Prescott College

Master of Science in Environmental Studies (MSES)

Course Curriculum for the 36 Credit MSES Program

Number	Course Title	Credits
	Online Orientation	0
Core Coursework (9 courses – 27 credits required)		
ENV 571000	Ecology, Culture and Community	3
ENV 57876	Understanding Climate Change	3
ENV 54500	Environmental Law and Policy	3
ENV 57501	Ecology	3
ENV 50505	Environmental History and Philosophy	3
ENV 51020	MSES Practicum	3
SBM 57501	Organizational Transformation and Sustainable Leadership	3
Capstone Coursework (2 courses – 3 credits required)		
COR 57700	Capstone Project (Thesis or Applied Professional Project)	3
	Or	
COR 57702	Capstone Portfolio	3
MSES Concentrations (choose *one* concentration – 6 credits)		
ENV 54400	Conservation Biology, plus one of the following: ENV 57150 Ecological Restoration, ENV57130 Biogeography, or ENV54505 Environmental Administrative Law	6
AHU56601	Environmental Communication, plus one of the following: AHU56602 Media and Advocacy, COR57703 Online Content Creation, or AHU52235 Natural History Writing	6
	Self-Designed Concentration: Courses to be determined in consultation with Program Director	6
Two Additional Electives (2 courses – 6 credits required)		
	Students may choose from Geographic Information Systems, Grant Writing, Emergency Management and Communication, Field Botany, Public Resource Management, Science Writing, Wildlife Law, Land Use Planning and Policy, Forest Ecology, Environmental Photography, Limnology, Field Journaling, or courses from any other Prescott College graduate program approved by the Program Director.	6

Total Credit Requirement: 36

Master of Science in Environmental Studies Core and Capstone Course Descriptions:

Title: **Ecology, Culture, and Community**
Number: ENV57100
Description: This course provides students with the experience and direction necessary to understand their own communities within a bioregional context. This requires students to identify and map where they live in terms of geology, biology, and climate, rather than relying on political borders, and to research and interpret the natural and cultural histories of their regions in order to understand how their own bioregions enable some possibilities of human community development while limiting others. In addition to researching and writing a Deep History of their bioregions, students will compile an annotated list of resources that provide an expanded temporal representation of the region's geology, botany, wildlife biology, human population dynamics, cultural practices, and environmental impacts.
Type: Required Core Course

Title: Understanding Climate Change
Number: ENV57876
Description: This course provides an overview of the dynamic Earth system and the causes and implications of climate change. Students will gain a better understanding of how deep earth history, ocean currents, and geology shape the earth's climate system. They will also explore how human activities are altering this system and the various ways that scientists document and analyze human-induced climate change. Students will have a better understanding of climate models and how they are used, impacts on communities and resources, and how the global community is working towards addressing the challenges posed by climate change.
Type: Required Core Course

Title: Environmental Law and Policy
Number: ENV54500
Description: This course provides an introduction to the laws and policies pertaining to issues such as population, energy, pollution, land management, waste disposal, economic growth, and ecosystem management, as well as some of the theoretical underpinnings of how economic and ecological burdens and benefits are distributed within society. Students will consider historic and modern common-law mechanisms for managing land use, and modern environmental statutes including federal land management regimes, consumer protection statutes, pollution prevention regimes, and the intersection of energy regulation and transportation law with environmental laws.
Type: Required Core Course

Title: Ecology
Number: ENV57101
Description: This course offers a rigorous overview of six major organizing areas for the study of ecology: physiological ecology, dynamics of energy and element cycles, population ecology, population interactions, community ecology, and evolutionary ecology—the latter especially as it relates to conservation issues. Students explore their local natural communities as a way to apply their theoretical understandings of the ecological processes in question. Each student reads a body of current literature and produces a significant paper centered on ecological issues of their bioregion.
Type: Required Core Course

Title: Environmental History and Philosophy
Number: ENV50505
Description: This course provides an introduction to historical and philosophical analyses of

environmental attitudes and values. After establishing the vital connection between ontology ("worldview") and ethics, students address select indigenous and traditional environmental perspectives. The course then turns to the nature/culture schism under the sign of modernity (agriculture, science and instrumental rationality, theories of property). Students will also consider figures associated with Romantic responses to modernity (and their critics). The course concludes by focusing on Environmental Justice (including Climate Justice). For their final project, students will craft a personal, bioregionally grounded "ecosophy," an environmental credo responsive to human and more-than-human community informed by class reading and discussion.
Type: Required Core Course

Title: MSES Practicum
Number: ENV51020
Description: This course offers a practicum experience the student carries out in the profession they are or want to be employed in. The student will construct a working and learning environment in which knowledge and skills are brought to bear on a significant issue or set of issues, within the context of the student's Environmental Studies concentration. Final products of the practicum will vary, depending upon track and goals as stated by the student in the practicum proposal. In cases where a student is already well-integrated into the local community of professionals, the practicum can be waived and an additional elective taken to complete the 36-hour credit count.
Type: Required Core Course

Title: Organizational Transformation and Sustainable Leadership
Number: SBM57501
Description: This course examines leadership theory relating to community and organizational transformation with a focus on leading for socially responsible institutions. Students consider variables that influence effective leadership in general, and the idiosyncrasies that characterize environmental issues and social change in particular. Throughout the course students examine several integral and connected issues—leadership theory and systems thinking, key environmental and related social issues for organizations, and a variety of different leadership modalities, along with Triple Bottom Line management concepts. These broad topics intertwine to provide a solid grounding to develop students' understanding of their strengths and potential as leaders for innovating environmental and social change.
Type: Required Core Course

Title: Capstone Project
Number: COR57700
Description: Taken near the end of graduate studies, this course engages students to develop a Capstone Project that represents the culmination of their graduate studies. Students may choose from an academic thesis or an applied professional project. Both formats offer opportunities to deeply study a topic and produce a project that may be applied to the student's current employment, help them change careers, engage them in a new community, or many other potential outcomes. During the first weeks of the course, students will draft a substantive Capstone Proposal and assemble a Capstone Committee, after which they will typically take an incomplete at the end of the block, which is designed to allow ample time for them to complete and write up the project

Or

Title: Capstone Portfolio

Number: COR57702

Description: Following completion of the coursework, the student will draw upon the completed materials to create a portfolio that demonstrates accomplishments in accordance with program goals and a set of goals the student has drafted. Typically a student will decide at the end of the first year if they are moving working toward a capstone project or a portfolio. The portfolio is tied together by a substantive reflective paper, which describes the case for the academic integrity of her coursework, the activities she has engaged within the coursework, and the connection to the student's career.

Master of Science in Environmental Studies Concentration Course Descriptions:

(choose two electives from these or other relevant graduate courses)

Conservation Biology Concentration

Title: Conservation Biology

Number: ENV54400

Description: Students will study the history and application of conservation biology, a newer field in the life sciences. Specific topics will include how has the field emerged and changed, the specific areas of study that made this field possible (biogeography, for example), historical and legal landmarks, current challenges, common lab and field techniques, design of study, and limitation of certain techniques. Students will read a significant body of current literature in the field and produce a paper that applies their knowledge of conservation biology to a problem in their local bioregion. Prerequisite: Ecology or equivalent background.

Plus one of the following:

Title: Ecological Restoration

Number: ENV 57150

Description: This course explores both the principles and practice of ecological restoration. The historical context of the field and foundational definitions are examined as well as the recommended best practices to design and implement an ecological restoration project. The social and human dimensions of restoration are explored within the context of resolving common conflicts and tradeoffs that occur between the science and practice of ecological restoration. The direction of the field of ecological restoration for the future is discussed in the face of global climate change and the Anthropocene. Several case studies are introduced throughout the course and the course culminates in a final assignment that asks students to critically examine a restoration project or study within their bioregion.

Title: Biogeography

Number: ENV 57130

Description: An advanced course in the study of historic and current organism distributions, biogeography treats both the patterns of these distributions and the possible causes suggested by these patterns. Students will examine questions of distribution from historic, evolutionary, ecological, and geological perspectives. The last segment of the course will be devoted to the role biogeography plays in conservation of species and systems. Students will research regional problems and bring their expertise to bear by proposing a potential solution based on their understanding of biogeographic process. Prerequisite: Ecology or equivalent background.

Title: Environmental Administrative Law

Number: ENV 54505

Description: This class examines how administrative agencies at the federal and state levels make environmental policy decisions, and how other agencies, corporations, nonprofits, and private individuals can influence those decisions. The class analyzes the administrative process, rule-making and adjudicative procedures, official notice-and-comment standards, and judicial review of agency decisions. Students will also study how legislative directives are translated into regulations, and the limitations on agency action. Prerequisite: Environmental Law and Policy.

Environmental Communication Concentration

Title: Environmental Communication

Number: AHU 56601

Description: Through readings and online discussion of communication theory, audience and rhetorical analysis, and persuasion in the mass media, students will identify mechanisms and professional practices required to communicate environmental and science policy issues. Case studies of key environmental issues in various bioregions and organizations will provide a sampling of communication models, including informational and public policy reports, objective and persuasive media reporting, and advocacy campaigns. Students will research and conduct an environmental communications campaign that incorporates public policy and planning processes, assessment of scientific data and claims, and audience analysis. This project will incorporate a pre-campaign analysis of audience and core concepts; the authoring of a coordinated body of messages, publications, and media; a timeline and budget; and an assessment process to evaluate the campaign's success.

Plus one of the following:

Title: Media Advocacy

Number: AHU56602

Description: Successful advocacy campaigns rely on explanatory and persuasive messages published in a range of media for diverse audiences. In this workshop-focused course, students develop expertise in research, writing, editing, media production and strategic communication analysis. Writing and media assignments develop messages on bioregional and global issues and include presentations, audio/video scripts, media productions, news releases commentary, blog posts and websites. A portfolio of work features explanatory and persuasive publications that support civic engagement, sustainability, and environmental advocacy campaigns.

Title: Online Content Creation

Number: COR 57703

Description: A convergence of online media tools and platforms allow communicators to create a vibrant messaging environment. In Online Content Creation, students learn the web publishing skills needed to curate online content and publish original work. Students will survey bioregional content, assess a variety of platforms and delivery processes, curate media, write blog posts, and produce original digital media while developing a thematic online portfolio.

Title: Environment Writing Workshop

Number: AHU 52235

Description: This course approaches "environmental writing" as a complex set of genres that spans settings, disciplines, and cultural traditions. We will address the stylistic and rhetorical strategies of a range of these genres and traditions, including popular science writing, Indigenous oral and written "texts," cross-cultural traditions of natural history writing, and environmental writing in the Anthropocene. Students will craft their own environmental writing, including essays, poetry, creative fiction and non-fiction, and field journaling, shaped by our reading and discussion, in a workshop setting.

Self-Designed Concentration

Courses to be determined in consultation with Program Director

Master of Science in Resilient and Sustainable Communities Electives

(choose two additional electives from these or other relevant graduate courses)

Title: Geographic Information Systems

Number: ENV54100

Description: This is an introductory course that will cover the historical development, theoretical basis and practical application of geographic information systems (GIS) technologies. This course will accomplish these goals by providing you with an understanding of: (1) numerous data formats and how to obtain freely distributed data, (2) a variety of open-source and freely distributed GIS software packages, (3) how to manage and construct GIS databases, and (4) applied GIS through case studies and individualized projects.

Title: Emergency Management and Communication

Number: ENV58800

Description: Students in this course will develop a bioregional risk analysis examining floods, wildfires, earthquakes, climate change impacts, public health crises, and food and social inequities. Students will gain knowledge and skills required of emergency managers and communicators by staffing virtual scenarios that apply principles of the National Incident Management System (NIMS), and by developing resiliency-based pre-plans and responses for immediate and long-term impacts of emergencies.

Title: Field Botany

Number: ENV57135

Description: A review of topics in plant anatomy, morphology, physiology, evolution, systematics, and field methods to provide students with the botanical knowledge and skills they need to support work in ecological research, plant conservation, forestry, range management, sustainable agriculture, ecological landscape design, land use planning, education, and related fields. Prerequisite: Ecology or equivalent course.

Title: Environmental Journalism

Number: ENV56500
Description: Issues like the coronavirus, climate change, renewable energy, plastics in the ocean and countless others are environmental, but also economic, social, political and matters of justice. Environmental journalists write about them from multiple perspectives, in a way that is clear to non-specialist readers, so people have the information they need to gauge risks and take action. In this course, students will analyze various types of environmental journalism and practice the skills necessary for researching and conducting interviews scientists, policy makers and activists, then writing, revising and submitting a story for publication in a newspaper, magazine or digital publication.

Title: Land Use Planning and Policy

Number: ENV51250

Description: This course reviews traditional legal controls over land in the United States, including zoning ordinances and subdivision regulations at the local level, and state-wide planning initiatives found in states such as Vermont and Oregon. Students will consider those land-use laws and societal factors that contribute to blighted inner cities and suburban sprawl, develop familiarity with relevant policies in their own bioregions, and consider modern planning techniques and emerging trends in sustainable and resilient community development.

Title: Forest Ecology

Number: ENV51100

Description: This course explores the primary ways in which organisms interact with abiotic components of North America's various forest communities, from northern hardwood forests to temperate rainforests. Of particular interest are the processes—both natural and anthropogenic—that determine how organisms are distributed throughout a forest community. By gathering data and applying generalized patterns in their local ecosystems, students will develop a hands-on knowledge of ecosystem processes that provides a fundamental context for understanding modern ecosystem management. Students will read a body of current literature in the field and produce a significant paper focused on issues pertaining to forests in their bioregion. Prerequisite: Ecology or equivalent course.

Title: Limnology

Number: ENV58285

Description: Limnology is the study of the interrelationships of the ecological functions and trophic structures of the organisms of fresh and saline inland waters as they are affected by their dynamic physical, chemical, and biotic environments. It encompasses the integration of drainage basin, movements of water through the basins, and biogeochemical changes that occur as water moves and as waters remain standing. Thus limnology includes study of the ecological systems of streams, rivers, reservoirs, ponds, and lakes of incredible size and compositional variation. Students will apply the major theories, concepts and practices upon which limnology relies, including aspects of biology, chemistry, physics and geology, to a bioregional or case study, and be able to articulate the differences and commonalities among the components of limnological systems and how some techniques of limnology might be applied to practical conservation problems.

Title: Field Journaling

Number: AHU/ENV58350

Description: With an emphasis on discovering, carefully observing, and accurately recording information in the field, this course provides a natural foundation for further environmental writing workshops. Students not only practice sustained field inquiry—with special emphasis on sketching as a technique of identification and classification—but will also consider the epistemological implications of

their habits of perception. Throughout the class, students will create thorough profiles of objects, organisms, and ecological associations discovered in the field; coursework will culminate in a portfolio of these profiles, prefaced by a reflective essay exploring the challenges and insights encountered during the process of dedicated field investigation.

Title: Photography for Environmental and Social Justice Activism

Number: ENV55100

Description: As our environment and the living beings it supports continues to worsen under our "stewardship", our need to create accessible, persuasive, and constructive responses increase. Photography provides a powerful tool for informing others and helping them to empathize and act. Now, with a camera in everyone's pocket, society is flooded with images but only the smallest fraction catches our nation's attention or imagination. Even fewer images change our views, open our minds, or, ultimately make a difference. And fewer yet, affect us in ways that ameliorate our global condition. In our class, we will study the impact of diverse images both historical and contemporary and analyze how the greatest photographers craft compelling narratives that somehow resonate. As we study others' photography as critical consumers of imagery, we'll begin to hone our own photographic skills. Employing lessons and workshops, strategically assigned and individually chosen photo shoots, lots of image sharing and the artistic and editorial discussions that emerge, we will collaborate and challenge one another to create important images that can begin to improve our wounded world. While the environmental topics we cover will vary class by class and follow the lead of students' interests, the topics should address important, relevant, timely, consequential, environmental (broadly considered) issues in need of further attention. As such, this course will hone student's ability to understand imagery, investigate issues of critical environmental concern, develop a voice and message regarding their chosen issue, and craft that voice visually through photography. A broad consideration of the term "environment" has led previous students to explore issues such as these: industrial contamination, forest fires and the urban interface, community gardens and industrial agriculture, change makers and society's invisible people, resource waste and rampant consumerism, environmental justice and racism, radicalization of politics and public health concerns, concepts of citizenship and immigration, houselessness and mental health, pandemic response, and right/left concepts of the first amendment's protection of free speech.

Title: Funding Change: Grant Writing & Nonprofit Management

Number: GRA51102

Description: Social and environmental change projects require funding. In this class we will discuss philanthropy and the structures of the Non-profit enterprise. We will explore the ways philanthropies and nonprofits set priorities, how nonprofit leaders cultivate donor relationships, and how to vision a project that is competitive in the funding arena. We will also explore new and nontraditional funding structures including social business, social entrepreneurship and grassroots fundraising strategies. Core concepts of the course will include the essentials of visioning, researching, writing, obtaining, and maintaining grants. This conceptual work will be implemented through an intensive short-term internship working with a local change organization to actualize and submit a funding proposal.