

FALL 2026 COURSE DESCRIPTIONS:

New MENV course**Grant Seeking in Practice: Designing, Writing, and Evaluation Proposals (3cr)****ENVM 6100**[Taber Ward](#)

This course is a nuts-and-bolts, practice-based introduction to grant seeking and philanthropy for students planning careers in government, nonprofit, consulting, and applied research settings. Students will learn how to: Scan the funding landscape across government, academia, foundations, and other philanthropic sources Interpret Requests for Proposals (RFPs) and align project ideas with funder priorities Design coherent projects (needs statement, goals, outcomes, evaluation plan, and budget) Write and revise competitive proposals Understand how proposals are scored and evaluated from the reviewer's perspective Plan for reporting, compliance, and long-term funder relationships Interact with funders in different contexts The course is simulation/case-based, using real (or lightly modified) Request for Proposals (RFPs), and scoring rubrics. Focusing on a mix of government grants (e.g., state and federal programs), academic research grants and fellowships, private and community foundations, and small institutional/individual funding opportunities, the course emphasizes the kinds of grants MENV and ENVS students are most likely to encounter in their careers (CPW/GOCO, federal grants, agency programs, foundation RFPs, etc.).

Students will work individually or in small teams to develop a full proposal package and take part in mock review panels. While examples will be drawn from environmental, climate, urban design, food, energy, and social-impact contexts, the skills are broadly transferable to other domains. The course is designed primarily for MENV students but is open to MS/PhD students (and, where appropriate, advanced undergraduates with permission).

001 (28842) – Th, 4:00-6:30pm, AERO 114

Returning MENV courses**Sustainable Energy Policy (3cr)****ENVM 5006****Elizabeth Doris & Faith Smith**

The global energy system is at the early stages of a remarkable transformation: from one largely dependent on fossil fuels (coal, oil, and natural gas) to one based on renewable and sustainable energy sources. Energy policy - actions taken by public entities to influence energy - have and will play an essential role in this ongoing transformation. This course takes a critical and pragmatic look at energy policy: what policies are available, how do we evaluate them, who are the stakeholders in the energy policy process, and how do policies drive energy technology adoption.

001 (28854) – T, 4:00-6:30pm, SEEC S125

Energy Systems and Technologies (3cr)**ENVM 5007**[Joshua Radoff](#)

Examines the basics of energy technologies and energy delivery systems. Covers both conventional energy sources (oil and gas, coal, nuclear and hydroelectric) and renewable/sustainable energy technologies (wind, solar, biomass, geothermal and end-use efficiency). Investigates individual technologies as well as integration of multiple technologies on energy systems such as the electricity grid and liquid and gas fuels infrastructures.

001 (28853) – TTH, 10:00-11:15am, SEEC N125

Water, Climate, and Sustainable Cities (3cr)

ENVM 5012

[Paul Lander](#)

Provides students with the knowledge to characterize, analyze, assess and plan, urban systems, primarily those of water and landscape. Students will understand the nature of built systems in the urban environment, with particular focus on the urban water cycle and green infrastructure.

001 (28855) – M, 4:05-6:35pm, HY SEEC S265

Foundations of Environmental Policy and Management (3cr)

ENVM 5014

[Gregor MacGregor](#)

Examines concepts related to policy and regulatory processes, institutions, and management of the environment and natural resources. Surveys environmental issues and laws at the international, national, state and local levels. Focuses on policy tools including property rights, regulation, voluntary compliance, and market-based mechanisms. Students analyze a contemporary environmental or natural resources issue and prepare policy advocacy documents and presentations.

001 (28885) – TTH 8:30-9:45am, SEEC N128

Science, Politics, and Policy (3cr)

ENVM 5016

[Jojo La & Tanya Petach](#)

Examines the intersection of science with politics and policy, with an emphasis on how scientific information can be used to influence and support reasoned decision-making at all levels of government. The course will present the material through currently relevant and evolving topics such as climate change, species conservation and management, drought and other extreme climatic events, and topical issues as they arise during the course.

001 (28886) – T, 6:40-8:50pm, SEEC N128

The Scientific Basis of Environmental Change (3cr)

ENVM 5018

[Meghan McCarroll](#)

Provides an overview of the science that underlies some of the most complicated global environmental challenges we face today. These include topics such as climate change, air quality, land management, agriculture, biodiversity loss and conservation, as well as the underlying biogeochemical, hydrologic, and ecological processes that are critical for understanding the changing environment.

801 (28874) – M 10:00am-12:30pm, SEEC S125

802 (28875) – W 4:05-6:35pm, SEEC N136

803 (28876) – W 10:00am-12:30pm, SEEC S125

**Please note, all sections should be similar in size. No exceptions on capacity changes. Each section permits a capacity of 33. No waitlists available.*

GIS for Sustainability Professionals (3cr)

ENVM 5023

[Jennifer Murdock](#)

Geographic Information Systems (GIS) for Sustainability Professionals are increasingly important for understanding and managing environmental change and sustainability challenges. This introductory course in GIS will provide you with a broad foundation of spatial thinking and geo-technologies. We will consider what constitutes spatial data, learn about real-world applications of GIS within the field of sustainability, and will work through hands-on exercises in ArcGIS to build confidence utilizing such software in your future careers. This is a computer-based course, but no prior GIS experience is required.

001 (28892) – W 4:05-6:35pm, SEEC N126

Stakeholder Engagement: Processes, Practices, Politics (3cr)

ENVM 5024

Kelly (Lane) MacGregor

This course is organized around stakeholder engagement issues that are important to understand within, and across, the MENV's five areas of specialization. This course examines stakeholder processes, practices and politics and apply these to various cases, issues, challenges and opportunities.

001 (28893) – W, 5:45-8:15pm, SEEC N124

Sustainable Land Use and Development (3cr)

ENVM 5026

[William Shutkin](#)

Survey of fundamentals of land use planning, growth management and urban/ community development systems, covering a range of cultural, legal and ecological issues. By way of case studies and best practices, focus on new, “sustainable” approaches at the intersection of real estate development, land use and urban planning, economic/community development and environmental policy.

001 (38238) – T, 4:00-6:30pm, SEEC N124

Nourishing Humanity within Planetary Boundaries - Intro to Food Systems (3cr)

ENVM 5038

Maya Moore

Take a holistic approach to exploring environmental, economic, social, and cultural dimensions of agri-food sustainability. Conceptualize food systems and their dynamics, recognize their achievements, come to terms with their role in environmental and social ills, and explore a range of promising alternative practices for rebalancing and building resilience in food systems.

001 (28852) – TTH 10:00-11:15am, SEEC N126

Sustainability & Resilience in Practice (3cr)

ENVM 5041

[Jonathan Koehn](#) & [Maria McDonald](#)

Explore sustainability strategies at the community scale and the drivers of decision making and investment in sustainability action. We will explore various approaches to sustainability with the goal of answering the question, “How do sustainability leaders engage with diverse stakeholders and decision makers to implement effective, equitable solutions to environmental problems?” We will select topics and case studies within Colorado that represent different kinds of challenges for sustainability planning and programs and evaluate solutions for each.

001 (28857) – T 9:00-11:00am, TBD

Benefit Cost Analysis (1cr)

ENVM 5043

[Stephanie Shwiff](#)

Analyze the environmental, economic, and international dimensions of a range of food production systems. Focuses on the economic benefit-cost analyses (BCA) that inform decision-making in food systems. BCA is a widely used economic valuation tool that involves estimating all benefits and costs in monetary terms and then adding and comparing those values and can help communicate the economic benefit of a proposed intervention.

001 (28858) – W 5:45-8:15pm, HY SEEC N125

Life Cycle Assessment - Bringing Objectivity into Subjective Conversations (1cr)

ENVM 5044

[John Heckman](#)

Use the food system landscape to provide an introduction to life cycle thinking, including a survey of industry standards, approaches and tools useful in better understanding and making decisions around sustainability.

001 (28859) – W 5:45-8:15pm, HY SEEC N125

Introduction to Monitoring & Evaluation (1cr)

ENVM 5045**James Harper**

Gain an understanding of traditional and new approaches to monitoring and evaluation (M&E) in the context of food and water, sanitation and hygiene (WASH) systems in the developing world. Covers rigorous impact evaluation designs and when to use each.

001 (28873) – W 5:45-8:15pm, HY SEEC N125

Humans, Environment, and Justice (3cr)**ENVM 5051**[Fatuma Emmad](#)

This course will examine the justice implications of the relationship between humans and the natural environment and in particular land use. We will take as a premise that all people have the right to access clean water, air and soil and to be free of contamination and hazardous pollution. We will look at current struggles and debates around topics of environmental quality and the processes that deny people access to basic resources.

001 (28884) – TH, 4:00-6:30pm, SEEC N125

Data Science and Visualization (3cr)**ENVM 5055****Kassandra Neiss**

Managing environmental change requires working with large complex datasets that vary in space, time, type, and quality. Data visualization, or the visual representation of data using charts, graphs, and maps, is an essential communication tool that assists with quick interpretation of trends and outliers within environmental data. If not done well though, it can lead to misrepresentations, spurious correlations, and generally confusing visuals. In this course, students will identify, clean, understand, and analyze environmental data through Tableau. They will learn to combine visuals, weave data-forward narratives using tools like Dashboards and Data Stories, and utilize APIs to bridge Tableau to external applications and create automation. By the end of the course, students will be able to create meaningful graphics that have the power to influence sustainability decisions.

001 (28881) – T, 4:00-6:30pm, C315

Introduction to Sustainability in the Outdoor Industry (3cr)**ENVM 5064**[Paul Dreyer](#)

Providing an introduction to public lands and natural resources policy, challenges and opportunities for community economic development, and the outdoor recreation industry. Outdoor recreation economy definitions, theories and frameworks are discussed and critically examined. Key stakeholders are identified, along with current and future trends, opportunities, and challenges. The need for sustainable practices and cross-cultural understanding and communication within the outdoor recreation economy is also emphasized. Finally, we will explore the diverse career opportunities that exist within the outdoor recreation industry.

001 (28882) – M, 4:05-6:35pm, SEEC N124

Community Economic Development and the ORE (3cr)**ENVM 5065**[Natalie Ooi](#)

Introduces community economic development theories, frameworks, and processes, as relevant to the ORE. Best practices for building the ORE within all types of communities are discussed, highlighting the importance of equitable, community-focused, integrated, and sustainable destination development practices. Tying this all together is the importance of community economic development in building community capacity for the future.

001 (28883) – TTH, 2:30-3:45pm, SEEC N126

Consulting in Practice: Introduction to Individual and Group Consulting (3cr)**ENVM 5070****Christine Ageton**

Learn the basics of consulting in this class. Great consultants are strategists and problem solvers. They know how to sort

through complexity and uncertainty to assess the core issue that a client needs to address. In this class students will learn 101 skills such as: project definition, scoping, proposal writing, project management of deliverables, contracts, and relationship management.

001 (2888) – TTH, 1:00-2:15pm, SEEC N128

Energy Markets, Transactions and Policy (3cr)

ENVM 5072

[Robin Meidhof & Rob Witwer](#)

The energy transition is one of the greatest industrial undertakings in human history. This course will focus on the legal and market aspects of that transition, the challenges they present, and the ways in which you can become more effective at navigating those challenges. For example, the U.S. has needed more transmission for more than a decade, yet transmission lines still take between 11-20 years to build. Why? Can the U.S. meet its aspirations to rapidly electrify and decarbonize our grid without “big transmission?” We will begin our inquiry by discussing the legal and constitutional underpinnings of federal, state and local powers, the creation of regional markets and regulatory decision-making bodies, and the history of utility regulation. We will evaluate how current regulatory structures, laws, and policies present hurdles and opportunities for the energy transition and we will dig deep into understanding how you can be a catalyst for change in improving the opportunities for utilities, renewable energy developers, and end-users (i.e., consumers) to engage with the markets and perhaps most important, engage with the regulators and policymakers who enact the legislation and policies that are driving the energy transition.

001 (28889) – W, 4:00-6:30pm, SEEC N124

Conservation Management: Policies, Leadership and Best Practices (3cr)

ENVM 5074

Emily Beam

Introduces students to complex conservation issues and examine how governments, tribes and organizations have, and continue to nurture and conserve healthy land and waterscapes, while balancing a variety of human impacts and uses. Students will examine how conservation policymaking occurs and the importance of governance, more broadly, in conserving our natural resources. Indigenous and traditional knowledge surrounding land and water use and management internationally are examined including the integration of said knowledge in the management of public lands. Relevant tools and methods that are used are examined alongside best management practices at a local, regional and international level. These include the importance of engaging and collaborating with diverse stakeholder groups and recognizing the multiple disciplines, lived experiences and perspectives that all contribute to conservation management.

001 (28890), W, 4:05-6:35pm, AERO N240

Circular Economy and Sustainability (3cr)

ENVM 5077

[Joel Hartter](#)

Fundamentals of a circular economy, the business value in a circular economy, how business models are presently shifting, and why businesses should become part of this transformational shift. This course will also cover knowledge and skills needed to critique and improve sustainability outcomes for businesses and their stakeholders.

002 (28891) – T 4:00-6:30pm, SEEC N125

GHG Accounting and Management (3cr)

ENVM 5083

Monica Dorsey

Introduces students to the fundamentals of greenhouse gas accounting and management, including market trends, GHG inventory development, data analysis, strategic planning, and carbon markets. A particular focus will be paid to practical knowledge, with students developing and analyzing a detailed, Excel-based inventory model. Recommended prerequisite: Students are strongly encouraged to have at least an intermediary working knowledge of Excel prior to beginning this course, including familiarity with formulas and functions such as Sum, Index Match, X Lookup, If

Statements, Pivot Tables and charts.

001 (28894), TTh, 11:30-12:45pm, SEEC N129

Product Life Cycle Assessment (LCA) (3cr)

ENVM 5085

[John Heckman](#)

How can we objectively determine which products are more sustainable? How are product carbon footprints done? How can business decisions and marketing claims on such topics be made with confidence? LCA provides the basis for answering these questions, but it has limitations of its own that need be understood as well. Students will learn the theoretical underpinnings of LCA as well as their practical application through conducting an LCA of their own on a product of their choosing. At the end of the course students should be able to successfully complete the required exam for the ACLCA professional LCACP certification.

001 (28895) – TTh, 2 :30-3 :45pm, SEEC S265

Distributed Energy Resources (3cr)

ENVM 5087

[Nicholas Lenssen](#)

Distributed energy resources (DER) are fundamentally changing the way the electric power system operates. DER consist of an array of technologies, including roof-top solar, distributed storage, electric and plug-in hybrid vehicles, and smart thermostats and appliances, that are connected to the electric distribution system. In isolation, DER are able to provide their owners with cost-effective energy services. In aggregate, these resources have the potential to lower greenhouse gas and criteria pollutant emissions as well as reduce overall utility costs, while producing a more resilient and reliable power grid. The promise of DER, though, remains challenged by institutional barriers that could limit the pace of DER expansion. Recommended prerequisite: [ENVM 5072](#), [ENVM 5007](#), [ENVM 5006](#).

001 (28896) – M, 4:05-6:35pm, SEEC N126

Environmental Justice in Law and Practice (3cr)

ENVM 5088

[Gregor MacGregor](#)

This course will provide students with the skills and knowledge necessary to locate contemporary and historical environmental justice (EJ) issues within the greater framework of American law and policy. Students will examine the history of environmentalism and EJ justice as both have developed, intersected, and been at odds with one another during the last 200 years. They will then learn the contemporary landscape of EJ issues, legal requirements, and societal aspirations through a combination of academic commentary and case studies. Using this knowledge, students will produce advocacy documents that apply conceptual EJ lenses to recommend real-world solutions.

001 (39135) – TTh, 2:00-3:15pm, Eaton Humanities Bldg 125

Capstone Innovation Lab 1 (1cr)

ENVM 6001

[Alice Reznickova](#)

Providing hands-on, learning-by-doing experiences, while also providing client organizations with solutions to complex problems and useful products. Projects can take place in-residence with a client, when appropriate. Project ideas will be codeveloped by students and industry, government, or non-profit partners and will be guided and evaluated by a committee of ENVS faculty. Required for all MENV students.

001 (28829) – F 9:00-10:00am, SEEC N125

002 (28830) – F 10:15-11:15am, SEEC N125

003 (28831) – F 11:30am-12:30pm, SEEC N136

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CIL 3 (1cr)

ENVM 6004

[Laura George](#)

Providing hands-on, learning-by-doing experiences, while also providing client organizations with solutions to complex problems and useful products. Projects can take place in-residence with a client, when appropriate. Project ideas will be codeveloped by students and industry, government, or non-profit partners and will be guided and evaluated by a committee of ENV5 faculty. Required for all MENV students.

001 (28832) – F 9:00-10:00am, AERO N240

002 (28833) – F 10:15-11:15, AERO N240

003 (28834) – F 11:30am-12:30pm, AERO N240

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Sustainability and Social Impact Reporting

ENVM 6100-002 (3)

Jessica Kochik & Molly MacEachen

Private and public entities around the world are increasingly taking on sustainability as core value. Many are driven by genuine desire for positive change. Others do so out of perceived need from customers, stakeholders, or investors. As a result, the need to be able to use frameworks to develop strategies and communicate progress and impact has been paramount. This class will explore the frameworks and standards used to measure sustainability across different industry sectors, differentiate between "CSR" and "ESG," and provide an investors perspective regarding which companies merit financial investment based on their sustainability performance. It will include a review of reporting standards such as GRI, CDP, GRESB, SASB, the process of conducting Materiality Assessments, and showcase how companies across the sustainability spectrum are developing enterprise-wide strategy and communicating their efforts.