 Communication and Diversity
- ECON 3100 Economics of Race and Gender
- EDFN 3000 Undocumented Mexican Immigration
- EDFN 4000 Food Justice in City & Schools
- ENGL 3795 Race and Ethnicity in American Literature
- ENGR 3400 Technology and Culture
- ETST 3036 American Indian Cultural Images
- ETST 3704 Culture, Racism and Alienation
- FITV 3611 Drama of Diversity
- HDFR 3020 Black and Latino Children in Families and Schools
- HIST 3345 Immigration and Ethnicity in American History
- HIST 3349 Social Movements in 20th Century America
- LING 3100 Language in Society
- MGMT 4100 Leveraging Diversity and Inclusion in Business
- PHIL 3500 Ideology and Culture: Racism and Sexism
- PMUS 3100 US Music: Social & Political Impact

- PSCI 3034 Race, Gender, Law and Public Policy
- PSCI 3035 Political Movements: Race and Gender
- PSYC 4485 Psychology of Cultural Diversity
- RLST 4000 Religion and Cultural Diversity
- SOCY 3020 Race and Ethnicity in the U.S.
- WGST 3020 Gender, Sexuality and Race in American Popular Culture

## **Other Degree Requirements**

In addition to the CU Denver Core Curriculum requirements listed above, students must complete a major and fulfill all additional School/College requirements. More information on these requirements can be found in the Academic Catalog in the following locations:

- Programs
- CU Denver General Graduation Requirements
- School/College Specific Graduation Requirements
  - Business School
  - o College of Architecture and Planning
  - o College of Arts & Media
  - o College of Engineering, Design and Computing
  - College of Liberal Arts and Sciences
  - o School of Education and Human Development
  - School of Public Affairs