

Additional Requirements: At least 3 courses must be 300 or 400-level.

*pending approval

GEOGRAPHIC INFORMATION SYSTEMS CERTIFICATE (GIS)

Statement of Goals:

The GIS Certification is designed to provide students with the technological tools and skills to use in their major program or other interest to:

- communicate about spatial locations and data
- visualize and understand spatial data and patterns
- do spatial analysis, modeling and trending for research and problem solving

GIS is a rapidly expanding research, problem solving and communication technique for spatial data. Often using GPS collected data or existing data from many online sources, GIS allows the making of maps as well as the application of statistics and other data analysis techniques for research in a wide variety of fields. At Carroll, programs using or exploring GIS techniques include Environmental Studies, Math, Engineering and Computer Science, Public Health and Sociology, although the research and analysis skills can be applied to any discipline that has spatial data analysis needs.

The GIS Certificate is designed, similar to a minor, to allow students from any background to add it to their degree and skill set. Unlike a minor, it does not require the students to get a major or degree to accompany it. The Introductory class or equivalent is required for the remaining 3 classes, but it is flexible in how students gain that knowledge and related skills. The final three classes, although they may be taken in any order, must be taken at Carroll and passed with at least a C. The required classes are:

GIS 110	Introduction to Geographic Information Systems
GIS 210	GIS Data and Databases
GIS 310	Advanced GIS
GIS 311	Raster GIS and Remote Sensing

For more information about the GIS classes or Certificate contact the Computer Science Program (Dave Marshall, dmarshall@carroll.edu).

HEALTH & PHYSICAL EDUCATION

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Mission

The Health and Physical Education program seeks to produce a well-rounded, entry-level professional, an aim expressed by Carroll's Mission Statement as well as by its liberal arts focus. In addition to preparing students for the demands of future employment, the faculty members of the Health and Physical Education program strongly believe in the importance of promoting a healthy lifestyle which will assist each member of the Carroll community to meet the demands of everyday life.

Graduates of the Health and Physical Education program must understand learners/clients, be knowledgeable of programs, be well-founded in the methods of delivering programs designed to meet the unique needs of learners/clients, and be capable of evaluating the effectiveness of their professional programs.

A common model for most Health and Physical Education programs includes five dimensions of optimal well being (physical, emotional, social, spiritual, and environmental). Within these five dimensions can be found the essence of the Carroll College Mission Statement, as well as that of the Health and Physical Education program. The Carroll College Mission Statement and the Carroll College goals and objectives guide and direct the development of the Health and Physical Education non-teaching major.

Goals and Objectives

The Department of Education: Health and Physical offers a non-teaching degree with a concentration in Sport Management and a K-12 HPE degree. It also provides coursework essential to the Teacher Education curriculum, other Carroll College programs, and the promotion of healthy lifestyles.

The Health and Physical Education program works toward the following goals and objectives:

Objective #1: To prepare Health and Physical Education graduates with theoretical knowledge and skills necessary for careers in health and physical education-related fields (e.g., recreation, physical fitness, athletic coaching, pedagogy, sport management, and community health). Student Outcomes: Students who graduate from Carroll College's Department of Education: Health, Physical, and Teacher with a non-teaching degree in Health and Physical Education will demonstrate the following skills:

1. organization and management;
2. program planning, implementation, and evaluation;
3. educational strategies;
4. instructional decision making;
5. problem-solving inquiry;
6. learner/client diagnosis;
7. media and technology resource;
8. effective peer group interaction;
9. managing stress;
10. subject matter comprehension;
11. knowledge and application of law and ethics;
12. knowledge of referral systems;
13. oral and written communication competence;
14. critical thinking;
15. meeting the needs of diverse populations;
16. application of foundation knowledge in human development, learning styles, self concepts, philosophy of health and physical education, and;
17. comprehension, analysis, and evaluation of professional information.

Objective #2: To ensure that the Health and Physical Education graduate is a well-rounded individual who demonstrates the ability to integrate his/her field with the concepts, theories, and methodologies of other disciplines. Student Outcomes: Upon graduation the student will demonstrate the ability to: obtain, evaluate, and use new information to make health-promoting decisions; integrate and synthesize information from a variety of sources and disciplines; participate in multidisciplinary discussions of health and fitness.

Objective #3: To ensure that the Health and Physical Education graduate is conversant in the dimensions of optimal well being (physical, emotional, intellectual, social, spiritual, and environmental). Student Outcomes: Upon graduation the student will have documented his/her development and practice of attitudes, skills, and behaviors that enhance quality of life; development and practice of attitudes, skills, and behaviors that maximize personal and community potential; consistent participation in a personal wellness program; and study of the physical, emotional, intellectual, social, spiritual, and environmental aspects of health and well being.