Department	Faculty Member	Research Description
Accounting	Hani Tadros	Attempting to understand why firms disclose environmental information, prior literature lands conflicting results. Proponents of legitimacy theory argue that environmental reporting is elusive and deceptive while advocates of economic theory believe that this type of disclosure – driven by investors need for information – is informative and value relevant. Using panel data analysis of firms' environmental disclosures over a 14-year period, Hani Tadros examines whether an association exists between these disclosures and firms' environmental performance. He tries to understand the determinants of firms' environmental reporting to better understand the motivation of firms to disclose such information.
Art, Environmental Studies	Samantha DiRosa	Samantha DiRosa's research investigates the intersections between art, activism, sustainability, environmental justice, and eco-spiritual practices. In 2008, serving as a Sustainability Faculty Scholar, she worked to integrate dialogues on sustainability into the Studio Art foundations curriculum. This led to further pedagogical research, supported by a two-year fellowship from Elon's Center for Advancement of Teaching and Learning, to create more visible bridges between Art and Environmental Science, while broadening interdisciplinary dialogues on sustainability and the environment. Her latest research endeavors include the development of practices to help mitigate eco-anxiety and eco-grief. Additionally, her artwork, which has been shown extensively nationally and internationally, explores our disconnection from the natural world, environmental degradation, and our atomic legacy.

Department	Faculty Member	Research Description
Biology	David Vandermast	David Vandermast's research looks at the long-term dynamics of plant populations and communities in North Carolina. His research most often focuses on forest recovery from disease, plant population responses to changes in environmental conditions, invasive plant abundance in forest communities, secondary successional processes in forests of varying composition and structure, and the structure and composition of patches of old forest in the NC Piedmont called “forests of continuity”. More recently, Dr. Vandermast has focused on the use of trees for carbon sequestration. He is a member of the Offset Network Advisory Committee, which focuses on promoting accessible and affordable carbon offset programs.
Biology	Linda Niedziela	Linda Niedziela's research interests include the toxicological assessment of human impact on aquatic environments. She has mentored many student projects looking at how toxic compounds released into the environment from industry, agriculture, or pharmaceutical use impact the survival, development or fertility of aquatic organisms. Understanding the toxicity of these contaminants can lead to the development of less toxic alternatives or stronger regulation of chemical use. Another aspect of her research is to use zebrafish as an aquatic model organism to investigate how these environmental compounds and pharmaceuticals cause harm and then apply that information to human health risk.
Biology, Environmental Studies	Brant Touchette	Brant Touchette's research centers on wetland vegetation and the role climate change plays on wetland plants. This includes the impacts of elevated CO2 levels and sea-level rise on coastal marshes and the consequences of decreased precipitation on freshwater wetlands. Research also includes restoration of rare ecosystems such as coastal maritime swamps and lotic wetlands used by endangered species. He is also on the editorial board for the peer review journal Aquatic Biology.

Department	Faculty Member	Research Description
Biology, Environmental Studies	Mike Kingston	Mike Kingston's research focuses on the ecology of microscopic algae that live in sand beaches, estuaries, and on the banks of freshwater streams. A second area of research focuses on community ecology and the effects of climate change, introduced species, and predation on the colonization of subtidal hard substrates by invertebrate marine animals.
Chemistry	Anthony Rizzuto	Dr. Rizzuto's research lab focuses on the role of chemical species in various atmospheric and environmental processes. These projects include: 1. The study of microscopic atmospheric water droplets and how their chemical composition impacts cloud formation and evaporation rates. This information plays an important role in furthering our understanding of oceanic and atmospheric chemistry, which in turn can be used to develop more accurate climate models. 2. The study of carbonic acid (the centerpiece of the global carbon cycle) as it pertains to ocean acidification, nanoparticle sequestration and carbonation, and increased atmospheric carbon dioxide levels. 3. The study of aerosolized nitrous acid (HONO) decomposition and its impacts on NOx chemistry and the global nitrogen cycle. HONO is a precursor to a number of radical species that significantly impact atmospheric chemistry, in particular ozone depletion. Understanding the kinetics associated with HONO reactions will inform on how best to protect our ozone layer.

Department	Faculty Member	Research Description
Chemistry	Jen Dabrowski	In a world with limited supplies of crude oil there is a growing need for alternatives methods of accessing the products responsible for the modern quality of life desired by society. Currently the majority of consumer products (e.g., medicines, plastics, electronics, etc.) are produced from non-sustainable petroleum-derived substances. Jen Dabrowski's research utilizes the principles of organometallic chemistry to design and apply more Earth-abundant catalysts to solve challenges in the creation of feedstocks for consumer products from biorenewable resources. Current efforts have focused on sugars as a rich scaffold for diversification.
Chemistry	Justin Clar	Dr. Clar's Research group focuses on the release and transformation of trace metals in both natural and engineered environmental systems. Since the industrial revolution, economic investments in research and development for new technologies has far outweighed the amount allotted to downstream environmental implications and human health concerns. As a result, environmental scientists are consistently put in the role of remediation and mitigation, as opposed to prevention. The goal of our research group is to understand how anthropogenic activity alters the cycling of trace metals in the environment, with special attention paid to changes in chemical speciation.

Department	Faculty Member	Research Description
Chemistry	Karl Sienerth	Karl Sienerth's research involves the synthesis of new compounds that have the potential to help humans mimic photosynthesis. Students in his research group collaborate to develop methods for making the compounds in the lab, and then use a wide range of instrumental methods to analyze the compounds. Once the basic structures of the compounds are confirmed, they are tested to see if they can make the conversion of carbon dioxide to other useful compounds more efficient. Not only does each compound studied have the potential to serve as a CO2 conversion catalyst, the research as a whole adds to the broader body of knowledge about CO2 chemistry, bringing humankind closer to a day when we can develop a complete carbon cycle to minimize the effect our fuel usage has on the planet.
Cinema & Television Arts	Doug Kass	As a filmmaker, Doug Kass' scholarship includes film projects of various sorts. From 2018-2020 he made public service announcements for the United Nations AIDS outreach organization, UNAIDS. These projects addressed global issues of health disparity.
Communication Design	Brian Walsh	Brian Walsh's current research interest involves examining the present state of the funeral industry, and how its emphasis on 'traditional' means of interment cause soil, water and air contamination, as well as waste tremendous amounts of natural resources. Walsh explores alternative funerary rites that minimize environmental impact and aim to fundamentally change care of the deceased in America. He teaches in the iMedia graduate program.

Department	Faculty Member	Research Description
Economics	Brooks Depro	Brooks Depro is an environmental economist and examines the relationship between housing choices, environmental health risks, and environmental justice. His work in this area has been published in the *Journal of the Association of Environmental and Resource Economists, Land Economics* , and the edited volume of *The Political Economy of Environmental Justice* . His principles of economics classes cover environmental topics, and he also teaches advanced courses, such as Markets and Environmental Justice and the Moral Limits of Markets. He teaches in the MBA program.
Economics	Casey DiRienzo	Casey DiRienzo focuses on the economic and business country-level factors that contribute to a country's overall ability to meet environmental performance measures. During the 2000 Millennium Summit and 2005 World Summit, government and policy leaders pledged their countries' support for environmental sustainability and their commitment to meet the environmental goals established in these summits. Her research has focused on the economic, business and socio-economic variables that have led some countries to be more successful in meeting these goals than others. A recent publication explores the role of women and corrupt practices on environmental outcomes.
Economics	Steve DeLoach	Steve DeLoach has published papers and mentored numerous student theses dealing with various aspects of sustainability. Much of this work has examined the role of international trade on environmental and working conditions across countries. His most recent work has examined the impact of access to microfinance on household decision-making in developing countries.

Department	Faculty Member	Research Description
Economics	Tina Das	Tina Das focuses on the economic and business country-level factors that contribute to a country's overall ability to meet environmental performance measures. During the 2000 Millennium Summit and 2005 World Summit, government and policy leaders pledged their countries' support for environmental sustainability and their commitment to meet the environmental goals established in these summits. Her research has focused on the economic, business and socio-economic variables that have led some countries to be more successful in meeting these goals than others. A recent publication explores the role of women and corrupt practices on environmental outcomes.
Education & Wellness	Katie Baker	Dr. Katie Baker's research focuses on mathematics teaching and learning that centers student thinking and students' contributions. Her work considers if and how learners get access to high-quality mathematics education and what this access affords. Mathematical access especially aligns to the United Nations Sustainable Development Goal 4 of Quality Education, but impacts many of the other goals through the problem-solving and critical thinking skills it affords learners. In order to consider and reflect upon various ways to learn mathematics, she collaborates with Dr. Scott Morrison around teaching and learning mathematics outside and supports undergraduates researchers in their pursuits of expanding the creativity and richness of mathematics instruction that also fosters a connectedness to nature.

Department	Faculty Member	Research Description
Education & Wellness	Scott Morrison	Scott Morrison's research is focused on ecologically minded teachers and everyday environmental education. Ecologically minded teachers are not necessarily trained in environmental education or required to integrate environmental issues into their classrooms and curriculum, yet they do so because of their values and beliefs. He has written about the content and pedagogy of ecologically minded teachers (Morrison, 2018) as well as the responses of seven teachers to a professional development experience on eco-justice education (Morrison, 2018). He also mentors undergraduate research in environmental education. With Samantha Friedman '18, he published an article on the effects of being in nature on autistic elementary students and their special education teachers (Friedman & Morrison, 2021). With Abigail Decker '21, he published an article on the perceptions that nature-based educators have on the role of gender in their work with children (Decker & Morrison, 2021). He teaches an environmental education course outside in a forest classroom, a garden-based learning course in partnership with two elementary schools, and an interdisciplinary capstone course on nature awareness, also in a forest classroom.
English	Cassie Kircher	Cassie Kircher is a nature writer, who writes about Alaska's Kenai Peninsula, Wisconsin's lake country, and her seven years working and living as a park ranger in Colorado's Rocky Mountain National Park. Her first collection of essays, Far Flung: Improvisations on National Parks, Driving to Russia, Not Marrying a Ranger, the Language of Heartbreak, and Other Natural Disasters, was published in spring 2019 by West Virginia University Press. Kircher is currently working on her observations and experiences with the absence of race in national parks.

Department	Faculty Member	Research Description
English	Dan Burns	Dan Burns' sustainability-related research on the emergent literary subgenre of "cli-fi,"—short for speculative fictions of environmental crisis, climate change, and ecocatastrophe—was presented at two comparative literature conferences in 2013 and 2018. The first, a paper entitled "Topography, Topology, Totality: Narrativizing Scale in the Novels of Joseph McElroy," was presented at the American Comparative Literature Association Conference (ACLA), University of Toronto. The second, a paper entitled "Secret History as Subterraneity: Excavating Chris Abani's Las Vegas," was delivered at the annual meeting of the Society for the Study of the Multi-Ethnic Literature of the United States (MELUS), University of Nevada-Las Vegas.
Environmental Studies	Amanda Chunco	Amanda Chunco's primary research interest centers on integrating field studies with geographic models to aid the conservation of rare and endangered species. Dr. Chunco's work focuses on the impact of human activity (particularly climate change and land-use) on the distribution and abundance of wildlife. She works primarily with mammals and amphibians, but the general methodology she uses is applicable to the conservation of biodiversity as a whole.
Environmental Studies	Kelsey Bitting	Kelsey Bitting has been involved since the fall of 2019 in a cross-institutional effort to gather energy and momentum toward sustainability at institutions of higher education via conference presentations at the AAC&U General Education and Assessment meeting, the Earth Educator's Rendezvous conference, and a webinar for the POD Network's Earth-Centered Special Interest Group. Collaborators include Chelsie Romulo (University of Northern Colorado), Rob Turner (University of Washington, Bothell), and Scott Werts (Winthrop University).

Department	Faculty Member	Research Description
Environmental Studies	Robert Charest	Robert Charest's research and practice involve community oriented design build projects, including innovative urban structures, micro housing and interior product design. With community partnerships, Professor Charest offers students hands-on experience while participating in inner city revitalization. His scholarship and involves responsible design and stewardship towards the environment and includes activities within the framework of engaged and applied scholarship.
Environmental Studies, Biology	Janet MacFall	Janet MacFall's primary research interest is in soil ecology, with a focus on the role of roots and the microbial community in soil processes. This is especially relevant to sustainability because these soil organisms are responsible for nutrient cycling/retention/conversion in soil. They affect the ability of soil to support plant growth (food and fiber production) and for soil/vegetation to regulate contaminants moving with water flow. Understanding the regulation of materials in surface and ground waters by soil communities is essential for management of clean surface waters. Clean water is critical for drinking, recreation, agriculture, commerce and ecological integrity. Again, this is relevant to principles of sustainability.
Finance	Adam Aiken	Adam Aiken's research has studied how investor ideology affects ESG investment decisions using the equity and mutual fund holdings of the members of the U.S. Congress. This work was published in Management Science (https://pubsonline.informs.org/doi/abs/10.1287/mnsc.2018.3175). His recent interests include the inherent measurement issues in ESG firm ratings and how investment managers learn about and weight the different ESG choices of firms. He teaches in the MBA program.

Department	Faculty Member	Research Description
Finance	Raj Gupta	Raj Gupta is developing a pipeline of ethics and sustainability research linked to his areas of expertise in finance and business administration. His ongoing and recent work include empirical studies of financial performance and value creation looking at the competitive advantage of sustainable companies, both domestic and global. His past work includes studying linkages between the Dow Jones Sustainability Index (DJSI) and other broadly-based financial indices. He teaches in both undergraduate and graduate business programs.
History & Geography	Honglin Xiao	Honglin Xiao's research focuses on understanding the interactions of the societies, economies, governments and the environment, with separate research in China and the Piedmont region, in order to understand the driving forces of land-use change, develop diagnostic models of cover change and produce integrated models for future sustainable land use and environmental restoration. The study of land use land cover change is central to the study of global environmental change, ecosystem degradation and biodiversity loss.
History & Geography, Environmental Studies	Ryan Kirk	One of Ryan Kirk's research topics is water management in the Piedmont region. With expanding development, growing populations and increasing frequency of drought cycles in this region, sustainable water management is vital for future growth planning. His research focuses on the effects of development on water quality in Piedmont communities. Another research topic involves mapping and modeling land use and land ownership patterns in the Piedmont and Appalachian regions. Understanding the environmental legacies of past land use and modeling scenarios of future land use help us understand the extent and consequences of land owner choices.

Department	Faculty Member	Research Description
Law	Caroleen Dineen	During the 2020-2021 and 2021-2022 academic years, Caroleen Dineen's research has focused on legislative approaches to addressing nutrient pollution's impact on harmful algal bloom (HAB) proliferation. HABs can poison aquatic life, cause lethal oxygen depletion in the aquatic ecosystem, and create an aquatic "dead zone" incapable of sustaining plant or animal life. HABs also may create serious health issues and negatively impact recreational and commercial aquatic uses. Nutrient pollution results from a variety of sources, including fertilizer application, animal waste, stormwater runoff, and sewage treatment facilities. The research explores various nutrient pollution legislative initiatives and analyzes their feasibility and efficacy.
Law	Vanessa Zboreak	Vanessa Zboreak researches state-level regulatory science to determine the best way to assess the validity of environmental and economic data in rulemaking. Much of the work is focused on the use (or non-use) of long-range predictions on climate change in rulemaking, and the use of non-economic community valuation in cost benefit analysis for rules about land use and development.

Department	Faculty Member	Research Description
Management & Entrepreneurship	Brittany Mercado	From 2014-2018, Brittany Mercado led a large-scale data collection sponsored by Korn Ferry that involved eight academic research teams. They investigated personality and work behaviors in the U.S., Germany, South Korea, Japan, China, Mexico, and South Africa. Specifically relating to sustainable development, they assessed employees' green work behaviors, employees' behaviors that are linked with and contribute to environmental sustainability. These include efforts to conserve and recycle, for example, in the course of daily work. The study examines individual-level factors, such as personality and cognitive ability, that can be used to predict engagement in these desirable employee behaviors. She continues to work with this dataset and team on projects related to sustainability. They are supporting the corporate sponsor (an executive search firm) as they attempt to increase individual-level green work behaviors, and the team is preparing manuscripts to submit to a conference and for potential publication.
Management & Entrepreneurship	Christy Benson	Christy Benson teaches business law and ethics. Her research focuses on international trade and sustainable development. Her recent work includes an empirical study of financial performance and value creation, looking at the competitive advantage of sustainable companies. She practiced law for 10 years with major law firms in Washington, DC, specializing in international trade and transactions. She served in the Rules Division of the WTO Secretariat in Geneva in 2000, has advised numerous foreign government ministries in FTA negotiations and assisted a wide range of multinational clients on trade matters.

Department	Faculty Member	Research Description
Management & Entrepreneurship	Elena Kennedy	Elena Kennedy's research focuses on early stage decision making in social enterprises—organizations that combine business practices and the pursuit of a social and/or environmental mission—and how those decisions affect the organization's ability to achieve their mission to create impact. She has examined the role of legal structure on social enterprise survivability, governance practices to ensure the protection of organization's mission, the positioning of the beneficiary and its effects on the enterprise's ability to scale, measure impact, and the impact the organization has on it's individual beneficiaries, and most recently how locally oriented entrepreneurs can cooperate to develop entrepreneurial communities that drive economic development in their local area. She teaches in the MBA program.
Management & Entrepreneurship	Rosey Bao	Rosey Bao's current research focuses on the antecedents/predictors of corporate social responsibility (CSR) by exploring the specific firm level corporate governance conditions under which firms are likely to behave in socially responsible ways. Using a sample of firms across 26 different countries, the study examines and teases out the moderating effects of country level institutions on the relationship between firm level governance and CSR. It suggests that the relationship between firm level governance mechanisms such as insider and institutional ownership and CSR is moderated by country level institutions such as the presence of minority shareholder protection and regulatory quality.

Department	Faculty Member	Research Description
Marketing & International Business	Carri Reisdorf	Carri Reisdorf focuses on corporate social responsibility and environmental sustainability, in particular how these concepts are influenced by culture, consumer perceptions and identification. Some of Dr. Reisdorf's recent projects look at how green firm-specific advantages can lead to both higher financial and environmental performance, as well as how formal and informal pressures are causing firms to engage in social responsible practices around the world.
Philosophy	Lauren Guilmette	Lauren Guilmette's research relates to sustainability primarily through an ecofeminist lens, with research into the late feminist Teresa Brennan and her unfinished work on the terrors of globalization. She has three peer-reviewed articles on Brennan and another forthcoming, and is currently drafting an article specifically on Brennan's ecofeminist politics of the local. Sustainability also surfaces in her work in critical disability studies and feminist bioethics, with questions of environmental racism and the differential distribution of precarity via exposure to toxins.
Physics & Engineering	Jonathan Su	Jonathan Su is developing a lens-free holographic imaging system for use in water quality measurement. He and his students are currently using it to try to create an automated system which can detect cyanobacteria in local water systems. These cyanobacteria can release toxic cyanotoxins that can pose a danger to humans and animals. His other work also focuses on fluid mechanics, mass transport, and drug delivery systems.

Department	Faculty Member	Research Description
Political Science & Policy Studies	Aaron Sparks	Aaron Sparks studies the politics of environmental policies. This is done mainly through the lens of political behavior, that is, how do people think about the environment, and how does that impact their environmentally related behavior from organizing to carrying a reusable water bottle. With Elon students, Aaron Sparks is also working to understand how climate organizations build political power. He is also interested in improving measures of sustainability knowledge.
Psychology	Maureen Vandermaas-Peeler	Working with undergraduate researchers, Dr. Maureen Vandermaas-Peeler studies the development of young children's inquiry and discovery through joint participation with peers and adults in authentic, engaging activities in outdoor environments. Findings contribute to the growing momentum in programs and schools to make spending time in natural outdoor settings a priority for young children to foster developing skills and knowledge and to help ensure a future generation of environmental stewards.
Religious Studies	Geoffrey Claussen	One of Geoffrey Claussen's research interests is Jewish approaches to nonhuman animals and the environment. He is currently working on a research project that explores the diversity of Jewish approaches to environmental ethics.

Department	Faculty Member	Research Description
Religious Studies	Toddie Peters	Toddie Peters' research on abortion and reproductive justice is focused on addressing the disproportionate impact of restrictive abortion policies on poor women, young women, and women and color with particular attention to intersecting forms of oppression and structural violence based on gender and economic status. Her scholarship on economic and environmental ethics is focused on exploring the development of a solidarity economy and shifting collective worldviews/ethical underpinnings of alternative economic structures that focus on the common good and the well-being of the entire human and natural world.
Sociology & Anthropology	Rissa Trachman	Rissa Trachman has conducted archaeological research in Belize for over 20 years. Her research is conducted on a 250,000 acre conservation and management area and necessarily involves perspectives of environmental impact both of ancient Maya inhabitants and the modern impact of archaeology on its surroundings. The ancient Maya interaction with the environment was substantial and underestimated. Her field research project in Belize, the Dos Hombres Archaeological Project explores these interactions and their subsequent social impacts as reflected in her recent publications.
Sociology & Anthropology	Robert Perdue	Dr. Robert T. Perdue, Assistant Professor of Sociology, is an environmental sociologist who examines the social, economic and ecological impacts of natural resource extraction. His current work focuses on prison construction as an economic development strategy following resource decline. A good overview of this work can be found in Environmental Justice, entitled "Linking Environmental and Criminal Injustice: The Mining to Prison Pipeline in Central Appalachia."

Department	Faculty Member	Research Description
Sport Management	Young Do Kim	Young Do Kim's current research interest lies in the area of sustainability in sport. His ongoing research projects focus on formulating conceptual frameworks that illustrate key drivers and outcomes of sport organizations' environmental initiatives and empirically examining how sport teams, as leverageable assets, can influence the quality of local communities and sustainable behavior change through their environmentally responsible initiatives. In general, his research seeks to help sport organizations implement strategic environmental initiatives and continue their investment in the sport greening movement for socially and environmentally healthier communities.
Strategic Communications	Barbara Gaither	Barbara Gaither researches marketplace advocacy, a form of advertising and public relations used by corporations and industries to generate acceptance for industry-related issues, particularly those involving environmental and/or health risks. Gaither explores the implications of this form of advocacy for industry, environmental efforts and public policy. Gaither also researches public response to corporate social responsibility.