

RESOURCE DEVELOPMENT

RD

**Department of Community
Agriculture, Recreation and
Resource Studies
College of Agriculture and
Natural Resources**

- 200 Introduction to Environmental Studies**
Fall, Spring. 3(3-0)
Interdisciplinary nature of environmental and natural resource issues.
- 201 Environmental and Natural Resources**
Fall, Spring. 3(3-0)
Physical, economic, and institutional aspects of natural resource and environmental policy. US doctrines for land, water, mineral, and environmental resource management.
- 207 Great Lakes: Biology and Management**
Fall. 3(3-0) Interdepartmental with Fisheries and Wildlife. Administered by Department of Fisheries and Wildlife.
Living aquatic resources of the Great Lakes: environmental history, biological resources and their management. Policy issues.
- 211 Introduction to Gender and Environmental Issues**
Spring. 3(3-0) Interdepartmental with Fisheries and Wildlife; Forestry; Environmental Economics and Policy; Women's Studies. Administered by Department of Fisheries and Wildlife. R: Not open to freshmen. SA: PRM 211
The concept of gender. Overview of environment and habitat. Historical gender roles in environmental management. Gender-based theoretical perspectives. Case studies on developing and developed countries. Environmental management with emphasis on fisheries, wildlife and wetlands. Women environmental professionals.
- 300 Environmental Conflict Management (W)**
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. SA: AEE 310, RD 310
Alternative dispute resolution and environmental conflicts.
- 301 Federal and State Environmental Policy**
Fall, Spring. 3(3-0) R: Open only to sophomores or juniors or seniors in the Environmental Economics and Policy or Environmental Studies and Applications majors.
Federal and state environmental policies and processes. Resource conservation and emergency planning. Federal resource laws and regulations.
- 302 Natural Resource Issues**
Spring. 3(3-0) P:M: (EC 201 or EC 202) RB: (RD 200) R: Open only to sophomores or juniors or seniors in the Environmental Economics and Policy or Environmental Studies and Applications majors.
Analytical frameworks and concepts in resource development and use. Property rights. Market and non-market allocations. Stakeholder perspectives. Role of scholar-practitioner.
- 313 Grantwriting and Fund Development**
Fall. 3(3-0)
Theoretical and practical background for proposal writing. Program and strategic planning. Fund-raising and institutional advancement.

- 314 Environmental Assessment of Land Uses**
Fall. 3(3-0) RB: (RD 200)
Environmental issues related to land-use. Environmental assessment for land-use decisions. Data acquisition and processing techniques. Spatial analysis methods.
- 320 Resource Management and Planning**
Fall. 3(3-0) RB: (RD 200)
Concepts, principles, and objectives of management and planning. Population dynamics, resource demand, and impact and suitability assessment for sustainable development.
- 324 Water Resource Management**
Spring. 3(3-0) P:M: (BS 110)
Biophysical, community and institutional components of comprehensive water resources management. Biophysical and social processes that control the quality and quantity of aquatic resources at the watershed level.
- 415 Environmental Impact Assessment**
Fall. 4(3-2) P:M: (ZOL 355 or concurrently)
Environmental impact assessment of proposed projects and plans. Regulatory frameworks and project management. Multi-disciplinary project-based laboratory including field work.
- 430 Law and Resources**
Fall. 3(3-0) Interdepartmental with Forestry; Environmental Economics and Policy. R: Open only to juniors or seniors or graduate students. SA: PRM 430
Legal principles applied to the environment and natural resources. Sovereignty, property rights, land and water use, jurisdiction, public trust doctrine, wetland law, and eminent domain. Case and statutory law analysis.
- 433 Law and Social Change**
Spring. 3(3-0) Interdepartmental with Environmental Economics and Policy; Sociology. RB: (RD 301 or RD 336 or GBL 395) R: Open only to juniors or seniors. SA: PRM 433
Function of law in a modern society. Concepts of power, public regulation, civil rights, and property rights. Limits on freedom.
- 440 Environmental Policy Making in Michigan**
Spring. 3(3-0) Interdepartmental with Environmental Economics and Policy. RB: (RD 200 or EEP 201 or PLS 100 or PLS 301 or PLS 324) SA: PRM 440
State legislative process and its role in environmental policy formulation. Influence of lobbying, grass roots environmental movements, and economic factors.
- 442 Concepts of Biological Information Systems**
Spring. 3(3-0) Interdepartmental with Entomology. Administered by Department of Entomology. R: Open only to seniors or graduate students.
Systems approach to managing biological information using computer technology.
- 444 Pesticides, People and Politics**
Fall. 3(3-0) RB: Completion of Tier I writing requirement. One course in a biological or physical or social science.
Comparative state, national, and international policy issues and politics related to pesticide regulations and use in industrialized and non-industrialized countries.

- 446 Environmental Issues and Public Policy**
Fall, Spring. 3(3-0) Interdepartmental with Zoology. Administered by Department of Zoology. R: Not open to freshmen or sophomores.
Interrelationship of science and public policy in resolving environmental issues. Technical, social, economic, and legal influences. Case study approach.
- 452 Watershed Concepts**
Fall, Spring, Summer. 3(3-0) Interdepartmental with Biosystems Engineering; Crop and Soil Sciences; Forestry; Fisheries and Wildlife. P:M: (RD 324 and ZOL 355) RB: organic chemistry
Watershed hydrology and management. The hydrologic cycle, water quality, aquatic ecosystems and social systems. Laws and institutions for managing water resources.
- 460 Natural Resource Economics**
Spring. 3(3-0) Interdepartmental with Environmental Economics and Policy; Park, Recreation and Tourism Resources; Biosystems Engineering. P:M: (EC 201) and (RD 302 or EEP 255)
Economic framework for analyzing natural resource management decisions. Spatial and inter-temporal allocation of renewable and nonrenewable resources. Special emphasis on institutions, externalities, and public interests in resource management.
- 466 Natural Resource Policy**
Spring. 3(3-0) Interdepartmental with Forestry; Fisheries and Wildlife; Park, Recreation and Tourism Resources. Administered by Department of Forestry. R: Open only to seniors or graduate students in the Department of Forestry or the Department of Fisheries and Wildlife or the Department of Community, Agriculture, Recreation and Resource Studies.
Natural resources policy-making in the context of scientific, environmental, social, and legal-institutional factors. Historical evolution of policies and case studies of contemporary policy issues.
- 470 Theory and Practice in Community and Economic Development**
Spring. 3(3-0) Interdepartmental with Environmental Economics and Policy; Sociology. R: Open only to juniors or seniors. SA: PRM 470
Concepts, principles, models, and skills for community and economic development. Community participation in local development initiatives.
- 480 Environmental Studies Abroad**
Fall, Spring, Summer. 1 to 6 credits. Fall: various sites. Spring: various sites. Summer: various sites. A student may earn a maximum of 12 credits in all enrollments for this course. R: Not open to freshmen. Approval of department; application required.
Contemporary problems affecting natural resource management outside the United States. Ecological, socio-dynamic, and cultural influences on environmental management. Study-travel experience.
- 490 Independent Study**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to juniors or seniors. Approval of department; application required.
Individual supervised study of selected topics.

- 491 Special Topics in Resource Development**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to juniors or seniors.
Selected issues in resource development derived from current resource policy changes, or other emerging topics of interest.
- 493 Professional Internship in Resource Development**
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors in the Department of Community, Agriculture, Recreation and Resource Studies. Approval of department; application required. A student may earn a maximum of 6 credits in all enrollments for any or all of these courses: ABM 493, AEE 493, ANR 493, ANS 493, CSS 493, EEP 493, FIM 493, FW 493, HRT 493, PKG 493, PLP 493, PRR 493, and RD 493.
Supervised professional experiences in agencies and businesses related to resource development.
- 495 Senior Seminar**
Spring. 2(2-0) R: Open only to seniors in the Environmental Studies and Applications major.
Examples and practice in directing change and resolving issues by anticipating resource problems. Analysis and application of policy alternatives. Preparation of position papers.
- 499 Senior Thesis Research**
Fall, Spring, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to seniors in the Environmental Studies and Applications major.
Supervised research option for satisfying capstone experience requirement.
- 801 Foundations of Resource Development**
Fall. 3(3-0)
Exploration of the philosophical and ethical considerations central to lifelong critical thinking and learning concerning sustainability and development.
- 802 Foundations of Resource Development II**
Spring. 3(3-0) P:M: (RD 801)
Perspectives, approaches, and issues in resource management. Sustainable development and local food systems.
- 803 Research Processes in Natural Resources**
Fall. 3(3-0) SA: FOR 803
Research planning and implementation. Structure of research organizations. Applications of research results.
- 810 Institutional and Behavioral Economics**
Fall. 3(3-0) Interdepartmental with Agricultural Economics; Economics. Administered by Department of Agricultural Economics.
Relationships among institutions, individual and collective actions, and economic performance. Public choice, property rights, and behavioral theories of firms and bureaucracies.
- 812 Qualitative Research Techniques for Resource Development**
Spring. 3(3-0)
Design of qualitative research projects. Collection and analysis of qualitative data. Informal and semi-structured interviewing, observation, focus groups, free lists and pile sorts. Use of qualitative methods in mixed methods studies.
- 823 Community-Based Natural Resource Management in Developing Countries**
Spring. 3(3-0) RB: Previous experience or course work related to at least one of the following: developing countries, natural resource management, community development.
Community-based management of natural resources in developing countries. Roles of property rights, collective action, and the quality of local governance in promoting productivity, conservation, and equitable distribution of benefits.
- 824 Watershed Management**
Spring. 3(3-0) RB: (RD 324) or approval of department.
Dynamics of physical, social, economic, political and institutional forces applied to watershed planning and management.
- 825 Planning for Sustainable Development**
Fall of even years. 3(3-0) RB: (RD 460)
Land resource evaluation and impact assessment for rural development planning and policy analysis. Concepts, principles, and indicators of sustainable development. Systems approaches and applied models in resource assessment. Case studies.
- 826 International Development and Sustainability**
Fall. 3(3-0) Interdepartmental with Anthropology; Political Science; Forestry; Social Science.
Environmental, economic, political, legal, management, and cultural components of sustainable development.
- 828 Attitudes, Behavior and Environmental Sustainability**
Spring. 3(3-0)
Environmental quality as affected by personal and collective behavior. Underlying social values and impact of collective attitudes on public policy.
- 829 The Economics of Environmental Resources**
Fall. 3(3-0) Interdepartmental with Agricultural Economics; Economics; Forestry; Park, Recreation and Tourism Resources. Administered by Department of Agricultural Economics.
Economic principles related to environmental conflicts and public policy alternatives. Applications to water quality, land use, conservation, development, and global environmental issues.
- 830 Wetlands Law and Policy**
Spring of odd years. 3(3-0) Interdepartmental with Agricultural Economics; Fisheries and Wildlife; Forestry. RB: (RD 801) Prior exposure to environmental and natural resource economics, management, policy, or law. An ability to do legal and other library-based research.
Origin and development of wetlands law and policy. Wetland functions, mitigation, and banking. Legal, economic, political, and administrative perspectives. Cases, statutes and regulations.
- 831 Role of the Expert Witness**
Fall of odd years. 3(3-0)
Rules of procedure regarding pretrial discovery and the rules of evidence including depositions, use of tests and experiments, and issues involving hearsay.
- 832 Environmental and Natural Resource Law**
Fall. 3(3-0) Interdepartmental with Agricultural Economics; Crop and Soil Sciences; Forestry; Geography. RB: (RD 430)
Origin and development of environmental law. Theories of power, jurisdiction, sovereignty, property interests, pollution, and other bases for legal controls of natural resources. Common law and constitutional limitations on governmental power.
- 836 Law of Environmental Regulation**
Fall. 3(3-0) RB: (RD 415) or approval of department.
Administrative law. National Environmental Policy Act. Air and water pollution. Toxic substances. Case studies.
- 838 Land Use Law**
Spring. 3(3-0) Interdepartmental with Agricultural Economics; Forestry; Urban Planning. RB: (RD 430) SA: RD 834
Public and private land use controls in the U.S. Civil rights, housing, energy problems, growth management, waste management, and land conservation. Cases, statutes and other regulations.
- 852 Systems Modeling and Simulation**
Fall of even years. 3(3-0) Interdepartmental with Fisheries and Wildlife; Biosystems Engineering; Forestry. Administered by Department of Fisheries and Wildlife. RB: (STT 422 or STT 442 or STT 464 or GEO 463)
General systems theory and concepts. Modeling and simulation methods. Applications of systems approach and techniques to natural resource management, and to ecological and agricultural research.
- 853 Applied Systems Modeling and Simulation for Natural Resource Management**
Spring of odd years. 3(2-2) Interdepartmental with Fisheries and Wildlife; Biosystems Engineering; Forestry; Zoology. Administered by Department of Fisheries and Wildlife. RB: (FW 820 or BE 486 or ZOL 851) approval of department. R: Open only to seniors and graduate students
Mathematical models for evaluating resource management strategies. Stochastic and deterministic simulation for optimization. System control structures. Team modelling approach.
- 858 Gender, Justice and Environmental Change : Issues and Concepts**
Spring of odd years. 3(3-0) Interdepartmental with Fisheries and Wildlife; Anthropology; Forestry; Sociology; Geography. Administered by Department of Fisheries and Wildlife. RB: Background in social science, environmental science, or natural resources.
Issues and concepts related to gender, ecology, and environmental studies. Key debates and theoretical approaches to addressing environmental issues from a gender and social justice perspective. Gender and environment issues and processes from a global perspective.

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- 859 Gender, Justice, and Environmental Change: Methods and Application**
Spring of even years. 3(3-0) Interdepartmental with Anthropology; Forestry; Fisheries and Wildlife; Sociology; Geography. Administered by Department of Anthropology. RB: Background in social science, environmental science, or natural resources.
Methods and case studies related to gender, ecology, and environmental studies. Methodological and fieldwork issues from a feminist perspective in international and intercultural contexts. Qualitative and quantitative methods for integrating social and environmental data.
- 862 Farming Systems and Rural Development**
Fall of odd years. 3(3-0) Interdepartmental with Sociology. Administered by Department of Sociology. R: Open only to graduate students in the departments of Sociology and Resource Development.
Farming systems research and its place in rural development strategies. Sociological and resource analysis of small scale family farming systems.
- 866 Economics of Renewable Resources**
Spring of odd years. 3(2-2) Interdepartmental with Forestry. Administered by Department of Forestry. RB: (AEC 829 or EC 803 or EC 805) SA: FOR 866
Applications of economic theory and analysis to renewable natural resources problems. Focus on renewable resource interactions, including multiple-use forestry and agroforestry.
- 869 Community and Conservation**
Fall of even years. Summer of even years. 3 credits. Interdepartmental with Sociology; Fisheries and Wildlife. Administered by Department of Sociology. RB: Social Science methods, social science theory and environmental coursework.
Use of experiential, participatory, field-based mode of inquiry to develop understanding of social and cultural issues associated with conservation. Understanding of different social positions and perspectives.
- 870 Community Resource Development**
Fall. 3(3-0)
Concepts, models, and strategies. Design and implementation of change in community settings.
- 874 Management of Nonprofit Organizations**
Fall. 3(3-0)
Managing nonprofit organizations. Role of nonprofit organizations in the economy. Legal requirements for operation. Managing volunteers. Roles and functions of boards. Fund raising and marketing. Human resource strategies.
- 876 International Rural Community Development**
Fall, Spring, Summer. 3(3-0) Fall: Virtual University. Spring: Virtual University. Summer: Virtual University.
Rural community resource development in Africa, Asia, Europe, and the Americas. Theories of development, learning, participation, and program development. Evaluation strategies. Case studies.

- 881 Building and Implementing Watershed Management Plans**
Fall, Spring, Summer. 3(3-0) Fall: Virtual University. Spring: Virtual University. Summer: Virtual University. Interdepartmental with Forestry; Fisheries and Wildlife. RB: (RD 324 and ZOL 355 and RD 452) Not open to students with credit in RD 824.
Problem definition. Data collection. Public consultation. Program evaluation. Case studies include watershed planning in the Great Lakes region.
- 882 Watershed Assessments and Tools**
Fall, Spring, Summer. 3(3-0) Fall: Virtual University. Spring: Virtual University. Summer: Virtual University. Interdepartmental with Forestry; Fisheries and Wildlife. RB: (RD 452 and RD 881)
Techniques for assessing and predicting physical, chemical, biological, and socioeconomic conditions within a watershed. Water quality monitoring. Bio-assessment protocols. Pollutant loading models.
- 890 Independent Study**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department.
Individual study of selected topics under faculty supervision.
- 891 Selected Topics**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
Selected topics on current innovations or emerging issues in resource development.
- 898 Master's Research**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to master's students in Resource Development.
Plan B research paper.
- 899 Master's Thesis Research**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to master's students in Resource Development.
Master's thesis research.
- 923 Advanced Environmental and Resource Economics**
Fall. 3(3-0) Interdepartmental with Agricultural Economics; Economics; Forestry; Park, Recreation and Tourism Resources. Administered by Department of Agricultural Economics. RB: (AEC 829 and EC 812A)
Advanced economic theory of environmental management and policy. Treatment of externalities and market and non-market approaches to environmental improvement. Topics in conservation and sustainable economic growth. Applications to research and policy.
- 925 Advanced Natural Resource Economics**
Spring. 3(3-0) Interdepartmental with Agricultural Economics; Forestry; Park, Recreation and Tourism Resources; Economics. Administered by Department of Agricultural Economics. RB: (EC 812A and AEC 829 and FOR 866) SA: AEC 991H
Economic theory of managing nonrenewable and renewable resources, including optimal use, the incentives for use under decentralized markets, and public policy design. Analysis of the co-evolution of economic and ecological systems.

- 999 Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to Ph.D. students in Resource Development.
Doctoral dissertation research.

RETAILING

RET

Department of Advertising, Public Relations and Retailing College of Communication Arts and Sciences

- 261 Introduction to Retailing**
Fall, Spring. 3(3-0) SA: HED 261 Not open to students with credit in MSC 351.
Retailing of goods and services. Retail industry structure, location, pricing, promotion, and management.
- 362 Human Resources and Professional Practice in Retailing**
Spring. 3(3-0) P:M: (RET 261) and completion of Tier I writing requirement. SA: HED 362
Strategies for selecting, managing, evaluating and developing employees. Leadership, motivation, team building, problem-solving, and evaluation of skills necessary to compete professionally.
- 363 Promotional Strategies in Retailing**
Spring. 3(3-0) P:M: (RET 261) R: Open only to juniors or seniors. SA: HED 363
Overview of integrated marketing communications as they apply to retailing. Development and implementation of promotional strategies for retailers.
- 371 Merchandise Planning and Buying**
Fall, Spring. 4(4-0) P:M: (RET 261 and MSC 327) and (ACC 201 or ACC 230) and (CSE 101 or CSE 131) and (MTH 112 or MTH 110 or MTH 114 or MTH 116 or MTH 124 or MTH 132 or MTH 201 or STT 200 or STT 201) and completion of Tier I writing requirement. SA: HED 371
Calculations and computer application in the planning and control of merchandising budgets.
- 373 Retail Entrepreneurship**
Fall. 3(3-0) P:M: (RET 261) R: Open only to juniors or seniors. SA: HED 373
Small retailing and service businesses and the economy. Problems and strategies for effective management. New venture creation.
- 460 Retail Information Systems**
Fall, Spring. 4(4-0) P:M: (CSE 101 or CSE 131) and (MTH 110 or MTH 116 or MTH 112 or MTH 114 or MTH 124 or STT 200 or STT 201) and (RET 371 or MSC 351) SA: HED 460
Information needed to make effective retail decisions. Use of technology in collecting, analyzing, and interpreting retail systems data and in writing and presenting reports.