SCIENCE -INTERDISCIPLINARY (SCIE)

QUICK FACTS: SCIE COURSES

- Instructional School: Science, Technology, and Math
- Department: Biological Sciences

SCIE 101 Foundations of Science

(3 Credits, Fall/Spring/Summer)

This interdisciplinary course is designed to provide students with a basic understanding of the processes and disciplines of science with an emphasis on the scientific method. Topics include: the scientific method, critical thinking, pseudoscience, scientific philosophy, science information literacy, statistics, and current topics in science as well as a brief introduction to the disciplines of biology, chemistry, geology, and physics. There is no lab associated with this course. (*This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 4 - Scientific Ways of Knowing.*). (*3 lecture hours, 0 lab hours, 3 credits*)

SCIE 102 Ethics in Science

(3 Credits, Fall/Spring/Summer)

Scientific innovation is a driving force behind our changing society. It is becoming increasingly more important for the average citizen to understand how ethics drive this continued process of innovation. Students will examine the history and various points of view associated with scientific issues and determine how ethics can be used to navigate these problems. This course is designed for all students interested in ethical facets of science. (*This CWI course meets Idaho State Board of Education GEM competency requirements for GEM 6 - Social and Behavioral Ways of Knowing. It has also been E designated and will fulfill the Ethical Reasoning requirement.*). (*3 lecture hours, 0 lab hours, 3 credits*)

SCIE 200 Vertically Integrated Projects (VIP)

(1 Credit, Varies)

Orientation to team-based research projects coached by college faculty and graduate students offered in collaboration with another institution. Team members contribute to the project's success by exploring different roles on large multidisciplinary design/discovery teams. Skills learned include a basic level of professional (e.g., communication, project management, time management) and technical skills (e.g., lab skills, scientific method application). Topics considered in the courses are those necessary for the success of the VIP project. Course and topic(s) may be repeated up to three times (for a maximum of 4 credits) for different VIP projects. PREREQ: PERM/INST. (*1 lecture hours, 0 lab hours, 1 credits*)

SCIE 225 Essential Principles of Scientific Research (1 Credit, Varies)

(1 Credit, Varies)

This course is designed for Biology and Chemistry majors who have an interest in Biomedical Research. The course will serve as a prerequisite for participation in the CWI INBRE Summer Research Fellowship and will also benefit any student who hopes to engage in scientific research during their academic or professional career. This course will allow students to explore research conducted by local scientists; students will read and discuss scientific journal articles and attend presentations by research scientists. The culmination of the course will be the completion of a research fellowship application. This course meets for the equivalent of one contact hour per week. There are no prerequisites, except an interest in scientific research. (*1 lecture hours, 0 lab hours, 1 credits*)

SCIE 290 STEM Capstone

(1 Credit, Varies)

This capstone course serves as the culmination of the STEM degree at CWI. Students will demonstrate preparedness to progress to advanced study in their chosen STEM field; they will demonstrate an understanding of what careers relate to that field and how their field impacts and interacts with other disciplines, both within and outside of the scope of STEM curriculum. This course will produce a capstone project and should be completed in the student's final semester. (Pass/No Pass) PREREQ: MATH 170 and 40 credits of successfully completed coursework. (1 lecture hours, 0 lab hours, 1 credits)

SCIE 293 Interdisciplinary Science Internship

(1-3 Credits, Varies)

Internships allow students to apply learning to real-life career possibilities. Credits are earned through supervised fieldwork specifically related to a student's area of study. PREREQ: PERM/INST. (*0 lecture hours, 3 lab hours, 1 credits*)

Refer to <u>How to Read Course Descriptions</u> for an explanation of elements found in the course descriptions above.