University Committee on General Education

Proposed Catalog Changes

Effective Term = Summer 2017

1. Add the following courses:

**CORS 234 The Science of Engineering and Technology in the Modern World (3 cr)**
An introduction and focus on how science and technology affect peace, security, community, democracy, environmental sustainability and human values. The class will help prepare future citizens to respond knowledgeably and reflectively to the most important scientific and technological challenges of the contemporary world. This course offers ways of integrating knowledge in areas that are impossible to grasp through any single discipline; examples include Cybersecurity studies, Environmental studies, Globalization, Nuclear science, Robotics and Manufacturing in today’s world and Sustainability studies. This course will enable students to form more robust understandings of the nature of scientific and technological change, the relationship of culture and science, and the limits of rational analytic methods in characterizing complex engineering problems, as well as the benefits and risks of the advances in science and technology.

Available via distance: No
Geographic Area Availability: Idaho Falls
Rationale: The proposed Core Science (CORS) course introduces first year students to several different core topics in the fields of engineering and technology. The covered topics include cyber security, energy, materials science, manufacturing, robotics, environmental science, and nuclear engineering. Upon the completion of the course the students will gain broader knowledge regarding the listed topics in the fields of engineering and technology, which will help in shaping their understanding of these areas, and it will help the students in selecting an area, or areas, on which they would like to focus their efforts in their upper division education.

**CORS 235 As the World Burns: Fire on Earth (3 cr)**
Fire is a fundamental element on the Earth’s surface, and has been present for millennia. Anthropologists have established that human mastery of fire for cooking was one of the key moments in evolution when humans separated themselves from all other species and accelerated evolution towards modern civilization. Today, fire is a dominant force shaping the landscape on six continents, and is a major natural hazard in the western US, and particularly in the Northwest. It is both a major natural hazard and a critical ecological process, making the way we manage it and fight it highly controversial. The goal of this course is to explore the science of fire through the lens of how humans relate to it: through use of fire as a tool and fear of fire as one of the most destructive forces on Earth. Students will examine basic assumptions and views of fire through the scientific method to improve their understanding of ecology, evolution, physical Earth processes and natural hazards.

Available via distance: No
Geographic Area Availability: Moscow
Assessment: Students will start the course by taking a pre-course quiz to assess baseline knowledge on scientific method, and writing a short paper in response to an opinion question on wildfire to establish preconceptions and demonstrate understanding of scientific method. They will repeat these at the end of the course to demonstrate longitudinal learning.