Project Title: “Frontiers in Environmental Justice”
– An Online Course offering Students Background, Trends, and Engagement Opportunities with Changing Environmental Justice Movements

Project PI: Rebecca Hardin
Topics: The topics covered in the course include (1) background on the emergence of the environmental justice movement in the U.S. and (2) some foundational underlying theories, principles and knowledge forms that have infused the movement. The bulk of the course, however, will be devoted to (3) presenting information and concepts about intersectionalities (or intersecting identities and social concerns) that characterize research and action on environmental justice issues today. The course will inspire students both to learn by doing, and to leave curated traces of that learning, such as podcasts, video shorts, or even more fully developed Modules such as those supported by our Digital Learning Platform, Gala. We would like the course to mark a departure from talking head/interview style content, and offer a richer range of styles. To do this with internal coherence, clarity, and power will be challenging but we believe we have the right team to do it with AI support, and that assessing it through focus groups and a beta version for us on our own campus might allow us to make a strong offering in the tradition of innovative, team taught courses that figure among the most popular and highest enrolled of all time, such as the “from haute cuisine to soft matter science” at Harvard, or the “storytelling” MOOC which curates a mix of digital media, gaming, photography, and other materials from Potsdam.

Actors who have committed to offer a module for the course include:

UM faculty who have proposed modules for the course: Paul Mohai (U.S. health and residential exposure), Bilal Butt (East Africa), Aniket Aga (India), Tony Reames (urban energy justice)

Note: Dorceta Taylor is also interested, on the condition that some proceeds can be used to support EJ related students at SEAS. I agree heartily that this should be our financial model.

Knight Wallace Fellows who can collaborate on production or specific modules:

Chitrangada Choudhury, Independent Journalist (Orissa, India). Local rights and the role of informed consent in ecological justice and sustainability

Kate Brooks, Photographer and Director, The Last Animals, Warfare and illicit trades in Wildlife in Africa and the Middle East

Leana Hosea, BBC multimedia journalist and Director, The Water Protectors, Native American and Urban U.S. (Flint, Navaho, NDAPL) water quality struggles

UM faculty whom I will approach for modules if production is confirmed: Elizabeth Roberts in Anthropology (nutrition, toxin exposure, gender and class in Mexico city), Larissa Larsen in Urban Planning (social processes of consultation in urban planning, Ethiopia and US), Roy Clarke in Applied Physics (international energy justice; west Africa), Lutgarde Raskin in Civil and Environmental Engineering (water quality in Flint, Bangladesh)

Non local scholars with whom we have preliminary audio or video interviews, or shoot dates: Robert Bullard, Robin Kimmerer, Craig Packer, David Pellow and Martha Nussbaum.
Practitioners, Artists or Activists with whom we have preliminary interviews: Aaron Mair (President, Sierra Club), Nils Kristofferson (Wallowa Resources, Northern Oregon where the Bundy standoff occurred), and Josh Fox (Director, Gasland), Mark Binelli (Author, Detroit City is the Place to Be), Kate Brooks, Director, and winner of Tribeca Disruptive Innovation award 2017 for The Last Animals).

Those we hope to invite over the course of next year using this budget include Juan Martinez Alier, and Beverly Wright.

Syllabus: see below.

Additional materials: A wide range of materials are already available and/or only need editing given the exiting platform www.hotinhere.us. In addition we will draw from modules on Gala.

Forms of Assessment: Assessments will follow methods currently being deployed and tested by the MSC team in their collaboration with AI and CRLT, including online, peer-to-peer and user interviews or focus groups. In this way we can get both more systematic, succinct information and more open ended, essay style reactions to the course for formative data during a first phase of course development, with self assessments and more summative data being built in over time.

Expectations of benefits to SNRE: Environmental Justice emerged at SNRE after the Michigan Consensus meetings in 1990. Far from a fad, the field has engendered new forms of partnership between scholars and faith based, grassroots, or transnational environmental movements. These collaborations have produced rigorous and repeated empirical studies of exposure risk for toxins and pollutants in the U.S., emerging platforms for monitoring and connecting cases of such exposure worldwide, and increased reflexivity among environmental experts more broadly about the lack of social diversity in their field. A general course covering briefly the intellectual and institutional history, methods, social formations and transformations of the environmental justice movement will put SNRE, on the eve of its own transformation, back in a position of visibility and leadership on these issues nationally and internationally. It will be popular both among our residential students and to the many students beyond our campus who seek to understand and even to extend the environmental justice movement beyond its historic U.S. base. I anticipate offering this course initially as a hybrid residential and online 3 credit course in Winter 2018 and using the experience to finalize a full online version for regular offering starting from the following year. I will be teaching an intensive weeklong course on environmental justice in Denmark in June 2017, where there is growing interest in environmental justice, and that experience may also shape the final course plan.

Action Plan: This timeline is feasible given similar productions already completed, but also the possibility of using audio and video already recorded in the spirit of “student produced” MOOCs.

Time frame: This course will be produced incrementally over the course of the academic year, 2017-2018, beginning with content review of existing resources, framing and production planning with students in my 501.089 course, toward modules with some talking head footage
from various UM faculty, then integration of Michigan Sustainability Cases where appropriate to enable in depth exploration of issues. Care will be needed for optimizing syllabus flow and content-- I will meet with CRLT, DEI/Teaching inclusivity task force, and AI to consider the tone, clarity and accessibility of the curriculum, lesson plans, lectures, discussions, student exercises and assessments, and the integration with CANVAS or other LMS options that might best be used to offer the course.

Sept-Dec 2-17: students in my 501 course will engage to research, storyboard, and plan production for each module, including some production and/or curation work of complementary audiovisuals. The journalists and documentary film makers listed will collaborate closely to ensure high production value, and engaged styles for each module.

Jan through April 2018: formative assessment of course modules and/or beta offering to be used toward recruitment to SEAS? We could either organize small trials of each “module” within the curriculum with willing graduates of our program, or current students who are not in a position to take the course in winter term and hence will not risk its being redundant. This will enable collecting user feedback to guide further media production that may be needed, or framing of the modules and their links to assignments and assessment of student performance.

Timeline:
FIRST: Summer faculty conferral, triage and structuring of syllabus

NEXT: September will be the start of the production course, with reviews of syllabus structure for interventions, modifications and attribution of student interest/labor/core skills for a final production schedule.

Budget: funding will be spent on several possible needs: support for former Knight Wallace Fellows engagement, to coordinate travel and related logistics (for instance for shooting Martha Nussbaum), for acquisition of copyrighted audio and visual materials, and/or to offset faculty time or travel for those engaged in making a module.

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>Amount</th>
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<tr>
<td>Visits of (or to) two non-SNRE faculty members (Martinez Alier, Beverly Wright) to Ann Arbor</td>
<td>$3,000.00</td>
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<tr>
<td>($900 per air ticket, ground transportation, and visa fees, 300 @ 150/day for two days of accommodation, and $300 per visitor for meals for 3 days $100 per day)</td>
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<tr>
<td>2. Honorarium for UM faculty or KW fellow lectures and prep @ $500 per person</td>
<td>5000.00</td>
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<tr>
<td>3. Travel for Interviews with historic figures in the field @ $1500 per visit Martha Nussbaum at U. Chicago Law, David Pellow in CA</td>
<td>3,000.00</td>
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Total Budget $10,000
Short Syllabus Draft for Student Review and Revision: Environmental Justice

**Week 1: Introduction: Frontiers in Environmental Justice**
Audio and video recordings with Pellow (Lecture material and interview material from his Lecture at NRE last spring, and/or a doc style video montage using voice over from his conversations with Hardin recorded in WCBN studios)

**Week 2: Formation of the EJ movement in the US**
- Background materials: Selections from *Dumping in Dixie* by Robert Bullard, chronicling early social protests in the southeastern U.S. as these led to and linked more widespread unrest and early lawsuits about waste disposal in communities of color from Texas to North Carolina.
- Possible doc style montage with voiceover from:
  - Interview on the emergence of EJ in the US with Robert Bullard (Producer Nick Bruscato)
  - Interview on transition from Michigan conference to Washington and the Decree under Clinton (Producers Ember McCoy and Austin Martin)
  - Mohai, Paul with David Pellow and Timmons Roberts 2009.

Read: Michigan Coalition Work EPA journal piece by Bunyan. 1992

**Week 3: Philosophical Fundamentals**
Selections from Nussbaum, M. *Frontiers of Justice: Disability, Nationality, Species Membership.* [Chapter Selections: 1, 5, 6] and some review of original Rawls on the social contract
- Video recordings with Martha Nussbaum from her visit here (or working with Hot out There Producer, Harold Rice on location in Chicago)

**Week 4: Racism, Classism, and Conservation**
Selections from Juan Martinez Alier’s *Environmentalism of the Poor,* and from Dorceta Taylor’s recent book *The Rise of the American Conservation Movement: Power, Privilege, and Environmental Protection.* Released in this, the 100th year anniversary of the birth of the National Park Service, the book examines how the powerful and privileged developed conservation laws, policies and institutions to protect nature and the disproportionately negative impacts some of these had on the white working class and people of color. The book places people of color like Sacagawea, York, Harriett Tubman, Phillis Wheatly, Biddy Mason, and the Buffalo Soldiers who helped to build Yosemite firmly within the conservation narrative. It also examines the quest for exposure to wildlands and open spaces by blacks in the nineteenth and early twentieth centuries and the segregation and discrimination that awaited them in the national parks and other natural spaces. We will also read selections from Taylor, Dorceta: selections from the recently released report, “The State of Diversity in Environmental Organizations: Mainstream NGOs, Foundations, and Government Agencies,”
- Starting with edited audio from Dorceta Taylor and colleagues interview “Diversity Matters” on minorities in environmental leadership from WCBN archive
Week 5: Beyond Liberal Political Philosophy to Indigenous Knowledge Frameworks
Selections from Biologist and Native American Robin Kimmerer’s *Braiding Sweetgrass*, a consideration of how native American knowledges of plants interface with more western scientific botanical and technical traditions, and contrast in their temporalities, ontologies and values.
*Podcast with Robin Kimmerer* (producer Carla Dhillon)

Week 6: Practicing Indigenous Governance for Equity and Adaptive Development
Doc style visual content including footage from NDAPL and Navaho nation from Leana Hosea, with voices over from Gala audio content with Nick Reo, of Dartmouth, enrolled St. Saint Marie Chippewa and expert on the management of forests, wildlife, and climate adaptation by Tribal Administrations (producer: Ed Waisanen). Readings from Hardin and Askew’s Special Issue of the Journal of law, Property and Society entitled: Claims, Rights, Voices Spaces; The Global Indigenous Rights Movement.

Week 7: Transformations of the EJ Movement in the US--


-Audio and video recordings with Rob Wolcott, Paul Mohai linking unleading of gasoline in the 1980s to the challenges of lead in water in Flint today (Producers Ember McKoy and Austin Martin)
Background Material: Review the website for the Environmental Justice Organizations, Liability and Trade website, or EJOLT, and the EJ Atlas. See also Grafton et al article on EJOLT research methods in the *Journal of Politics, Groups and Identities*. 
*Interview with Juan Martinez Alier* and student teams on building a transnational EJ database.

Week 8: Emerging Transnational Movements—Anti Coal Movements? Society of Fellows Postdoctoral Scholar. This module could be a more conventional talking head shoot with Anthropologist Aniket Aga, who will talk to us about the ways that Green Movements can further marginalize those who are already vulnerable, not only here in the U.S. with what has been termed “whitelash” by mining communities against renewables and other green ideas, but also between developing economies like India and the U.S. or European Climate agendas. He will explore in a recorded interview persistent charges against Greenpeace and others about who can “afford” not to use coal…Paris Accords saw this flashpoint ignite; one reason Greenpeace is now banned in India. We could also consider interspersing with footage from the U.S., possibly...
including communities in southern Appalachia where mountaintop removal mining is now providing platforms for solar fields.

**Week 10: Intersectionalities-Gender, Class and Access to “Healthy”**


-Audio and video work (Producer, Chris Askew Merwin) with new kinds of teams linking Ethnographers and Engineers Nancy Love, Krista Wigginton, and Rebecca Hardin (INFEWS NSF Grant for work in Vermont and A2) or Lutgarde Raskin and Rebecca Hardin on their studies in Flint and Gabon, or Krista’s collaborator, Ethnographer [Elizabeth Roberts](#) on their NSF funded work in Mexico. What new kinds of work at the intersections of critical social science, microbiology, and infrastructural water management systems work are being done by and about women, and in what contexts?

**Week 12: Intersectionalities-Race, Rights, and Urban Energy Justice**

Readings with Tony Reames (to be developed, [listen to podcast with him for intro](#))

**Week 13: Intersectionalities—Conservation, Militarization, and Human/Animal Rights**

Background Materials: [Herding by Cell Phone: Technology, Social Networks and the “Transformation” of Pastoral Herding in East Africa](#), In *Human Ecology*.

“Voices from the field” – narratives of pastoralists on the edge of protected areas [Creeping Militarization of Conservation](#) is a Triple Fail and other editorials and articles.

Film Short (producers Claire Poelking and Mike Burbidge)--[Craig Packer “Real Pricetags for Lion Prides”](#) and/or footage from Kate Brooks, Director The Last Animals. Kate can talk with Rebecca Hardin about the Social Impact Campaign for that Film, raising money for education in protected area perimeters.

[Audio Short with Bilal Butt on the management of African wildlife and alienation of African pastoralists](#) (producer Ed Waisanen), and interview with filmmaker Kate Brooks of [The Last Animals](#) (producers Claire Poelking and Mike Burbidge).

**Week 14: Intersectionalities--of Disability AND Dispossession**


Possible filmed Interview with Marc Ona Essangui; Goldman Prize Winning Activist and Post Polio Advocate despite being wheelchair bound has been a leader in human rights and environmentalist activism for protection of rainforests and small scale farming in his native Gabon. By turns celebrated and imprisoned, his persistent, thoughtful actions embody elements we first encountered at the opening of the course, with Nussbaum’s eloquent plea to consider ecological or species based, migration and mobility, and disability related issues as key frontiers for justice work in our time. Combined with commentary from UM Applied Physics founder and Professor Roy Clarke, currently working to help communities in protected area perimeters have access to solar power to solve energy poverty.