

- CS 202 Web Development
 - CS 310 Database Design & Implementation I
 - CS 330 Networking I
- Plus additional classes from the CIS major (section I or II) or any GIS class.

To earn a Bachelor of Arts degree with a major or minor in computer science or computer information systems, a student must earn a grade of “C” or better in all of the courses listed for the major or minor. A lesser grade in any of these courses must be replaced before the Bachelor of Arts degree will be granted. In addition, a “D” or “F” grade in any of these courses precludes taking subsequent courses for which the deficient course is a prerequisite.

ECONOMICS

JERRY E. POHLMAN, PH.D.

Mission and Goals

The Department of Business, Accounting, and Economics offers Bachelor of Arts degrees in Accounting, Public Administration, or Business Administration. Students selecting majors in Business Administration must choose a concentration in Economics, Finance, International Business or Management. Minors are available in Accounting, Economics, Business or Public Administration and an Associate of Arts Degree is offered in Business Administration. Students may combine majors, minors and emphases.

Consistent with Carroll Colleges, dual goals of vocation and enlightenment, the Department of Business, Accounting, and Economics also serves a dual mission. Students are provided a common body of knowledge necessary for entry into a business-related career. At the same time, the curriculum ensures that students receive a well-rounded liberal arts education. Value oriented discussions, including ethical dilemmas encountered in global business, are included in the curriculum.

The Public Administration major, which is a joint effort between the Business, Accounting and Economics Department and the Political Science Department, provides relevant courses in business and political science to prepare students for administrative careers in local, state and federal governments. In addition, students are prepared to pursue graduate work in public administration.

The Business Administration major prepares students for careers in marketing, finance, management or economics. Students completing the Accounting major are prepared for professional certification exams. They are also provided with skills necessary to perform in an accounting related career. Through the liberal arts education, students develop valuable communication and reasoning skills. Both the Business Administration major and the Accounting major are designed and evaluated to ensure students are prepared for entry directly into the workforce or for acceptance into graduate school.

Minor in Economics

Minor Program Requirements

- Twenty-one semester credits of economics courses, including:
 - EC 201-202 Principles of Economics
- And 5 upper-division economics courses, including:
 - BA 409 Operations Research

EDUCATION: TEACHER

GLORIA J. LAMBERTZ, ED.D.
 JONATHAN C. MATTHEWS, PH.D.
 ROBERT J. STANSBERRY, ED.D.
 RODERICK M. THRONSON, ED.D.
 LYNETTE E. ZUROFF, ED.D.

Mission

The teacher education unit’s mission is to prepare students for lifelong learning, developing future educators’ intellect, imagination, self-confidence, and motivation, while preparing them for the teaching profession. Students investigate, reflect, analyze, and judge reality and truth through inquiry and discussion. Committed to educating each student as a total human being, the teacher education unit helps students to receive, respond to, organize, and characterize values. Specifically, students develop values about teaching, society, health behaviors, moral issues, education, and political influences. We ask our students to think boldly about the opportunities and responsibilities presented to us by a rapidly changing world. Students within the department are encouraged to live Carroll College’s mission by participating in community service and by interacting with children and adults from diverse cultural, religious, economic, and intellectual backgrounds.

The teacher education unit advances this mission as it works within the conceptual framework of Carroll College’s teacher education unit. That framework is built upon a liberal arts education, structured by traditional educational philosophies, and embraced by an atmosphere of dignity, which values justice of all persons. Access the complete Teacher Education Conceptual Framework and the current Title II pass rates from Carroll College’s Education Homepage.

Goals and Objectives

The goal of Carroll College’s teacher education program is to assist students in developing teaching competencies in their chosen fields and help them become educational leaders capable of responding to their students’ individual needs. Teacher education graduates will demonstrate competence in the 10 INTASC standards, as well as an additional Montana standard. The following dispositions, skills, and knowledge are to be viewed in conjunction with specific goals and objectives established for the college and for each required professional education course.

DISPOSITIONS

1. Demonstrate an attitude of professionalism through
 - a. his/her behavior as a role model to students;
 - b. continuing self-development;
 - c. ethical behavior;
 - d. peer support;
 - e. contributions to the growth of the profession.
2. Maintain healthy student/teacher relationships.
3. Exhibit continued enthusiasm for teaching profession.
4. Have appropriate relationships with administrators, teachers, support personnel, parents, and other community members.
5. Be encouraged to participate in community service.
6. Project a positive self-image.
7. Appreciate the whole person by recognizing the uniqueness of each individual student.

SKILLS

1. Classroom management and coping
2. Classroom motivation and interaction
3. Planning and lesson design
4. Teaching strategies
5. Instructional decision making
6. Problem-solving inquiry
7. Student diagnosis

8. Media and technology resource
9. Effective peer group interaction
10. Effective listening, speaking, reading, writing, thinking, and viewing.

KNOWLEDGE

1. Content (subject matter)
2. Law and ethics
3. Referral systems
4. Instruction of the special child
5. Child development, sociology, learning theory, self-concepts, philosophies of education.
6. Comprehension, analysis, and evaluation of print and non-print information and messages.
7. Standard conventions of writing and speaking
8. Analysis of literature and fine arts.
9. Mathematics
10. Science
11. Social studies
12. Connecting learning with workforce and fulfillment of living

In addition to the above goals and objectives, each licensure area has goals and objectives.

Major in Elementary Education

In order to earn the Bachelor of Arts degree with a major in elementary education and obtain teaching licensure in grades K-8, a student must successfully complete the following:

I. Major and Professional Education Program Requirements

ED 102	Foundations of Education
ED 205	Classroom Management
ED 212	Teaching Mathematics in the Elementary School
ED 228	Children's Literature
ED/PSY 229	Educational Psychology
ED 245	Diversity Field Experience
ED 312	Elementary Science and Social Studies
ED 320	Art Education in the Elementary School
ED 323	Teaching the Communication Arts I
ED 324	Corrective and Remedial Reading
ED 325	Teaching the Communication Arts II
ED 329	Music Education in the Elementary School
ED 405	Education Seminar
ED 410	Student Teaching
ED 412	Measurement and Assessment in Teaching
HPE 109	Techniques of Basic Skills in Physical Education
HPE 314	Physical Education in the Elementary School
SPED 300	Introduction to Exceptional Children

Note: ED 403-404 is an alternative program to student teaching. It is possible to obtain an elementary education major from Carroll without teacher licensure. Students who choose this option need not complete ED 405 or ED 410.

II. Other Program Requirements

AN/SO 218	Introduction to Native American Studies
CS 103	Instructional Media and Technology
MA 201-202	Mathematics for Elementary Education
HPE 214	The School Health Program
PSY 227	Child Psychology
or PSY 105	General Psychology
and PSY 203	Developmental Psychology
One semester of earth science (EAS 201 or AS 102). Lab is required.	

One semester of life sciences (BI 101 or BI 102). Lab is required.
One semester of physical sciences (CH 111 or PHYS 103). Lab is required.

A United States history course (see index for page number)

A contemporary world culture course (see index for page number)

Notes:

1. All degree students should review requirements for graduation as described in this catalog.
2. Courses in economics, anthropology, and American national government are highly recommended.

III. Acceptance Into Teacher Education Program

All students in programs that lead to teacher licensure (elementary or secondary education) should review requirements for acceptance into this program. See page 48.

Secondary Education Requirements

To be licensed to teach in a secondary school in Montana, grades five through 12, a student must complete either a broadfield major or a major and a minor. Students interested in a broadfield major or a major and minor should contact not only individuals within the elected department, but must seek additional counsel from an advisor within the Department of Education: Health, Physical, and Teacher. They must be accepted into the teacher education program. See index for page number of the teacher education program.

I. Secondary Education Teaching Options

Carroll College offers the following secondary teaching options:

A. Broadfield Majors: 40 or more semester credits:

English Education
History and Political Science
Mathematics
Social Studies

B. Secondary Education Majors: 30 or more semester credits:

Biology
Chemistry
English Literature
Health and Physical Education (K-12)
History
Political Science
Spanish (K-12)
TESOL (K-12) *

C. Secondary Education Minors: 20 or more semester credits:

Biology
Chemistry
Computer Science
French (K-12)
History
Health and Physical Education (K-12)
Physics
Psychology*
Reading (K-12)
Spanish (K-12)
Special Education (K-12)

*Students pursuing a psychology endorsement may be required to student teach outside of the Helena area. Students pursuing a TESOL K-12 endorsement will be required to student teach outside of the Helena area.

Note: In addition to the teaching major and minor or broadfield major the student preparing for secondary education must complete

professional course work. See the following pages for required courses.

II. Professional Education Requirements For Secondary Education (For TESOL K–12 requirements, see TESOL K–12 requirements)

- AN/SO 218 Introduction to Native American Studies
 - CS 103 Instructional Media and Technology
 - ED 102 Foundations of Education
 - ED 205 Classroom Management
 - ED/PSY 229 Educational Psychology
 - ED 245 Diversity Field Experience
 - ED 318 Content Area Reading and Secondary Methods
 - ED 405 Education Seminar
 - ED 408 Student Teaching in the Minor Area or
 - ED 410 Student Teaching
 - ED 412 Measurement and Assessment in Teaching
 - HPE 214 The School Health Program
 - PSY 228 Adolescent Psychology
 - SPED 300 Introduction to Exceptional Children
- Appropriate content-area methods course for both major and the minor fields.
- United States and contemporary world cultures course(s)—see below.

The United States and Contemporary World Cultures Course Options

Students pursuing teacher education must complete coursework focused on both United States history and contemporary world cultures. Students may fulfill this requirement through completing one of the following four options: 1) one course from category C (see below); 2) one course each from categories A and B; 3) one course each from categories A and C; 4) one course from categories B and C.

A. U.S. History:

- HI 221-222 History of the United States
- HI 323 20th Century American History
- HI 421-422 American Diplomatic History
- PO 216 American Political Thought

B. World Cultures:

- AN/SO 204 Cultural Anthropology
- AN/SO 317 Ethnic and Racial Relations
- AT 165 Pop, Rock, and All That Jazz
- CO 325 Intercultural Communication
- EC 406 International Economics
- FR/GM/SP A modern foreign language
- GEOG 202 World Regional Geography
- LL 400 Theories and Methods of Learning and Teaching Language
- PHIL 223 Oriental Philosophy
- PHIL 304 Contemporary Philosophy
- PO 206 Modern Political Ideologies
- PO 250 Contemporary Issues in American Politics
- PO 324 Western European Politics
- PO 326 The Communist and Post-Communist World
- PO 328 The Developing World
- PO 342 War and Peace
- PO 344 World Order and Interdependence
- SO/AN 218 Introduction to Native American Studies
- SO/AN 318 American Indians
- TH 206 Comparative Religion
- TH 333 Church and State in Latin America

C. U.S. History and World Cultures:

- HI 323 20th Century American History
- HI 352 American/East Asian Relations
- PO 115 International Relations

Major in History and Political Science for Secondary Education

Because this History and Political Science major includes two major areas of study, a minor is not required.

I. Major Program Requirements

Twenty-seven semester credits of history, including:

- HI 101 History of Western Civilization
- HI 102 History of Western Civilization
- HI 221 History of United States
- HI 222 History of United States
- HI 231 Montana and the West
- Or HI 424 History of the Trans-Mississippi West

Non-Western History course (e.g. HI 251, 271)

Upper-division History elective (i.e. course numbers between 301-499)

- HI 494 Historiography
- HI 495 Research Seminar in History

Twenty-four semester credits of political science courses, including:

- PO 104 American National Government
- PO 115 International Relations
- PO 206 Modern Political Ideologies
- PO 216 American Political Thought
- PO 222 United States Foreign Policy
- PO 230 Montana State Politics
- PO 280 Introduction to Comparative Politics
- PO 312 Elections, Political Parties, and Public Opinion

II. Professional Education Requirements for History and Political Science Major

- AN/SO 218 Introduction to Native American Studies
 - CS 103 Instructional Media and Technology
 - ED 102 Foundations of Education
 - ED 205 Classroom Management
 - ED/PSY 229 Educational Psychology
 - ED 245 Diversity Field Experience
 - ED 318 Content Area Reading and Secondary Methods
 - ED 344 Secondary Social Studies
 - ED 405 Education Seminar
 - ED 410 Student Teaching
 - ED 412 Measurement and Assessment in Teaching
 - HPE 214 The School Health Program
 - PSY 228 Adolescent Psychology
 - SPED 300 Introduction to Exceptional Children
- United States and contemporary world culture course(s) – see index for page number.

Notes:

1. All degree students should review requirements for graduation as described in this catalog.

III. Acceptance Into Teacher Education Program

All students in elementary or secondary education should review information on the Teacher Education Program. See index for page number.

Middle School Area of Concentration

Students with secondary or elementary teaching majors desiring to teach at the middle school level (grades five through eight) should add

this emphasis to their academic preparation. This emphasis prepares the prospective teacher for the unique nature of the middle school child and program.

In addition to the Professional Education Requirements for elementary or secondary education, the following course work is required of all students:

- ED 350 Middle School Teaching
- PSY 227 Child Psychology
- and PSY 228 Adolescent Psychology
- or PSY 105 General Psychology
- and PSY 203 Developmental Psychology

Students must also take appropriate elementary and secondary methods courses for the teaching major/minor (secondary students) or area of academic emphasis (elementary) and complete student teaching at the middle school level.

Elementary teaching majors also must take a minimum of 12 semester hours of course work in addition to their elementary major requirements in an area of academic emphasis. Academic areas of emphasis include mathematics, science, language arts (English), and social science. The area of academic emphasis must be mutually agreed to by the student and the academic advisor from the Department of Education: Health, Physical, and Teacher. Actual course work meeting the 12 semester hour requirement must be approved by the academic advisor from the Department of Education: Health, Physical, and Teacher.

Acceptance Into The Teacher Education Program

Admission to Carroll College does not automatically qualify a student for acceptance into the teacher education program. All individuals pursuing academic programs that lead to teacher licensure must, by the end of their sophomore year (before April 1), submit an admission application to the Department of Education: Health, Physical, and Teacher. It is the student's responsibility to seek admission to the program.

Students must meet the following criteria:

1. Pre-Professional Skills Tests (PPST) minimum scores of 170 in reading, 170 in writing, and 170 in mathematics;
2. grade of "C" or better in CO 101, and
3. a minimum of 2.5 cumulative grade point average.

In addition, students will be assessed based on the following:

4. a written essay;
5. faculty recommendations;
6. interview;
7. background check
8. portfolio (See *Teacher Development Portfolio: Collect, Select, Reflect*), and
9. previous K-12 field experiences.

The candidate's status will be evaluated by the Department's admissions committee based on the above criteria. The student will be accepted into the program, accepted on a provisional basis, or denied acceptance. Those who are not directly accepted into the program will be informed of their deficiency and may be given further opportunity for acceptance following counseling and/or academic assistance. Students who have been accepted into the teacher education program, but have not been enrolled in Carroll College for one semester or more, must seek readmission into the program. Transfer students at the junior level are accepted to the program conditionally for one semester. One month prior to the close of that semester, junior transfer students must submit an application for acceptance into the teacher education program. Transfer candidates will be reviewed in the same manner as sophomore students.

All candidates will be informed of their status no later than June 30 of the admission year.

Teacher Development Portfolio

All students majoring in Education at Carroll College are required to maintain a Teacher Development Portfolio. The purpose of this requirement is two-fold:

1. The portfolio you present to your instructors at various times in your program provides them with authentic assessment information about how well you are progressing toward specific program goals in your effort to become a teacher.
2. Creating the portfolio offers you a valuable learning experience by providing you with the opportunity to set personal educational goals, to evaluate your efforts toward these goals, and to see how your personal professional goals match the goals of Carroll's Teacher Education Program.

The Teacher Development Portfolio is a collection of materials assembled to demonstrate to others what you have done and/or are able to do. From years of experience and extensive research efforts, the Interstate New Teacher Assessment and Support Consortium (INTASC), the Montana Board of Public Education, the Carroll College Teacher Education Program faculty, and the Education Advisory Board has identified a set of teaching skills and abilities that prospective teachers must possess in order to be successful as beginning teachers. Your portfolio is a collection of documents (statements, letters, pictures, records, etc.) that document your acquisition of these abilities beyond the letter grade you have earned in a specific course. Students are introduced to the Teacher Development Portfolio and the specifics of the portfolio process in ED 102, Foundations of Education. Further details and requirements for the Teacher Development Portfolio are found in the booklet titled *Teacher Development Portfolio: Collect, Select, Reflect*.

Admission To The Student Teaching Program

Acceptance into the teacher education program at the end of the sophomore year does not automatically permit one to pursue student teaching as a senior student. However, students who have not been admitted to the teacher education program by March 15 of their junior year will not be considered for student teaching. All teaching candidates in K-8, K-12, and 5-12 programs must apply for admission to the student teaching program.

Students must meet the following criteria:

1. a minimum 2.5 grade point average and
2. all Professional Education Requirements and Other Program Requirements must be completed, with a grade of "C" or better.

In addition, students will be assessed based on the following:

3. application to student teaching;
4. recommendations;
5. portfolio, and
6. previous K-12 field experience.

Application must be made to the Department of Education: Health, Physical, and Education no later than March 15 of the junior year. Failure to do so will cancel the student's opportunity to student teach during the fall and spring semesters of the following school year. It is the student's responsibility to seek admission to the student teaching program.

Student Teaching Placement

Candidates admitted to student teaching cannot be guaranteed a particular school district, building, or master teacher. The decision for

placement is the responsibility of the Director of Student Teaching, department faculty, and school district personnel.

Student Teacher Placement Options

Option 1: Local area (no additional costs/fees)

The Carroll College local placement areas are within commuting distance of the Carroll campus and include the following districts:

Helena School District #1

East Helena School District #9

Montana City School District #27

Option 2: Out-of-area (within Montana; may require additional costs/fees.)

Student teacher candidates requesting student teaching assignments outside the Option 1 placement areas must have a legitimate reason for doing so. Out-of-area placements in other communities or settings within Montana will be made when:

- (1) Helena area school districts (see Option 1) cannot provide an appropriate placement in the student's area of licensing.
- (2) An out-of-area placement provides a move valuable experience in the student's area of licensing.
- (3) A placement in the Helena area will impose extreme hardship and prevent the student from completing the student teaching experience.

For any out-of-area request to be approved, the faculty members of the Department of Education must judge that there is a very low probability that the student will require intervention of department faculty members during his/her student teaching experience.

All out-of-area student teaching placements must be approved by the faculty members of the Department of Education prior to student teaching assignments. A student seeking an out-of-area student teaching placement must submit a written request to the Education Department Chair explaining in detail the rationale for his/her request. Appropriate documentation supporting the request should also be attached.

If the requested teaching site is within the state of Montana, but outside Option 1 areas defined above, the Director of Student Teaching will determine the best possible supervision model, either with Carroll College supervisors, with contracted supervision by another college/university, or with another qualified individual. If the student's request is approved, all costs for supervision that would exceed those incurred during a Helena placement must be borne by the student teaching candidate. This may include the salary of the college supervisor and all expenses associated with travel, lodging and meals.

Option 3: Out-of-state (outside of Montana; will likely require additional costs/fees.)

Students may request to do their student teaching out-of-state in accordance with the guidelines and approval process outlined above in Option 2 – Out-of-area. All out-of-state student teaching placements must be approved by the faculty members of the Department of Education prior to student teaching assignments. A student seeking an out-of-state student teaching placement must submit a written request to the Education Department Chair explaining in detail the rationale for his/her request (based upon 3 criteria listed in Option 2 above). Appropriate and complete documentation in support of the request should also be attached. The Director of Student Teaching will determine contracted supervision by another college/university or with another qualified individual. If the student's request is approved, all costs for supervision that would exceed those incurred during a Helena

placement must be borne by the student teaching candidate. This may include the salary of the college supervisor and all expenses associated with travel, lodging and meals.

Content Knowledge Requirement

In order to be recommended for a Montana teaching license, a student seeking a K-8 license must receive a score of at least "8" on the Content Knowledge Worksheet. This worksheet is based on three indicators of knowledge: 1) student's grade point average of 11 specified content area courses, 2) content knowledge as demonstrated during student teaching, and 3) the score obtained on the PRAXIS II Elementary Content Knowledge test.

The Content Knowledge Worksheet may be obtained in 120 O'Connell Hall. Students seeking a 5-12 license or a K-12 license without a K-8 license, will be required to demonstrate content knowledge by receiving a specific score on a PRAXIS II test, if OPI (Office of Public Instruction) has named the test to be used.

Competency Requirement: All Education Options

In the event that supervisory personnel of the Department of Education: Health, Physical, and Teacher decide to withdraw a student from student teaching or the internship program due to lack of growth toward competency in teaching, every effort will be made to provide alternative routes to graduation.

Education Advisory Board

In striving to provide quality education for Carroll College's elementary and secondary preservice and in-service teachers, the Department of Education: Health, Physical, and Teacher solicits input from people involved in the educational community. The Education Advisory Board is a group of recognized educational professionals and students who gather as needed to discuss and document ideas. The Board consists of 36 members who represent diverse geographic areas and interest groups.

Transportation

Transportation is not provided to or from classes, including those held off campus.

ENGINEERING (3-2)

GARRY FISCHER, M.S.

MARY E. KEEFFE, PH.D.

TERENCE J. MULLEN, P.E.

JOHN L. SCHARE, PH.D.

ANTHONY M. SZPILKA, PH.D.

WILLIS WEIGHT, PH.D.

See also Civil Engineering.

Mission and Goals

Consonant with the mission of the College, this department is "dedicated to providing for its students the means for their full realization of a dual goal of vocation and enlightenment." Society requires competent professionals who can solve contemporary problems by using connections among disciplines, especially the humanities, engineering and technology, and the sciences. The Programs within this Department are designed to blend the unique characteristics of Catholic liberal arts education with preparation for productive and rewarding professional careers. The four professional educational objectives of this department are to produce graduates who have:

- 1) The specialized knowledge and skills necessary for initiation into their chosen profession,
- 2) A broad range of skills necessary for effective communication,