

## **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.