

Regularly Offered MSU Graduate Courses Related to the Environment:

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Department	Course	Semester	Year	Title	Professor	Credits
ACR	415	Fa	Annual	<u>Program Planning & Evaluation</u>	Suvedi	3
ACR	811	Fa	Annual	<u>Community, Food and Agriculture: A Survey</u>	Bingen	3
ACR	812	Fa	Even years	<u>Buzzword Paradigms in Environmental and Natural Resources Management.</u>	Arvai	3
ACR	823	Sp		<u>Contemporary Issues in Animal-Human Relationships</u>	Kalof	3
ACR	824	Sp	Annual	<u>Sustainable Development: Measuring Socio-Economic Wellbeing</u>	Richardson	3
ACR/ ANP/ FOR/PLS/ SSC	826	Fa	Annual	<u>International Development: Theory and Practice</u>	Kerr	3
ACR	828	Sp	Annual	<u>The Art and Craft of Public Policy Analysis</u>	Norris	3
ACR	833	Sp	Annual	<u>Program Evaluation in Agriculture and Natural Resources</u>	Suvedi	3
ACR/FOR/FW	841	Fa, Sp	Annual	<u>Building and Implementing Watershed Management Plans</u>	Bartholic	3
ACR/FOR/FW	842	Fa, Sp	Annual	<u>Watershed Assessments and Tools</u>	Bartholic	3
ACR	843	Fa, Sp, Su	Annual	<u>Legal, Financial and Institutional Frameworks in Watershed Management</u>	Bartholic	3
ACR	845	Fa	Odd years	<u>Coastal & Maritime Resource Management</u>	Vanderstoep	3
ACR	846	Fa	Annual	<u>Law of Environmental Regulation</u>	Bronstein	3
ACR	848	Sp	Annual	<u>Community Based Natural Resource Management in International Development</u>	Kerr	3
ACR	853	Fa	Even	<u>Industrialization of American Agriculture</u>	Wright	3
ACR	862	Fa	Even years	<u>Community Program Development</u>	Rivera	3
ACR/FOR	872	Sp	Odd years	<u>Parks and Protected Areas Policy and Management</u>	Propst	3
ACR	873	Fa	Even years	<u>Culture, Communities and Tourism</u>	VanderStoep	3
ACR	875	Sp	Odd years	<u>Tourism and Global Change</u>	Nicholls	3
ACR	876	Sp	Odd years	<u>Marketing Tourism, Leisure, and Natural Resources</u>	Vogt	3
ACR	878	Fa		<u>Tourism, Conservation and Development.</u>	Bronstein	3
ADV	426	Fa	Annual	<u>Advanced Creative: Print</u>	Brimmer	3
ADV	450	Fa, Sp	Annual	<u>Portfolio Development</u>	Brimmer	3
ADV	823	Fa, Sp	Annual	<u>Consumer Behavior</u>	Kwon	3

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ADV	865	Sp	Annual	<u>Advertising and Society</u>	Vandenbergh	3
AEC/ ACR/ EC/ FOR/ PRR/ FW	829	Sp	Annual	<u>Economics of Environmental Resources</u>	Batie	3
AEC	865	Sp	Annual	<u>Agricultural Benefit-Cost Analysis</u>	Crawford	3
AEC/ SCM	891	Sp		<u>Business, the Environment, and Sustainability</u>	Joshi	3
AEC/ EC/ FOR/ PRR/RD	923	Fa	Annual	<u>Advanced Environmental and Resource Economics</u>	Hoehn	3
AEC/ EC/ FOR/ PRR/RD	925	Sp	Annual	<u>Advanced Natural Resource Economics</u>	Horan	3
AEC	930	Sp	Annual	<u>Dynamic Analysis in Agriculture and Natural Resources</u>	Myers	3
AEC	932	Fa	Annual	<u>Information Economics and Institutions in Agriculture and Natural Resources</u>	Black/ Staatz	3
ANP	430	Fa	Odd years	<u>Culture, Resources, and Power</u>	Medina	3
ANP	431	Fa	Odd years	<u>Gender, Environment, and Development</u>	Walker	3
ANP	831	Fa	Even years	<u>Seminar in Cultural Ecology</u>	Derman	3
ANP/ FW/ FOR/ GEO/ RD/ SOC	859	Sp	Annual	<u>Gender, Justice, and Environmental Change: Methods and Application</u>	Ferguson	3
ANR	493	Su	Annual	<u>Natural Resources and Policy Course with Paid Internships</u>	Rey	3
ANS	401	Sp	Annual	<u>Issues in Animal Agriculture</u>	Karcher/ Swanson	1
ANS	407	Fa	Annual	<u>Food and Animal Toxicology</u>	Bursian	3
ANS	417	Sp	Annual	<u>Topics in Toxicology</u>	Bursian	1
ANS/ BE	418	Fa	Annual	<u>Comprehensive Nutrient Management Planning</u>	Rozeboom	3
ANS/ ENE/SOC	427	Sp	Odd years	<u>Environmental Toxicology and Society</u>	Chou	3
ANS	455	Sp	Annual	<u>Avian Physiology</u>	Balander	4
ANS	480	Fa, Sp	Annual	<u>Animal Systems in International Development</u>	Shelle	3
ANS/ ZOL	805 (730)	Fa, Sp	Annual	<u>Animal Welfare Assessment</u>	Siegford	
ANS/ENE	827	Fa	Odd years	<u>Integrated Risk Assessment of Environmental Hazards</u>	Chou	3
BE	431	Fa	Annual	<u>Bio-Resource Optimization</u>	Alocilja	3

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BE	481	Fa	Annual	<u>Land and Water Conservation Engineering</u>	Nejadhashemi	3
BE	482	Sp	Annual	<u>Non-point Source Pollution Control</u>	Reinhold	3
BE	815	Sp	Annual	<u>Instrumentation for Biosystems Engineering</u>	Guyer	3
BE	825	Fa	Annual	<u>Properties of Biological Materials</u>	Liao/ Steffe	3
BE	835	Fa	Annual	<u>Analysis of Biological Systems</u>	Dolan/ Segerlind/ Srivastava	3
BE	845	Fa	Annual	<u>Biosensor Principles and Applications</u>	Alocilja	3
BMB/ PLB	864	Fa	Even years	<u>Plant Biochemistry</u>		3
CAS	825	Fa	Annual	<u>Mass Communication and Public Health</u>	Silk	3
CAS	826	Sp	Annual	<u>Health Communication for Diverse Populations</u>	Lapinski	3
CAS	892	Fa	Even years	<u>Risk Communication</u>	Lapinski	3
CE	421	Fa	Annual	<u>Engineering Hydrology</u>	Li	3
CE	448	Sp	Annual	<u>Transportation Planning</u>	Lyles	3
CE	481	Fa	Annual	<u>Environmental Chemistry: Equilibrium Concepts</u>	Voice	3
CE/ ENE	483	Fa	Annual	<u>Unit Operations and Processes in Environmental Engineering</u>	Masten	3
CE	487	Sp	Annual	<u>Microbiology for Environmental Health Engineering</u>	Cupples	3
CE	807	Sp	Even years	<u>Seismic Structural Design</u>	Burgueno	3
CE	812	Fa	Odd years	<u>Properties of Soils</u>	Khire	3
CE	813	Fa	Annual	<u>Soil Dynamics</u>	Chatti	1
CE/ENE	821	Fa	Annual	<u>Groundwater Hydraulics</u>	Reeves	3
CE/ ENE	823	Fa	Odd years	<u>Stochastic Groundwater Modeling</u>	Li	3
CE	829	Fa	Odd years	<u>Mixing and Transport in Surface Water</u>		3
CE	851	Sp	Even years	<u>Transportation and the Environment</u>	Dion	3
CE	891-601	Sp	Odd years	<u>Computational Surface Water Quality</u>	Mantha	
CJ	809-730	Sp	Annual	<u>Environmental Risk and Decision Making</u>	Rivers	3

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CJ/ FW	809-731	Sp	Annual	<u>Corporate Environmental Crime and Risk</u>	Gibbs	3
CJ/ FW	809/891	Fa	Annual	<u>Global Risks, Conservation and Criminology (online)</u>	Gore	3
CSS	402	Fa	Annual	<u>Principles of Weed Science</u>	Kells	3
CSS	431	Sp	Annual	<u>International Agricultural Systems</u>	Freed/ Snapp	3
CSS	440	Fa	Even years	<u>Soil Biophysics</u>	Smucker	3
CSS/ FOR/ HRT	441	Sp	Even years	<u>Plant Breeding & Biotechnology</u>	Freed	3
CSS/ FOR/ HRT	451	Sp	Annual	<u>Biotechnology Applications for Plant Breeding and Genetics</u>	Douches	3
CSS	455	Fa	Annual	<u>Pollutants in the Soil Environment</u>	Boyd	3
CSS	470	Fa	Annual	<u>Soil Resources</u>	Mokman	3
CSS	480	Fa	Annual	<u>Soil Fertility and Management</u>	Jacobs	3
CSS	494	Sp	Odd years	<u>International Agriculture</u>	Freed, Snapp	1
CSS	802	Sp	Even years	<u>Weed Biology</u>	Renner	2
CSS	805	Sp	Odd years	<u>Herbicide Action & Metabolism</u>	Penner	2
CSS/ GLG	825	Sp	Even years	<u>Clay Mineralogy and Soils Genesis</u>	Teppen	4
CSS	840	Fa	Odd years	<u>Soil Physics</u>	Smucker	3
CSS	850	Sp	Annual	<u>Soil Chemistry</u>	Teppen	3
CSS	865	Sp	Even years	<u>Environmental Fate of Organic Contaminants in Soils</u>		3
CSS	892B	Fa, Sp	Annual	<u>Ecological Food and Farming Systems Seminar</u>		1
CSS	893-431	Su	Annual	<u>Methods in Soil and Plant Ecology for Sustainable Systems (at Kellogg Biological Station)</u>	Snapp	3
CSS/ FOR/ HRT	941	Sp	Even years	<u>Quantitative Genetics of Plant Breeding</u>	Wang	3
ENE	801	Sp	Annual	<u>Dynamics of Environmental Systems</u>	Mantha	3
ENE	802	Fa	Annual	<u>Physicochemical Processes in Environmental Engineering</u>	Tarabara	3
ENE	804	Fa	Annual	<u>Biological Processes in Environmental Engineering</u>	Hashsham	3
ENE	806	Sp	Annual	<u>Lab Feasibility Studies for Environmental Remediation</u>	Hashsham	3

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ENE	811	Sp	Odd years	<u>Membrane Processes</u>	Tarabara	3
ENT	404	Fa, Su	Annual	<u>Fundamentals of Entomology</u>	DiFonzo	3
ENT	410	Fa	Annual	<u>Apiculture and Pollination</u>	Pett	3
ENT/FW/ZOL	422	Fa	Odd years	<u>Aquatic Entomology</u>	Merritt	3
ENT/FW	469	Su	Annual	<u>Biomonitoring of Streams and Rivers</u>	Merritt/ Kaufman	3
ENT/ CSS/ FW/ HRT	477	Fa	Even years	<u>Pest Management Systems</u>	DiFonzo	3
ENT	470	Sp	Odd years	<u>General Nematology</u>		3
ENT/ CSS/ FOR/FW/ HRT	478	Sp	Even years	<u>Pest Management II: Biological Components of Management Systems</u>	Bishop	3
ENT	815	Fa	Odd years	<u>Insect Behavior</u>	Miller	3
ENT	818	Fa	Odd years	<u>Systematics, Morphology, Biology: Adults</u>	Cognato	3
ENT	838	Fa	Even years	<u>Systematics, Morphology, Biology: Immatures</u>	Parsons	3
ENT	844	Fa	Even years	<u>Insect Ecology, Evolution and Conservation</u>	Parsons	3
ENT	848	Sp	Odd years	<u>Biological Control of Insects and Weeds</u>	Landis	3
ENT	850	Sp	Odd years	<u>Insect Physiology</u>		3
ENT/ GEN	851	Fa	Odd years	<u>Molecular Entomology</u>	Dong/ Thiem	1 to 3
ENT/ PLP	870	Sp		<u>Nematode Management in Crop Systems</u>	Bird	3
ESA/ CSS/ PRR/ RD	480-750	Sp	Annual	<u>Environmental Science and Policy in New Zealand</u>	Schultink	varies
ESA	413	Fa	Annual	<u>Grantwriting and Fund Development</u>	Rowan	3
ESA	415	Fa	Annual	<u>Environmental Impact Assessment</u>	Schultink	4
ESA	420	Fa	Annual	<u>Risk and Decision Science for Environmental and Natural Resource Management</u>	Arvai	3

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ESA/ EEP/ FOR	430	Fa	Annual	<u>Law and Resources</u>	Kaplowitz	3
ESA	435	Fa	Annual	<u>Conservation Education</u>	Dann	3
ESA	436	Fa, Sp	Annual	<u>Conservation Education Practice</u>	Elshoff	1-Jan
ESA/ EEP	440	Sp	Annual	<u>Environmental and Natural Resource Policy in Michigan</u>	Nelson	3
ESA	444	Fa	Annual	<u>Pesticides, People, and Politics</u>	Bingen	3
ESA/ GEO/UP	450	Fa	Annual	<u>Smart Growth and Decision Making</u>	Adelaja/ Warbach	3
ESA/ BE/ CSS/ FOR/FW/RD	452	Fa, Sp, Su	Annual	<u>Watershed Concepts</u>	Bartholic	3
ESA/ BE/ EEP/ PRR	460	Sp	Annual	<u>Natural Resource Economics</u>	Norris	3
ESP	801	Fa	Annual	<u>Physical, Chemical, and Biological Processes of the Environment</u>	Long/Voice	3
ESP	802	Sp	Annual	<u>Human Systems and Environment</u>	Kaplowitz/ Walker	3
ESP	803	Fa	Annual	<u>Human and Ecological Health Assessment and Management</u>	Chou	3
ESP	804	Sp	Annual	<u>Environmental Applications and Analysis</u>	Dietz	3
FOR/ CSS	404	Fa	Annual	<u>Forest and Agricultural Ecology</u>	Kobe	3
FOR	406	Sp	Annual	<u>Silviculture</u>	Chhin	4
FOR	408	Fa	Annual	<u>Forest Resource Management</u>	Finley	3
FOR	412	Fa	Annual	<u>Wildland Fire</u>	Chhin	2
FOR/ SOC	450	Fa	Annual	<u>Forestry in International Development</u>	Yin	3
FOR	461	Sp	Annual	<u>Urban Forestry</u>		
FOR	464	Fa	Annual	<u>Forest Resource Economics</u>	Potter-Witter	3
FOR/ FW/ PRR/ RD	466	Sp	Annual	<u>Natural Resource Policy</u>	Leefers	3
FOR	802	Fa	Annual	<u>Forest Science Research</u>	Han/Kobe/Mat uana	2
FOR	804	Fa	Odd years	<u>Forest Ecology</u>	Kobe	3
FOR	824	Fa	Even years	<u>Forest Soils</u>	Rothstein	3

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FOR/ ANS/ CSS/ FW/ GEN/HRT	842	Fa	Annual	<u>Population Genetics</u>	Epperson	3
FOR/ RD	866	Sp	Odd years	<u>Economics of Renewable Resources</u>	Yin	3
FW	410	Sp	Annual	<u>Upland Ecosystem Management</u>	Campa	3
FW	414	Fa	Annual	<u>Aquatic Ecosystem Management</u>	Infante	3
FW	416	Fa	Annual	<u>Marine Ecosystem Management</u>	Peters	3
FW/ PLB	417	Fa	Annual	<u>Wetland Ecology and Management</u>	Monfils/ Mugg	3
FW/ ACR/ BE/ FOR/ GEO	419	Sp	Annual	<u>Application of GIS to Natural Resources</u>	Montgomery	4
FW/ ZOL	420	Fa	Annual	<u>Stream Ecology</u>	Wagner	3
ENT/FW/ZOL	422	Fa	Odd years	<u>Aquatic Entomology</u>	Hernandez/ Merritt/ White	3
FW/ LCS	423	Sp	Odd years	<u>Fish and Wildlife Disease</u>	Faisal/ Loch/ Schulz	3
FW	424	Fa	Annual	<u>Population Analysis and Management</u>	Hayes	4
FW	435	Fa	Annual	<u>Integrated Communications for the Fisheries and Wildlife Professional</u>		3
FW/ LB	438	Sp	Annual	<u>Philosophy of Ecology</u>	Nelson	3
FW/ BE/ ZOL	443	Sp	Annual	<u>Restoration Ecology</u>	Urquhart	3
FW/ ZOL	444	Fa	Annual	<u>Conservation Biology</u>	Roloff	3
FW/ MC	445	Sp	Annual	<u>Socio-economics and Policy of Conservation Biology</u>	Kramer	3
FW/ MC	450	Sp	Even years	<u>International Environmental Law and Policy</u>	Axelrod	3
FW	454	Sp	Odd years	<u>Environmental Hydrology for Watershed Management</u>	Infante	3
FW	468	Fa	Annual	<u>Great Lakes Water Policy</u>	Dreelin	2
FW/ ZOL	471	Sp	Annual	<u>Ichthyology</u>	Roth	4
FW/ ZOL	472	Sp	Annual	<u>Limnology</u>	Soranno	3
FW/ PSL	473	Sp	Odd years	<u>Environmental Fish Physiology</u>	Li	3
FW/ ZOL	474	Fa	Annual	<u>Limnological and Fisheries Techniques</u>	Wolfson	3
FW/ ANS	475	Sp	Annual	<u>Aquaculture</u>	Garling	3

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FW	479	Sp	Annual	<u>Fisheries Management</u>	Irwin	3
FW	480-753	Su	Annual	<u>Madagascar, An Island Apart: Culture and Natural Resources.</u>	Gore/ Rasmussen	6
FW/ MC	481	Sp	Annual	<u>Global Issues in Fisheries and Wildlife</u>	Taylor	3
FW	810	Sp	Even years	<u>Human Dimensions Research in Fisheries and Wildlife</u>	Gore	3
FW	813	Fa		<u>Democracy and the Environment</u>	Axelrod	3
FW	824	Sp	Even years	<u>Analysis of Wildlife Populations</u>	Winterstein	3
FW/ PLB/ZOL	828	Fa	Even years	<u>Conservation and Genetics</u>	Scribner	3
FW	840	Fa	Odd years	<u>Landscape Ecology</u>	Roloff/ Cheruvellil	3
FW/ BE/FOR/RD	852	Fa	Even years	<u>Systems Modeling and Simulation</u>	Liu	3
FW/ BE/ FOR/ RD/ ZOL	853	Sp	Odd years	<u>Applied Systems Modeling and Simulation for Natural Resource Management</u>	Hayes	3
FW	854	Fa	Odd years	<u>Adaptive Management of Natural Resource Systems</u>	Jones	3
FW/ PB/ ZOL	857	Sp	Even years	<u>Theoretical Ecology</u>	Peacor	3
FW/ ANP/ ESA/ FOR/ GEO/SOC	858	Fa	Annual	<u>Gender and Environment</u>	Simmons	3
FW	868	Fa	Odd years	<u>Water Policy and Management</u>	Dreelin	3
FW	877	Fa	Even years	<u>Fish Population Dynamics</u>	Bence	3
FW	879	Sp	Even years	<u>Advanced Limnology</u>	Soranno	3
FW/ AEC/ FOR/ PRR	885	Fa	Annual	<u>Leadership in Natural Resources and Management</u>	Riley	
GEO	401	Sp	Even years	<u>Geography of Plants of North America</u>	Yansa	3
GEO/ BE	402	Fa	Even years	<u>Agricultural Climatology</u>	Andresen	3
GEO	403	Sp	Annual	<u>Dynamic Meteorology</u>	Zhong	3

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GEO	405	Sp	Annual	<u>Weather Analysis and Forecasting</u>	Winkler	4
GEO	407	Sp	Odd years	<u>Regional Geomorphology of the United States</u>	Arbogast	3
GEO	408	Fa	Odd years	<u>Soil Geomorphology Field Study</u>	Schaetzel	4
GEO	409	Fa	Odd years	<u>Global Climate Change and Variability</u>	Winkler	3
GEO	410	Fa	Annual	<u>Geography of Food and Agriculture</u>	Winklerprins	3
GEO/ UP	413	Sp	Annual	<u>Urban Geography</u>	Darden	3
GEO/ UP	415	Fa	Odd years	<u>Location Theory and Land Use Analysis</u>	Pigozzi	3
GEO	424	Sp	Annual	<u>Advanced Remote Sensing</u>	Lusch	4
GEO/ UP	425	Sp	Annual	<u>Problems in Geographic Information Science</u>	Zulu	3
GEO	435	Fa	Annual	<u>Geography of Health and Disease</u>	Grady	3
GEO	436	Sp	Annual	<u>Spatial Analysis of Populations</u>	Grady	3
GEO	440	Sp	Even years	<u>Critical Geopolitics</u>	Evered	3
GEO	453	Sp	Annual	<u>Metropolitan Environments: Urban Forms and Land Uses</u>	Vojnovic	3
GEO	454	Sp	Annual	<u>Geography of Environment and Development</u>	Simmons	3
GEO	459	Sp	Even years	<u>Tourism in Regional Development</u>	Nicholls	3
GEO	825	Sp	Annual	<u>Geoprocessing</u>	Shortridge	3
GEO/ STT	866	Sp	Annual	<u>Spatial Data Analysis</u>	Shortridge	4
GEO	871	Fa	Annual	<u>Seminar in Physical Geography</u>	Schaetzel	3
GEO	872	Fa	Annual	<u>Seminar in Human Geography</u>	Walker	3
GEO	873	Sp	Annual	<u>Seminar in Human - Environmental Geography</u>	Simmons	3
GEO	874	Sp	Annual	<u>Seminar in Geographic Information Science</u>	Messina	3
GEO	890	Sp	Annual	<u>Human-Environment Modeling with Agent-Based Modeling Focus</u>	Ligmann-Zelinska	3
GLG	411	Fa	Annual	<u>Hydrogeology</u>	Larson	3
GLG/ GEO	412	Sp	Annual	<u>Glacial Geology and the Record of Climate Change</u>	Larsen	4
GLG	413	Sp	Odd years	<u>Groundwater Contamination</u>	Hyndman	3
GLG	421	Sp	Annual	<u>Environmental Geochemistry</u>	Long	4

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GLG	431	Sp	Annual	<u>Sedimentology and Stratigraphy</u>	Hampton	4
GLG/ ZOL	433	Fa	Even years	<u>Vertebrate Paleontology</u>	Gottfried/ Tulu	4
GLG/ ZOL	434	Fa	Annual	<u>Evolutionary Paleobiology</u>	Ansley	4
GLG	471	Sp	Annual	<u>Applied Geophysics</u>	Van Dam	4
GLG	481	Sp	Odd years	<u>Reservoirs and Aquifers</u>	Sibley	3
GLG/ CE	811	Sp	Annual	<u>Advanced Hydrogeology</u>	Hyndman	3
GLG	821	Fa	Odd years	<u>Aqueous Geochemistry</u>	Long	3
GLG/ ZOL	831	Sp	Odd years	<u>Quantitative Paleobiology</u>		3
GLG	861	Fa	Odd years	Evolution of the Crust and Mantle		3
GLG/ CSS	863	Fa	Even years	<u>Mineral/ Water Interactions</u>	Velbel	4
GLG	881	Fa	Even years	<u>Sedimentary Petrology</u>	Rooney	4
GLG	882	Sp	Even years	<u>Basin Analysis</u>	Hampton	3
HRT	401	Fa	Annual	<u>Physiology and Management of Herbaceous Plants</u>	Warner	3
HRT	413	Sp	Even years	<u>Sustainable Landscape Practices</u>	Rowe	1
HRT/ FOR	480	Sp	Annual	<u>Woody Plant Physiology</u>	Cregg/ Flore	3
HRT/ CSS/ FOR/ PHL	486	Fa	Even years	<u>Biotechnology in Agriculture: Applied and Ethical Issues</u>	Grumet/ Thompson	3
HRT/ CSS/ FOR/ PLB/ PLP	820	Sp	Odd years	<u>Plant Reproductive Biology and Polyploidy</u>	Iezioni	1
HRT/ CSS/ FOR/ PLB/ PLP	821	Sp	Odd years	<u>Crop Evolution</u>	Hancock	1
HRT/ CSS/ FOR/ PLB/ PLP	822	Sp	Odd years	<u>Historical Geography of Crop Plants</u>	Hancock	1
HRT/ CSS/ FOR	892	Fa, Sp, Su	Annual	<u>Plant Breeding & Genetics Seminar</u>	Douches et al.	1
HST	410	Sp	Annual	<u>History of North American Urbanization</u>	Flanagan	3
JRN	412	Sp	Annual	<u>Environmental Reporting</u>	Detjen	3

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JRN	471	Fa	Annual	Wilderness Experience and Environmental Writing	Detjen	1
JRN	472	Fa	Odd years	Investigative Environmental Reporting	Poulson	3
JRN	476	Fa	Annual	Environmental Video Storytelling		3
JRN	812	Sp	Annual	<u>Advanced Environmental Writing</u>	Detjen	3
JRN	824	Fa	Odd years	<u>Health and Science Writing</u>	Detjen	2
LA/ HED/ HRT/PRR	816	Fa	Annual	<u>Environmental Design Theory</u>	Burley	3
LA/ HED/ HRT/ PRR	817	Sp	Annual	<u>Environmental Design Studio</u>	Rauhe	3
LA/ HED/ HRT/ PRR	883	Fa	Annual	<u>Environmental Design Seminar</u>	Schutzki	3
MMG/ CSS	425	Sp	Annual	<u>Microbial Ecology</u>	Lennon/ Walker	3
MMG/ CSS/ GLG/ZOL	426-431	Su	Annual	<u>Biogeochemistry (Kellogg Biological Station)</u>	Lennon/ Hamilton/	3
MMG	431	Fa	Annual	<u>Microbial Genetics</u>	Bertrand	3
MMG	433	Sp	Annual	<u>Microbial Genomics</u>	Britton	3
MMG	445	Fa	Annual	<u>Microbial Biotechnology</u>	Garrity	3
MMG	801	Fa	Annual	<u>Integrative Microbial Biology</u>	Ciche/Dazzo/ Hausinger/Sc hmidt	4
MMG	803	Fa, Sp	Annual	<u>Topics in Integrative Microbial Biology</u>	Schmidt	2
MMG	833	Fa	Annual	<u>Microbial Genetics</u>	Champness et al	3
MSE	871	Fa	Odd years	<u>Material Surfaces & Interfaces</u>	Drzal	3
NSC/ MC	448	Sp	Annual	<u>Ecology, Law and Economics</u>	Mercuro	3
NSC	830	Sp	Annual	<u>Nature and Practice of Science</u>	Miller	1
NSC/ AL	840	Sp	Annual	<u>Writing in the Sciences</u>	Snider	2
PHL	442	Fa	Odd years	<u>Ethics and Animals</u>	Thompson	3
PHL	452	Fa	Annual	<u>Ethics and Development</u>	Esquith	3

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PHL	480	Su	Annual	<u>Philosophy of Science</u>	Bellon/ Pennock/ Smith	4
PHL	484	Sp	Annual	<u>Philosophy of Biological Science</u>	Pennock	3
PHL	880-001	Sp		<u>Seminar in Philosophy of Science: Values and Scientific Evidence</u>	Steel	3
PHM/ ANS/BMB/PDI	816	Fa	Odd years	<u>Integrative Toxicology</u>	Bauer/Bursian /et al	3
PKG	875	Fa	Odd years	<u>Stability & Recyclability of Packaging Materials</u>	Selke	3
PLB	415	Sp	Annual	<u>Plant Physiology: Growth, Development and the Environment</u>	Walton	3
PLB/ PLP	402	Fa	Odd years	<u>Biology of Fungi</u>	Trail	3
PLB	418	Sp	Annual	<u>Plant Systematics</u>	Prather	3
PLB	434	Sp	Odd years	<u>Plant Structure and Function</u>	Koehler	4
PLB	441	Fa	Annual	<u>Plant Ecology</u>	Kilgore	3
PLB	800	Fa	Annual	<u>Seminar in Plant Biology</u>	Brandizzi	1
PLB	803	Sp	Annual	<u>Integrative Topics in Plant Biology</u>	Sang/ Shiu	varies
PLB/ ZOL	826	Sp	Annual	<u>Tropical Biology: An Ecological Approach</u>	Schemske	8
PLB/ ZOL	849	Sp	Annual	<u>Evolutionary Biology</u>	Conner/ Lenski/ Schemske	3
PLB/ BMB/ CSS	856	Sp	Annual	<u>Plant Molecular Biology</u>	He/ Last	3
PLB/ HRT	863	Sp	Odd years	<u>Environmental Plant Physiology</u>	Flore/ Telewski	3
PLB/ HRT	865	Fa	Annual	<u>Plant Growth and Development</u>	Hu/ Vannocker	3
PLP	405	Sp	Annual	<u>Plant Pathology</u>	Hammerschm idt/ Kirk	3
PLP/ ENT/ PLB	407	Sp	Annual	<u>Diseases and Insects of Forest and Shade Trees</u>	Adams/ McCullough	4
PLP	812	Sp	Odd years	<u>Epidemiology of Plant Diseases</u>	Jarosz	3

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PLP/ PLB	847	Sp	Even years	<u>Advanced Mycology</u>	Adams	4
PLP	881	Sp	Odd years	<u>Molecular and Biochemical Plant Pathology</u>	Day/ Hammerschmidt/Koczan	3
PLP/ PLB	884	Fa	Even years	<u>Prokaryotic Diseases of Plants</u>	He/ Sundin	3
PLP	894	Sp	Annual	<u>Seminar in Plant Pathology</u>	Hammerschmidt	1
PRR	410	Fa	Annual	<u>International Parks and Tourism</u>		varies
PRR	448	Sp	Annual	<u>Foundations of Natural Resource Based Recreation Management</u>	Propst	3
PRR	449	Fa	Annual	<u>Natural Resource Based Recreation Management Applications</u>	Nelson	3
PRR	451	Sp	Annual	<u>Park Interpretive Services and Visitor Information Systems</u>	Vanderstoep	3
PRR	840	Fa	Odd years	<u>Recreation & Tourism Economics</u>	Richardson	3
PRR	841	Fa	Annual	<u>Parks & Recreation Administration & Policy</u>	Paulsen	3
PRR	842	Sp	Even years	<u>Parks and Protected Areas Policy and Management</u>	Propst	3
PRR	895	Fa	Odd years	<u>Coastal & Maritime Management</u>	Vanderstoep	3
SME	870	Sp	Annual	<u>Teaching College Science</u>	Parker	2
SOC	451	Fa	Annual	<u>Dynamics of Population</u>	Mullan	3
SOC	452	Fa	Annual	<u>Environment and Society</u>	Harris	3
SOC	832	Fa	Even years	<u>International Inequality and Development</u>	Salime	3
SOC	840	Fa	Annual	<u>Animals and Social Transformations</u>	Kalof	3
SOC	851	Sp	Even years	<u>Demography and Public Health</u>	Johnson	3
SOC	865	Fa	Odd years	<u>Environmental Sociology</u>	McCright	3
SOC	868	Sp	Even years	<u>Science, Technology, Medicine and Society</u>	Ganchoff	3
SOC/ FW/RD	869	Fa	Odd years	<u>Community and Conservation</u>	Gasteyer	3
UP	458	Sp	Even years	<u>Housing and Real Estate Development</u>	Hamlin	3

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UP/ GEO	478	Fa	Annual	<u>Urban Transportation Planning</u>	Hinojosa	3
UP	801	Sp	Annual	<u>Concepts and Issues in Planning and Development</u>	Fan	4
UP	823	Fa	Annual	<u>Urban Land Management</u>	Machemer	4
UP	844	Sp	Annual	<u>Decision Theory for Urban Planning and Development</u>	Domas	4
UP/ GEO	854	Fa	Annual	<u>Economics of Planning & Development</u>	Kotval	3
UP	865	Sp	Annual	<u>Planning and Development Law</u>	Strauss	3
ZOL	415	Sp	Annual	<u>Ecological Aspects of Animal Behavior</u>	Getty	3
ZOL/ PLB	440-431	Su	Annual	<u>Field Ecology and Evolution (Kellogg Biol Station)</u>	Mittelbach/ Conner	4
ZOL/ PLB	445	Sp	Annual	<u>Evolution</u>	Williams	3
ZOL/ RD	446	Fa	Annual	<u>Environmental Issues & Public Policy</u>	Stevenson	3
ZOL	448	Fa	Annual	<u>Evolutionary Developmental Biology</u>	Shingleton	2
ZOL	453	Sp	Annual	<u>Field Studies in Marine and Estuarine Biology</u>	Hill	varies
ZOL	457	Sp	Annual	<u>Foundations of Evolutionary Biology</u>	Atkinson	3
ZOL/ ENT/ PLB	485	Sp, Su	Annual	<u>Tropical Ecology</u>	Urquhart	3
ZOL	822	Fa	Annual	<u>Topics in Ethology & Behavioral Ecology</u>	Eisthen/Telgk amp	3
ZOL/GLG	824	Sp	Annual	<u>Stable Isotope Biogeochemistry</u>	Ostrom	2
ZOL/ MMG/ PLB	855	Fa	Odd years	<u>Molecular Evolution: Principles & Techniques</u>	Smith	3
ZOL/ CSS/ PLB	891	Su	Annual	<u>"Eminent Ecologists" - Current Topics in Ecology and Evolution</u>	Gross et al.	varies
ZOL/ PLB	896	Fa	Annual	<u>Population & Community Ecology</u>	Litchman/ Mittelbach	4
ZOL/ FW/ PLB	897	Sp	Annual	<u>Ecosystem Ecology</u>	Hamilton	4
Key:						

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ACR	Community, Agriculture, Recreation, and Resource Studies		
ADV	Advertising		
AEC	Agriculture, Food, and Resource Economics		
ANP	Anthropology		
ANS	Animal Science		
BE	Biosystems Engineering		
BMB	Biochemistry and Molecular Biology		
CAS	Communication Arts and Sciences		
CE	Civil Engineering		
CSS	Crop and Soil Sciences		
ENE	Environmental Engineering		
ENT	Entomology		
ESA	Environmental Studies and Applications		
ESP	Environmental Science and Policy Program		
FOR	Forestry		
FW	Fisheries and Wildlife		
GEO	Geography		
GLG	Geological Sciences		
HED	Human Environment Design		
HRT	Horticulture		
JRN	Journalism		
LA	Landscape Architecture		
MC	Madison College		
MMG	Microbiology and Molecular Genetics		
MSE	Material Sciences and Engineering		
NSC	Natural Sciences		
PHL	Philosophy		
PHM	Pharmacology and Toxicology		
PKG	Packaging		
PLB	Plant Biology		
PLP	Plant Pathology		
PRR	Community, Agriculture, Recreation, and Resource Studies		

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RD	Community, Agriculture, Recreation, and Resource Studies				
SME	Science and Math Education				
SOC	Sociology				
UP	Urban Planning				
ZOL	Zoology				