ENVIRONMENT AND SUSTAINABILITY (ENVS)

ENVS 601. Introduction to Environmental Management. (5 Credits)
A study of bioregional and multidisciplinary approaches to environmental management, with emphasis on community and systemic responses to rapid global environmental change. Students develop fluency in historical and contemporary responses to environmental issues and, by exploring the learning laboratories of the Gunnison Valley, study key environmental stakeholders, models of resiliency, and tools for effecting change on a range of temporal and geographic scales.

ENVS 605. Science for Environmental Management. (3 Credits)
A survey of contemporary environmental science focusing on the integration of ecological and social research for natural resource management and conservation. Students gain familiarity with methodologies for developing scientific knowledge, accessing scientific information, doing inclusive science, applying science to plan for and achieve management outcomes, and communicating science to a wide range of audiences. Class projects introduce students to a range of issues and provide students with opportunity to contribute to real-world initiatives bridging these spheres.

ENVS 606. Ecosystem Restoration. (3 Credits)
Introduction to ecosystem types, threats to ecosystems, restoration principles and practices, and conservation mechanisms on multiple scales that may help curb additional ecosystem loss and degradation. Students will become familiar with best practices for restoring and conserving ecosystems through local, regional, and international case studies and participate in hands-on learning opportunities.

ENVS 608. Environmental Politics & Policy. (3 Credits)
Analysis of the key interactions between environmental policy and management, focusing on environmental decision-making within an array of policy contexts. Emphasis is on important federal policies such as the Clean Water Act and National Environmental Policy Act, with attention to the institutions, actors, and ideas driving environmental policy in the US and abroad.

ENVS 609. Technical Skills in Ecosystem Restoration. (1-3 Credits)
A workshop-style format course that gives students the opportunity to develop technical field skills in ecosystem restoration. No prerequisites. The course will include, but will not be limited to, key skills necessary for students to be workforce ready: Wetland delineation. Watershed and ecosystem health assessment and developing monitoring protocols. Soil health assessment and soil moisture monitoring. Water quality sampling and interpretation. Process-based restoration techniques and project design (planning, impact assessment, permitting, implementation). GIS and drone mapping for restoration planning and monitoring. Fluvial Geomorphology. Applied Aquatic Ecology.

ENVS 611. Integrative Skills for Environmental Management. (3 Credits)
The course focuses on developing skills needed to manage environmental projects and for career in environmental management. Students develop a thorough understanding of skills such as project management, collaborative conservation, grant-writing, inclusivity, adaptive management, systems thinking, and environmental communication through working as groups on client projects.

ENVS 612. Introduction to Analysis and Assessment for Environmental Management. (3 Credits)
An overview of a range of quantitative and qualitative analytic methods essential to environmental management careers in Integrative Land Management, Sustainable and Resilient Communities, and Global Sustainability. Topics covered include descriptive and inferential statistics, research methods and design, qualitative data collection and analysis, graphic presentation of results, and evidence-based decision-making. This course empowers students to organize, analyze, and graphically present environmental data.

ENVS 615. From Climate Science to Action. (3 Credits)
An action-oriented course about the science of climate change, with an emphasis on climate justice, and mitigation and adaptation strategies for careers in environmental management. Topics include greenhouse gas emissions, climate forces and feedbacks, climate ethics and justice, effects on ecological and human systems, and action strategies for climate change mitigation and adaptation at the local, regional, and planetary scale.

ENVS 616. Environmental Organization Development and Management. (3 Credits)
An introduction to developing organizations at the nexus of economic, social, and natural systems, and to the key skills necessary to succeed in this complex and highly competitive environment. Course discusses competitively advantageous strategies and practices organizations adopt to grow revenues, cut costs, improve market share, enhance brands, and redesign products and processes toward positive environmental and social impacts. Course examples will include sustainable innovation, creativity, and entrepreneurship from around the world. Students learn to identify the best opportunities, generate innovative non-profit and for-profit business models, frame and reframe problems, produce creative solutions, and generate a culture of innovation, creativity, and entrepreneurship within an organization utilizing principles from a variety of thinking methods including systems, design, and group thinking. Prerequisites: ENVS 605; ENVS 608; ENVS 611

ENVS 617. Global Sustainability. (3 Credits)
An exploration of how international governments, NGOs, and other entities join to move the world toward a more sustainable future. Addresses contemporary topics such as industrial ecology, international natural resource management, sustainable development, and other relevant areas of study. Students develop skills in accessing, assessing, and applying social, economic and environmental data and practices to global issues. Prerequisites: ENVS 605; ENVS 608; and ENVS 611.

ENVS 618. Public Lands Management. (3 Credits)
An exploration of the current and traditional approaches to public land and resourcemanagement. A regional focus on the Western U.S. is integrated with comparativeexamples from other regions and countries to enhance and broaden student perspectives. Course examines the history and future management implications of public lands agencies and policies, such as the National Parks, National Forests, Bureau of Land Management, NEPA and multi-use mandates. Special focus will be given to the management skills necessary in leading public lands agencies on the regional level. Prerequisites: ENVS 605; ENVS 608; ENVS 611.

ENVS 620. Studies in Sustainable and Resilient Communities. (3 Credits)
An examination of selected topics covering the content understanding, analytical skills, and management approaches vital to cultivating sustainable and resilient communities. Topics include subjects such as Climate Change Mitigation and Adaptation, Sustainable Food Systems, Sustainable Energy Futures, Sustainable Economic Development, Movements in Community Resilience, and Frameworks in Sustainability. This course is repeatable, since students are required to take this course three times, as long as the topic changes. Prerequisites: ENVS 616 or ENVS 617.

ENVS 623. Studies in Environmental Management. (1-6 Credits)
An examination of selected topics covering the content understanding, analytical skills, and management approaches vital to environmental management. Topics will vary from semester to semester based on faculty interest and student need. This course is repeatable, as long as the topic changes.

ENVS 625. Studies in Integrative and Public Land Management. (3 Credits)
An examination of selected topics covering the content understanding, analytical skills, and management approaches vital to cultivating sustainable and resilient communities. Topics include subjects such as Climate Change Mitigation and Adaptation, Sustainable Food Systems, Sustainable Energy Futures, Sustainable Economic Development, Movements in Community Resilience, and Frameworks in Sustainability. This course is repeatable, since students are required to take this course three times, as long as the topic changes. Prerequisites: ENVS 617 or ENVS 618.

ENVS 690. MEM Project Development. (5 Credits)
An introduction to the Master's Project. Course examines environmental project design strategies, successful environmental solutions, and organizations/community stakeholder groups seeking environmental management assistance from MEM students in the Master's Project. Students design, plan, and coordinate second year Master's Project with faculty mentors and community stakeholders. Requires two-weeks residency in Gunnison during culmination of course. Prerequisites: MEM Core

ENVS 692. Independent Study in Environment Management. (1-6 Credits)

ENVS 694. Master's Project and Portfolio. (3-6 Credits)
Students design and apply a specific research and environmental management project to an active environmental organization, green business, land agency, or community stakeholder group. Requires students to develop a lens and goal for environmental management; identify a project that enables the student to manifest his/her environmental management goal; research global best practices for similar projects; complete the project over 10 months; write up, present, and defend the results for the faculty mentor and MEM community; and complete an environmental career portfolio. Course spans Fall (3 credits) and Spring (6 credits) of the second year, and requires 9 total hours. This is a repeatable course for variable credit. Prerequisites: ENVS 690.