Environmental Studies is an interdisciplinary department that offers students the opportunity to develop a holistic understanding of environmental issues. Relying heavily on case studies, problem-solving strategies, and community involvement, the curriculum addresses environmental issues at local, national, and global levels. The program emphasizes perspectives from the natural sciences, social sciences, and humanities. It encourages depth of disciplinary knowledge, breadth of cross-disciplinary perspectives, and integration through core courses and a required off-campus internship. Students may major or minor in environmental studies.

Core Faculty

Dan Hornbach, John S. Holl
Professor of Biology and chair of the Environmental Studies Department, is an aquatic ecologist. His research focuses on freshwater ecology, and he works closely with the Minnesota Department of Natural Resources and colleagues at the University of Minnesota. He teaches Environmental Science; Lakes, Streams, and Rivers; and Aquatic Ecology.

Louisa Bradtmiller, associate professor, is a climate scientist and geochemist whose research uses ocean sediments to examine global climate changes since the last ice age. She teaches The Earth’s Climate System; Climate and Society; Paleoclimate; and a co-taught course on the economics of climate change. She has also taught Environmental Science and the department’s senior seminar.

Jerald Dosch, associate professor of environmental studies and biology and director of Macalester’s Katharine Ordway Natural History Study Area, is an ecologist with research interests in non-native species, restoration ecology, and ornithology. He teaches Environmental Science, Outdoor Environmental Education, and Ecology.

Christie Manning, visiting assistant professor of environmental studies and psychology, is an experimental and cognitive psychologist. Her research investigates the role of psychological distance in people’s response to information about environmental issues, particularly global climate change. She teaches Environmental Classics, Psychology of Sustainable Behavior, and Psychology in the Material World.

Marianne Milligan, visiting assistant professor of environmental studies and linguistics, does fieldwork on Menominee, an Algonquian language spoken in Wisconsin. She teaches Endangered and Minority Languages; 100 Words for Snow: Language and Nature; and Sociolinguistics.

Roopali Phadke, associate professor, teaches in the area of environmental policy and politics. Her research is at the nexus of environmental studies, international development, and science and technology studies. Her current research focuses on water and wind energy development. She teaches Environmental Politics and Policy; the Environmental Leadership Seminar and Practicum; Water and Power; Science and Citizenship; and Sustainable Development and the Global Future.

Chris Wells, associate professor, is an environmental historian whose research focuses on 20th-century U.S. environmental history. He combines the perspectives of environmental history, intellectual and cultural history, and the history of technology to examine the history of human interactions with the natural world. He teaches American Environmental History, Environmental Justice, Consumer Nation, Imperial Nature, and U.S. Urban Environmental History. He also serves as associate director of the Jan Serie Center for Scholarship and Teaching, and as director of the Digital Liberal Arts initiative.

Supporting Faculty

These faculty and staff members teach courses that directly support the environmental studies major.

Holly Barcus, professor and chair of the Geography Department, teaches Rural Landscapes and Livelihoods.

Terry Boychuk, associate professor of sociology, teaches Environmental Sociology.

Eric Carter, associate professor of geography, holds the Edens Professorship in Global Health and teaches Geography of Environmental Hazards.

I-Chung Catherine Chang, assistant professor of geography, teaches Introduction to Urban Ecology.

Alan Chapman, assistant professor of geology, teaches Dynamic Earth and Global Change.

Amy Damon, associate professor of economics, teaches Economics of Global Food Problems.

Mark Davis, DeWitt Wallace Professor of Biology, teaches Ecology.


Arjun Guneratne, professor of anthropology, teaches Environmental Anthropology.

Ruthanne Kurth-Schai, professor of educational studies and chair of the Educational Studies Department, teaches Education and the Challenge of Globalization; and Outdoor Environmental Education in Theory and Practice.

Keith Kuwata, professor and chair of the Chemistry Department, is a physical and analytical chemist with a background in laser spectroscopy and atmospheric chemistry.

Scott Legge, associate professor of anthropology, teaches Indigenous Peoples of the Arctic.

Kelly MacGregor, associate professor and chair of the Geology Department, teaches Environmental Geology and Dynamic Earth/Global Change.

Diane Michelfelder, professor of philosophy, teaches Environmental Ethics.

William Moseley, professor of geography, teaches People, Agriculture and the Environment; and Comparative Environment and Development Studies.

Environmental Studies

Suzanne Savanick Hansen, sustainability manager, teaches Sustainability and the Campus.

Dan Trudeau, associate professor of geography, teaches Cities of the 21st Century.

Sarah West, professor of economics, teaches Environmental Economics and Policy; and Climate Change: Science, Economics, and Policy.

Special Opportunities on Campus

The Environmental Studies Department sponsors a weekly lunchtime series that has included speakers from Pollinate Minnesota, Foxtail Farm, Sustainable Saint Paul, Team, National Park Service, Clean Water Action, Friends of the Mississippi River, Eureka Recycling, Minnesota Pollution Control Agency, Fresh Energy, Great River Greening, and the Environmental Protection Agency.

The department also works with the Sustainability Office and student-led environmental groups on campus to develop campus sustainability programs and projects. Environmental Studies classes developed the first campus greenhouse gas emissions inventory, recommended actions for the college’s climate action plan, and worked on campus Zero Waste projects. Student research also produced a plan for the college’s climate action plan, and worked on campus Zero Waste projects. Student research also produced a plan for the college’s climate action plan, and recommended actions for the college’s climate action plan, and worked on campus Zero Waste projects.

Hannah Whitney ‘17 (Grinnell, Iowa), Frogtown Green, environmental project assistant
Ivy Bardaglio ‘16 (Burlington, Vt.), Minnesota Environmental Quality Board, climate research intern
Harrison Beck ‘16 (Chestnut Hill, Mass.), Cooperative Energy Futures, community solar sales expert
Analuna Brambila ‘16 (San Jose, Calif.), Minnesota Valley National Wildlife Refuge, outreach intern
Alexander Frank ‘16 (Milwaukee), Citizens League of Minnesota, water policy analyst intern
Tessa Ganser ‘16 (Mazomanie, Wis.), Minnesota Department of Agriculture, water research digital library intern
Leo Kendrick ‘16 (Amman, Jordan), Minnesota Geological Survey, hydrology/GIS intern
Akhilah Sanders-Reed ‘16 (Sandia Park, N.M.), MN350, Move MN liaison and Tar Sands intern

Honors Projects

Olivia Nelson ‘16 (Glenview, Ill.), “Lavoisier’s Legacy: The Dominance of Modern Water Quality Science”
Mike Galgay ‘14 (Westerlo, N.Y.), “Geochemical Markers of Changes in the Ocean Silicon Cycle During Heinrich Events”

After Macalester

Analuna Brambila ‘16 (San Jose, Calif.) works with CommonBond.
Laura Humes ‘16 (Shoreline, Wash.) has a Watson Fellowship she is using to explore reimagining the refugee experience in Germany, Jordan, Rwanda, Tanzania and Thailand.
Olivia Nelson ‘16 (Glenview, Ill.) is pursuing a master’s in teaching at the American Museum of Natural History.

Emma Anderson ‘15 (Telluride, Colo.) is one-year intern at DIS in Copenhagen.
Samantha Burlager ‘15 (Shakopee, Minn.) is a Green Corps member working at Stearns History Museum in St. Cloud, Minn.
Andrew Gage ‘15 (Piedmont, Calif.) works as a campaign organizer for Environment America in Seattle.
Li Guan ‘15 (Shanghai, China) works in sustainability with Metro Transit in the Twin Cities.
Gabrielle Queenan ‘15 (Bedford, Mass.) is at the Massachusetts Rivers Alliance.
Mark Riegel ‘14 (Batavia, N.Y.) works for Environmental Quality Board in St. Paul.
Brianna Besch ‘13 (Bethesda, Md.) is working at the Environmental Protection Agency, Global Division.
Margaret O’Halloran ‘13 (Cleveland) is director of development for a Montessori high school in Cleveland.
Esther Schlotterbeck ‘13 (Auburn, Maine) works for Cycles for Change in the Twin Cities.
Madeline Vargo ‘13 (California, Pa.) is a water quality specialist for Minneapolis Parks and Recreation.
Benjamin Lev Eskin ‘12 (Bethesda, Md.) is research assistant at ICF International in Washington, D.C.
Rosamond Elizabeth Mate ‘12 (Champaign, Ill.) is an economic analyst at Analysis Group in Denver.
Ross Donihiue ‘11 (Waterville, Maine) is founder and media director at Maps for Good.
Timothy DenHerder-Thomas ‘10 (Jersey City, N.J.) is general manager at Cooperative Energy Futures.
Erin Rupp ‘04 (Marshfield, Wis.) is the founder of Pollinate Minnesota.
Catherine Neuschler ‘02 (Bowie, Md.) supervises the Agency Rules unit at the Minnesota Pollution Control Agency.

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