

2021-22

Reid Bertone-Johnson (LSS): LSS 255: Art and Ecology

Add a multi-week project to incorporate the Ada and Archibald MacLeish Field Station with the goal of introducing students to on-going works and research and the Arts Afield program, and ultimately developing new work (“data”) that allows them to reflect on the temporal and ecological aspects of LTER sites that would be included in the Arts Afield database.

Evangeline Heilger (AMS): new AMS 300 level seminar

Develop a new course that combines historical, theoretical, and material cultural sources about housing justice and housing injustice in the United States, including a significant hands on component that teaches students how to build a tiny house, while critically considering scholarly and popular cultural sources engaging the present, past, and (potential) future roles of small homes in America. Topics such as cultural-historical trends in home size and location and materials used to build and repair homes will be considered to better understand race, class, disability, settler-colonialism, gender, age, sexuality, “the urban,” nature, sustainability, nation, and other analytics key to cutting-edge American Studies scholarship.

Ellen Kaplan (THE): new THE 312tl Masters & Movements: New Topic Devising Performance in Dialog with the Landscape

Develop a new course that will provide students an opportunity to engage with the landscape by exploring and creating work that explores the relationship between self and place; help students uncover the histories that lay within the particular landscapes that we occupy (in all senses of that word); become acquainted with literature, poetry, and critical essays of ecologically aware arts; create artworks that are curious about the land, and develop an open awareness of ecology as creative, caring, humane path toward nurturing the environment; and introduce them to the wonderful resource that is the MacLeish Field Station.

Sabina Knight (WL/ENG): ENG 171/WLT 272 Composing a Self: Chinese and English Voices

Develop a robust unit to explore governmental and activist responses to the environmental crisis in China and the United States, and provide an opportunity for students to explore their own fears and actions they may take to influence personal and political change.

Jack Loveless (GEO): ENV/GEO 150 - Mapping Our World: An Introduction to Geographic Information Systems

Restructure and write the course learning modules to enable a transition to teaching using ArcGIS Pro. These learning modules will strengthen partnerships and projects with the MA Departments of Ecological Restoration and CEEDS focused on restoring streamflow to the Nashawannuck Brook, the Smith landscape master plan, and work at the MacLeish Field Station.

Steve Moga (LSS): new course, LSS 315: Urban Ecological Design

Develop a set of resources for and orient the new course around a series of design interventions or case studies to provide more depth, complexity and nuance to class discussions and student learning about design and the urban landscape.

Fadia Nordtveit (Interdepartmental, Conway Center): IDP 146: Critical Perspectives in Entrepreneurship

Incorporate themes of sustainability and the environment, including by introducing maker-space sections and adding immersion workshops with sustainability entrepreneurs who will introduce students to sustainable green entrepreneurship practices and help connect business design and sustainability.

Kathleen Pierce (ART/ARH): new course, **ARH 27x Representing Animals**

Enhance this new course by incorporating an element of project-based learning in the course connected with the primary learning goal of having students come to understand that all images—even scientific ones—are constructed. This new module would expose students to a scientific illustrator, and possibly an ecologist or zoologist, and then provide them an opportunity to engage in the practice of scientific illustration themselves, based on a visit to the MacLeish Field Station and the plant and animal life there.

2020-21

Molly Falsetti-Yu (SPN/POR): SPN 230 – Latin American and Peninsular Culture and Society, curricular event open to all students

Maja Tillmann Salas will give a lecture about her involvement as a facilitator of participatory video in many Andean communities. The topics that the community and Maja reflected on during the video trainings and the making of the videos themselves were cultural affirmation, the recovery of ancestral traditions, food sovereignty, and climate change. All of these topics are of interest to many students and faculty as well as community members. Participatory video as a process of producing and sharing knowledge will also be of interest to the people just mentioned. She will also share about the learning she gained in these communities. She has collaborated with a variety of NGOs including PRATEC (Andean Project of Peasant Technologies), with IIED (International Institute for Environment and Development) and Coventry University. She also collaborated on the project “Conversations with the Earth” (Indigenous Voices on Climate Change). Maja will also conduct two workshops with students in SPN 230 (Climate Voices) about participatory video.

Bosiljka Glumac and Sara Pruss (GEO): curricular event open to students

Lecture by Dr. Maria G. Honeycutt - “Science to Policy to Practice: The Trials and Tribulations of Adapting to Climate and Weather Hazards”. This lecture is the Smith College contribution to the Annual Five College Geology Lecture Series. Dr. Honeycutt is the Senior Policy Advisor for

Disaster Resilience with the National Oceanic and Atmospheric Administration (NOAA). Students and faculty from all Five College institutions regularly attend lectures in this series. Dr. Honeycutt's emphasis on climate and weather hazards is expected to attract a large audience from across disciplines, especially in this Year on Climate Change.

Richard Millington (ENG): ENG 100 – Nature's Nation, plus lecture support
Adapt readings, including "Climate Change in the Here and Now," a lecture by Min Song, Professor of English, Boston College as a public lecture held in connection to ENG 100, "Nature's Nation". Song, an important scholar of Asian American literature, is working on a book called 'Everyday Denial and Climate Lyricism'. His lecture 'lays out the challenges facing individual attempts to sustain attention to this topic and the ways in which contemporary literature, especially by writers of color, can contribute to a practice of reading for climate change that involves the conception of "everyday life projects."

Alex Barron (ENV): ENV 201/202 – Researching Environmental Problems
Adapt the curriculum and materials to accommodate COVID-19 related constraints for remote instruction around the themes of campus energy and energy/climate more broadly.

Reid Bertone-Johnson (LSS): GEO/ENV 150 toward LSS 2xx – Introduction to GIS for Designers and Planners
This will be a new course offered by the LSS program. Currently, geosciences offers an introduction to geospatial analysis (GIS) that is frequently over enrolled and they are unlikely to be able to continue teaching their course on a regular basis. This new LSS GIS course would be able to be offered in years that Geosciences does not offer their GIS course. Students will learn the history, theory, technology and application of GIS by a wide range of geospatially engaged professionals that do work with environmental data. Projects will include collaborations with the Mill River Greenway Initiative, the City of Northampton's Office of Planning and Sustainability, Healthy Hampshire, and the Pioneer Valley Planning Commission.

Jon Caris (SAL/Libraries): IDP 109 – Aerial Imagery and Cinematography
This course is an experimental, interdisciplinary course that is newly expanded to a 2-credit course offered during the fall/spring semester (not interterm). Designed in collaboration with a student pedagogical partner facilitated by the Sherrerd Center for Teaching and Learning, the course offers a rich blend of fieldwork, community-based group projects, learning dynamics and intentional reflection of peer-to-peer collaboration. Teaching and learning in this course is much like map-making – iterative, creative and scientific. The proposed enhancement revolves around making our engagement at MacLeish more well-rounded in terms of research methodologies, as well as building a more sustainable spatial footprint at MacLeish for the Smith community to utilize. The SAL has enjoyed an extensive history working at MacLeish, spanning the arts, humanities, social sciences and STEM disciplines through course projects,

short-term Kahn projects, special studies, honors theses, summer internships and beyond. The SAL uses MacLeish to play an invaluable role for training and developing these student projects.

Albert Kim (SDS): SDS 390 – Advanced Topics in Statistical and Data Sciences

Develop a new experimental course on Ecological Forecasting which will incorporate concepts and tools to help students learn how to make ecology a more predictive science. Exposure to a new, very applied setting of data analysis, will provide SDS students the opportunity to make meaningful contributions and to "learn how to learn" biology and ecology in the context of this time of unprecedented environmental challenges. This course presents research on statistical and machine learning models for forest ecology. In particular, students will be introduced to methods for model assessment and selection. Upcoming research with the Smithsonian Conservation Biology Institute and collaborations with the Forest Global Earth Observatory global network of scientists and forest research sites will be incorporated into this course to advance long-term studies of the world's forests.

Sabina Knight (EAL/WLT): EAL/WLT Modern Chinese Literature

Modify the course by integrating literary representations of the environment and the environmental crisis as a major topic. I would hope to be able to highlight and integrate more related works (such as about nature, consciousness raising and social activism) in earlier sections and then include two to four completely new units on eco-literature and eco-cinema. I would also introduce an assignment in which students would practice using social media to express concern about the environment through some combination of (a) quotations from, (b) reflections on, and (c) relevant images to accompany stories, novels and films.

Sarah Mazza and Greg de Wet (GEO): GEO 102 – Exploring our Local Geologic Landscape

Historically, GEO 102 has used the Pioneer Valley as it's classroom, taking our students on semi-weekly field trips to the Dinosaur Footprints Preserve in Holyoke, Mt. Tom State Park, Mt. Toby State Park and other geologic outcrops that are preserved in our area. The course goal is for students to understand how the underlying geology effects the landscape by understanding fundamental concepts associated with the rock cycle, plate tectonics, and paleoclimate events with a hands-on approach. Due to COVID19 these field trips are no longer possible, and the course must be modified. This grant enables preparation to maintain the hands-on nature of this course by eliminating van-based field trips and instead structuring walking tours and video tours of our campus and local sites. Students will find evidence of glacial erratics on our campus, explore rivers systems and sediment transport, and examine historic flooding events and mitigation strategies. Longterm, these modifications will enable fewer off campus trips and reduce campus carbon footprint.

Fraser Stables (ART): ARS 282/ARS 383 – Photo I and II

Modify the courses through a substantial rethink of the Photo I and II course sequence. In

Photo I, we currently work with thematically open projects that require students to work through specific technical skills and find ways in proficient, purposeful and conceptually resonant ways. In Photo II, we build upon this foundation, and move into assignments that connect to specific approaches within contemporary practice. Photo I walks a tightrope to build discipline while nurturing thematic exploration and Photo II re-tethers that rope to a shifting array of anchors that are thematic, conceptual, material and topical, in order of students creating their own language through interrogative and independent modes of production. This request is for the support of units that enable exploration of the environment, environmental issues, or sustainability.

Maria Succi-Hempstead (ITL): ITL 220 – Intermediate Italian

Create a 3-4 weeks long unit where students will develop the necessary vocabulary to learn about the most concerning environmental issues in Italy today. Through the discussion of short stories, movies, articles and other authentic materials, students will learn how to engage in discussions regarding these issues. Particular focus will be given to the impact of the COVID-19 lockdown on the environment and the potential implications.

2019-20 Curricular Enhancement Grants: Awardees and Projects

Elisabeth Armstrong and Kelly Anderson (SWG): SWG: Introduction to the Study of Women and Gender and SWG 230: Gender, Land and Food Movements

Develop new class projects and a new unit which will link the courses and address methods for the analysis of statistical data, and assess several climate change effects on the local community organization Gardening the Community in the context of feminist environmentalism.

Alexis Callender (ART): ARS 163: Drawing I

Modify a section of the course to focus on aspects of climate, ecology, and interconnected systems as drawing subjects in response to the 2019-20 Year on Climate Change. The class will be reconfigured to teach technical drawing through exercises that relate to social and cultural themes around climate change, ultimately engaging students in a visual inquiry around climate change and chains of production that are embedded in our favorite objects and those we use every day.

Jon Caris (Spatial Analysis Lab): IDP 109: Aerial Imagery and Cinematography

Revise the course to build capacity and scaffold a framework that teaches across levels of uses and degrees of users for drone technology by introducing more advanced topics related to remote sensing and image processing.

Matt Donovan (Poetry Concentration): ENG 112: reading Contemporary Poetry
Develop an “Artists Responding to Climate Change” workshop together with guest poet Camille Dungy to broadly engage Smith students in responding to climate change through art.

Molly Falsetti-Yu (SPN/POR): SPN 230: Climate Voices
Develop a new course to examine climate change and cultural-ecological narratives in Spanish-speaking regions of the world. A visiting guest from Peru will lead workshops about participatory community videography, and engage with students around her work on recovery of ancestral traditions, climate change, and food sovereignty.

Bosiljka Glumac (GEO): GEO 334: Carbonate Sedimentology
Design new courses research projects that move beyond the theoretical aspects of carbonate sedimentology and stratigraphy and instead use modern technological advancements to better understand the problems that Small Island Developing States in tropical regions face due to global warming.

Bosiljka Glumac (GEO) et al: ENV 323: Climate and Energy Policy, ENV 312: Sustainable Solutions, GEO 251: Geomorphology, GEO 108: Oceanography: An Introduction to the Marine Environment
Modify class modules for multiple courses to include engagement with Dr. Maria G. Honeycutt, Senior Policy Advisor for Disaster Resilience with the National Oceanic and Atmospheric Administration (NOAA) as part of the Year on Climate Change. Honeycutt will also give a public lecture “Science to Policy to Practice: The Trials and Tribulations of Adapting to Climate and Weather Hazards” while on campus.

Benita Jackson (PSY): PSY 240: Health Promotion
Develop a new course module to engage students in using both the United Nation’s fall 2018 report and cutting-edge psychology research to identify a potential campus policy change related to climate change that could promote human health.

Joel Kaminsky (REL): FYS 117: The Bible and the American Public Square
Develop 2-3 additional class sessions dedicated to the topic of the bible and the environment to help students see multiple perspectives in consideration of our current environmental crises.

Elisa Kim (ART): ARS 380: Architectural Design Studio: Transient Spaces—Terrestrial Bodies
Develop a studio course to engage issues of migration and mobility in the face of sea level rise along coastal Massachusetts.

Christiane Metral (FRN): FRN 220: High Intermediate French
Develop new curriculum and modify course material to offer a 4-week unit on the environment.

Richard Millington (ENG): ENG 100: Nature’s Nation
Develop a class module in response to the Year on Climate Change to explore environmental

writing in light of climate change with guest speaker Min Song, an important scholar of Asian American literature.

Camille Washington-Ottombre (ENV) and **Greg White** (GOV): ENV 240: Climate Change and Environmental Justice in Morocco Global Flex

Develop a course that will examine the multifaceted dimension of climate change in Morocco through such themes as economic development, agriculture and hydrology, policies of climate adaptation, gender politics, and migration.

Sujane Wu (EAS): CHI 352: Food for Thought: Chinese Language, Culture, Environment & Health
Develop a course focused on Chinese food culture and its impact on environment and health.

2018-19 Curricular Enhancement Grants: Awardees and Projects

Reid Bertone-Johnson (LSS): FYS 151: A River Runs Through Us

Develop projects for a new course that will introduce students to an interdisciplinary study of our landscape and environment and enable them to deeply connect with the Mill River in its cultural and natural contexts.

May George (ARA): ARA 101: Elementary Arabic II

Transition the curriculum and materials to create a focus on Middle East and North African culture, especially on food and agriculture.

Andrew Guswa and Susannah Howe (EGR): EGR 422D: Design Clinic

Partner with CEEDS on civil/environmental engineering projects in order to facilitate field data collection, develop safety protocols, and more fully support students in the field.

Andrea Hairston (THE): THE 312: Masters and Movements in Performance

Develop a new course that will explore and then communicate some of the local/historical/ecological impact of humans on the environments they inhabit via the performance of a site-specific music-theatre piece at the MacLeish Field Station- an episode of *Sing Earth*- in collaboration with composer and musician Pan Morigan.

Paramjeet Pati (EGR): EGR 100: Engineering for Everyone and EGR 390: Advanced Topics in Engineering section: Climate Change Adaptation

Adapt the curriculum and materials to develop new modules and exercises involving QGIS and OpenLCA to a) focus on legacy issues and design choices, and b) introduce tools for exploring environmental and socioeconomic factors that contribute to vulnerabilities of major US cities.

Camille Washington-Ottombre (ENV): ENV 201/202: Researching Environmental Problems

Modify the course curriculum and materials to incorporate new activities related to the landscape master plan renewal process that will enable students to both generate and analyze data and plan and carry out a participatory process to assess the values of the larger Smith community relative to the campus landscape.

2017-18 Curricular Enhancement Grants: Awardees and Projects

Judith Keyler- Mayer (GER): GER 200: Intermediate German: The German Environment
Adapt the curriculum and materials to create a week long section that focuses on the technology and politics of wind energy in Germany.

Mona Kulp and Cristina Suarez (CHM): CHM 346: Environmental Analytical Chemistry
Develop new teaching materials and modify the course short projects linked to faculty research interests into community-based independent research projects that engage students with off campus, real-world problems with local partners.

Paramjeet Pati (EGR): EGR 100: Engineering for Everyone section: How We Design the Environment

Develop a series of lectures, class exercises, and design problems focused on the energy-water-environment nexus analysis of urban habitats with the goal of getting at the role of climate adaptation strategies for resilient cities.

2016-17 Curricular Enhancement Grants: Awardees and Projects

Alexander Barron (ENV): ENV 201/202: Researching Environmental Problems

Adapt the curriculum and materials to cover important methodological concepts and draw links to policy. Develop core lab exercises to include off campus, real-world problems that can then translate into individual projects in a service learning setting with local partners.

Sarah Hines (HIST/LALS): FYS: The World Water Crisis

Develop a new course that takes an interdisciplinary and historical case-study approach to begin to answer the question of why 1 billion people today lack access to safe and reliable drinking water and the implications of addressing the crisis. Develop independent research projects to engage students with local water initiatives in order to facilitate an understanding of the land, water supply issues and local Western Massachusetts histories.

Niveen Ismail (EGR): EGR 390: Contaminant Fate and Removal in Aquatic Systems

Modify the curriculum and materials to explore contaminant fate and transport in aquatic systems in a more hands-on manner. Expand the number of discussion-based class sessions through integration of relevant case studies and peer-reviewed literature in addition to including a semester-long independent group project.

Michelle Joffroy (SPP/LALS): FYS: Vida y Tierra: Land and the Ecological Imagination in U.S. Latin@ Literature

Develop a new course focused on the ecological imagination in literature. Work with students and local organization *Casa Latina* to develop a series of local Latin@ land narratives with the goal of developing digital narratives to be used in a story mapping project. One ultimate goal of

the story mapping will be to create a community resource that could be used in local community building and cultural memory preservation projects.

Nancy Sternbach (SPP): SPN 245: Topics in Latin America and Penninsular Studies: Buen Provencho: Food and the Spanish-speaking world

Modify the curriculum by incorporating even more environmental concepts. Deepen student connections with farm workers and whole, unprocessed food by visiting a local farm and participating in at least one harvesting activity.

2015-16 Curricular Enhancement Grants: Awardees and Projects

Andrew Guswa (EGR): EGR 100: Engineering for Everyone

Adapt the curriculum and materials to center on water. Develop a course in which students can engage in critical analysis of historical and contemporary water issues and infrastructure in California and western Massachusetts in order to gain an understanding of the technical, environmental, economic, political, legal and cultural influences and constraints on engineering works.

Reyes Lázaro (SPP), **Denise McKahn** (EGR), and **Cristina Suárez** (CHM): CHM 346:

Environmental Analytical Chemistry; CLT 204/SPN 356: Writings and Rewritings: Queering “Don Quixote”; EGR 388: Photovoltaic and Fuel Cell System Design; and EGR 390: Thermodynamics II. Develop curriculum and materials for the courses that will provide a framework for formal dialogue in which chemists and engineers can engage literary scholars on the impact of technology on the environment and society and vice versa.

Jack Loveless (GEO): GEO/ENV 150: Modeling Our World: An Introduction to Geographic Information Systems

Transition project topics in the course to have a geoscience, environmental science and/or policy focus with a real-world application. Change the structure of the final project to emphasize the practical nature of GIS and spatial analysis in a service learning setting with a local partner.

Malcolm McNee (SPP): POR 220: Topics in Portuguese and Brazilian Literature and Culture: Topic: Contemporary Cityscapes: Mapping Brazilian Culture onto an Urban Grid

Modify course by developing two multi-modal components: on drought conditions and the water crisis in São Paulo and infrastructure development in Rio de Janeiro in preparation for hosting the 2016 Olympic Games. The components would then be explored through a number of themes.

2014-15 Curricular Enhancement Grants: Awardees and Projects

Michael J. F. Baressi (BIO) and **Amy L. Rhodes** (GEO) Cooperatively develop curriculum and materials for BIO 159Y-From Environment to Embryo: An Interdisciplinary Research Course and GEO 301- Aqueous geochemistry that are designed to investigate the potential environmental

impacts of hydraulic fracturing (fracking) of the Marcellus Shale for natural gas extraction, an environmental research question that has high relevance to the scientific community and society.

Judith Keyler (GER) Redesign GER 250- Advanced Intermediate German into GER 250- The Environmental Culture of Germany in order to foreground Germany's deep-rooted engagement with environmental issues. Develop student understanding of German environmental discourse by examining and discussing literary and journalistic texts in German, while also developing a basis for comparative studies through trips to the MacLeish Field Station.

Chris Vriezen and Christine White-Ziegler (BIO) Modify BIO 205 –Microbiology lab curriculum and materials. Instead of teaching a testable environmental microbiological hypothesis using a standard set of lab-strains, use “real unknown” isolates from soils obtained by students at a variety of MacLeish Field Station sites, which will allow for the study of different biotopes and comparison of bacteriocin producing bacteria.

Sarah Moore (EGR): EGR 110 Fundamental Engineering Principles
Enhance the course by developing a semester-long team project interwoven with the MacLeish Field Station.

2013-14 Curricular Enhancement Grants: Awardees and Projects

Jesse Bellemare (BIO): BIO 115 Biodiversity, Ecology, and Conservation Lab
Develop a formal manual that will, 1) increase focus on applied conservation issues with an eye toward integrating science and policy; 2) make extensive use of the MacLeish Field Station and the Bechtel classroom; and 3) enhance the emphasis on original, student-led research.

Naila Moreira (ENG): ENG 118: Water: Science and Politics
Develop a unit on sustainable water infrastructure to enhance science writing by introducing experiential information through physical interaction and observation. Encourage a project-based learning approach through engaging with the environment within a unit on flooding.

Paulette Peckol (BIO): BIO 268/269 Marine Ecology and Lab
Modify the course to include a unit that engages students in thinking about complex fisheries considerations through direct experience with different types of mariculture facilities in Maine. Develop internship partnership with the facilities to enable Smith students to continue to learn about environmentally sound, sustainable practices of small-scale, open- and closed-mariculture facilities.

Gregory White (GOV): GOV 242 International Political Economy
Significantly modify the course to incorporate environmental issues and analysis directly and systematically with a focus on five issue areas: development, oil, food, consumption, and climate change.

