

**COMMUNITY,
AGRICULTURE,
RECREATION AND
RESOURCE STUDIES**

ACR

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

187 Introduction to Sustainability
Fall, Spring. 3(3-0)

Integration of balance among social equity, ecological integrity, economic vitality, civic engagement, aesthetic understanding, critical thinking, systems thinking, personal development, and competency-based learning. Portfolio assessment.

**202 Problem Solving in Community,
Agriculture, and Environmental Systems**
Fall, Spring. 3(3-0) P: ESA 200 or PRR 213
R: Not open to freshmen.

Issues identification, critical thinking, problem solving, sustainability, and leadership in agriculture, natural resources, and community development.

**204 Energy Issues in Natural Resource
Management**

Spring. 3(3-0) Interdepartmental with Fisheries and Wildlife. Administered by Fisheries and Wildlife. RB: FW 101 or FW 203 or ESA 200 or ESA 201 or FOR 202

Energy issues and their relationship to natural resource management. Global warming. Fossil fuels, solar and wind power, biofuels, fuel cells, and hybrids. Energy efficiency and environmental impacts.

**205 Agriculture and Natural Resources
Communication Theory and Practice**

Fall, Spring. 3(3-0) P: Completion of Tier I Writing Requirement R: Open to undergraduate students in the College of Agriculture and Natural Resources.

Communication theory and skills for professionals in the fields of agriculture, food, environment, and recreation.

**250 Global Issues in Agriculture and Natural
Resources**

Fall. 3(3-0) Interdepartmental with Agriculture and Natural Resources. Administered by Agriculture and Natural Resources. P: Completion of Tier I writing requirement. SA: AEE 301

Globalization. Economic, political, and social issues related to natural resources and agricultural production. Historical perspectives and future projections.

**251 Information Technology in Agricultural
Systems**

Fall. 3(2-2) Interdepartmental with Technology Systems Management. Administered by Technology Systems Management. RB: Computer science course

Applications and trends in information systems. Evaluation and use of computer systems, peripherals, networks, presentation systems, and communication systems.

287 Issues in Sustainability

Fall, Spring. 3(3-0) P: ACR 187

Current events in sustainability. Linkage of student experiences with sustainability competencies through portfolios. Sustainability learning community.

**305 Communication Techniques for
Agriculture and Natural Resources
Professionals (W)**

Fall, Spring. 3(3-0) P: (ACR 205 or approval of department) and completion of Tier I writing requirement R: Open to juniors or seniors.

Agricultural, natural resources, environmental communications techniques. Impacts of new and emerging communication tools. Facilitation principles and practice. Crisis communications. Grantsmanship.

387 Sustainability Practicum

Fall, Spring. 2(0-4) P: ACR 187 or approval of department

Integration of sustainability competencies through applied research, outreach or teaching project. Project defense presentation.

410 Michigan's Hunting Heritage

Fall. 3(3-0) P: Completion of Tier I Writing Requirement R: Not open to freshmen.

Social, economic, ecological, cultural and political aspects of hunting. Safe use of firearms and archery equipment. Hunting ethics, safety and techniques. Field trips required.

415 Program Planning and Evaluation

Fall. 3(3-0) P: (MTH 116 or (MTH 103 and MTH 114)) and (STT 200 or STT 201 or FW 324 or PSY 295 or COM 200 or approval of department) Not open to students with credit in PRR 389.

Concepts, theories, and procedures in program development and evaluation. Practical methods and skills to plan and implement evaluations of community, agriculture, and natural resources programs.

**419 Applications of Geographic Information
Systems to Natural Resources
Management**

Spring. 4(2-4) Interdepartmental with Biosystems Engineering and Forestry and Fisheries and Wildlife and Geography. Administered by Fisheries and Wildlife. P: GEO 221

Application of geographic information systems, remote sensing, and global positioning systems to integrated planning and management for fish, wildlife, and related resources.

472 Selected Topics in Sustainability

Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: ACR 187 or approval of department

Focused topics related to global sustainability issues, themes, events, or concepts.

487 Sustainability Portfolio Capstone

Fall, Spring. 2(2-0) P: (ACR 187 or concurrently) and ACR 387 or approval of department

Capstone presentation and explanation of sustainability competencies.

**490 Independent Study in Community
Sustainability**

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits ESA 490, PRR 490, ACR 490 RB: Completion of Tier I Writing requirement R: Approval of department; application required.

Individual supervised study of selected topics

**491 Special Topics in Community
Sustainability**

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits ESA 491, PRR 491, ACR 491 RB: Completion of Tier I Writing requirement R: Open to juniors or seniors.

Selected issues in community sustainability derived from current and emerging topics of interest.

492 Senior Seminar

Fall, Spring. 1(1-0) R: Open to seniors in the Department of Community, Agriculture, Recreation and Resource Studies.

Senior seminar and capstone experience. Linking course work to professional practice. Enhanced professional communication techniques.

**800 Foundations of Community, Agriculture,
Recreation and Resource Studies**

Fall. 3(3-0) R: Open only to graduate students in the Department of Community, Agriculture, Recreation and Resource Studies.

Concepts, issues, and approaches central to integrated research, service and learning careers in community, agriculture, recreation and resource studies.

802 Survey of Research Methods

Fall. 3(3-0) R: Open to graduate students in the Department of Community, Agriculture, Recreation and Resource Studies.

Methodological approaches and research techniques applied in multidisciplinary research in community, agriculture, recreation, and resource studies. Concepts and skills needed to interpret and evaluate published research.

**811 Community, Food and Agriculture: A
Survey**

Fall. 3(3-0)

Philosophical, socio-economic, health and political issues related to food and farming in the United States.

**812 Buzzword Paradigms in Environmental
and Natural Resource Management**

Fall of even years. 3(3-0)

Frequently misunderstood paradigms and concepts applied in environmental and natural resources studies.

**814 Sustainable Tourism and Protected Area
Management: Theories and Applications**

Spring. 3(3-0) SA: PRR 874

Historical antecedents and current concepts of leisure, travel, and tourism. Tourism theory and applications.

**823 Contemporary Issues in Animal-Human
Relationships**

Fall of even years. 3(3-0)

Contemporary issues in animal-human relationships, including agriculture and food systems, local communities, and enclosed parks. Nature as a fluid network of relations including humans, nonhumans, and technologies.

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- 824 Sustainable Development: Measuring Socioeconomic Well-Being**
Spring. 3(3-0) RB: Prior coursework in microeconomics and sociology
Measurement of social and economic welfare at national and local scales. Consumption and economic growth as welfare indicators. Theories of development, utility, and economic growth. Indicators of sustainable development. Environmental and social dimensions of human well-being.
- 825 International Development: Strategy, Design, and Implementation**
Fall, Spring. 3(3-0) SA: RD 876
Development policy design, strategy, programs, and projects. Planning, organizing, staffing, financing, controlling, and evaluating development projects and programs. Case studies.
- 826 International Development Theory and Practice**
Fall. 3(3-0) Interdepartmental with Anthropology and Forestry and Political Science and Social Science. Administered by Community, Agriculture, Recreation and Resource Studies. SA: RD 826
Evolution of international development theory across disciplines. Changing conceptualizations, measurements, processes and effects of development and poverty. Ethnicity, social class, gender, and community influences on socioeconomic processes. Current issues, concerns, and strategic alternatives.
- 827 Economic Applications in Resource Studies**
Fall of odd years. 3(3-0)
Economic concepts and approaches for analyzing policy decisions in community development, agriculture, natural resources management, recreation and tourism. Case studies in non-market valuation, regional economic impact analysis, benefit-cost analysis for policy analysis.
- 828 The Art and Craft of Public Policy Analysis**
Spring. 3(3-0) RB: Prior course work in political science, public administration or economics, and research methods, or relevant work experience.
Public policy analysis, especially natural resource policy. Theoretical models of policy analysis. Practice translating science to policy. Values, systems and political environments in which policy decisions are made. Field trip required.
- 829 The Economics of Environmental Resources**
Spring. 3(3-0) Interdepartmental with Agricultural Economics and Economics and Forestry and Fisheries and Wildlife. Administered by Agricultural Economics.
Economic principles related to environmental conflicts and public policy alternatives. Applications to water quality, land use, fish and wildlife, conservation, development, and global environmental issues.
- 830 Planning for Sustainable Development**
Summer. 3(3-0)
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.
- 831 Foundations of Qualitative Research**
Spring. 5(5-0) RB: Prior research experience is helpful SA: RD 812
Qualitative project design. Relationship of epistemology to theory, methodology, and method. Collection and analysis of qualitative data. Project-based. In-depth interviews, focus groups, observation, memos, coding displays, report writing.
- 833 Program Evaluation in Agriculture and Natural Resources**
Spring. 3(3-0)
Concepts, theories, procedures and applications of program evaluation. Planning and implementing evaluations of food, agriculture and natural resources programs. Logic models, evaluation plans and instruments, data analysis and written reports.
- 838 Participatory Modes of Inquiry**
Spring. 3(3-0) RB: ACR 800, ACR 802, a graduate philosophy of science course, or a graduate-level research methods course.
Participatory and action research literature across the disciplines. Epistemological and theoretical foundations, fields of application, points of emphasis for practice. Skill building in reflexivity, surfacing assumptions, dialogue, and active listening.
- 841 Building and Implementing Watershed Management Plans**
Fall, Spring, Summer. 3(3-0) RB: ESA 452 SA: RD 881
Developing and implementing watershed management plans. Problem definition, data collection, public consultation, and program evaluation.
- 842 Watershed Assessments and Tools**
Fall, Spring, Summer. 3(3-0) RB: ESA 452 or ACR 841 SA: RD 882
Assessing and predicting physical, chemical, biological and socioeconomic conditions within watersheds. Tools and techniques for identifying, evaluating, and prioritizing problems.
- 843 Legal, Financial and Institutional Frameworks in Watershed Management**
Fall, Spring, Summer. 3(3-0) RB: ESA 452 or ACR 841 or ACR 842
Watershed management laws and regulations. Resolving financial and human conflicts arising from regulation.
- 845 Coastal and Maritime Resources Management**
Fall of odd years. 3(3-0) SA: PRR 895
Integrated planning and management of coastal and maritime resources. Legal, social and political contexts of Coastal tourism. Cultural landscapes. Natural, historic and cultural resources. Commercial and recreational uses. Field trips required.
- 846 Law of Environmental Regulation**
Fall. 3(3-0) SA: RD 836
How the legal system regulates environmental matters. Case studies. Administrative Procedures Act. National Environmental Policy Act. Clean Air Act. Nuclear power, federal lands, parks, monuments, and the production, use and disposal of hazardous substances.
- 848 Community Based Natural Resource Management in International Development**
Spring. 3(3-0) SA: RD 823
Community-based natural resource management in developing countries. Determinants of conservation, productivity, and income distribution. Interaction of human and natural systems, perceptions of scarcity, property rights, collective action, and governance. Policy tools for promoting conservation.
- 851 Modeling Natural Resource Systems**
Spring. 3(3-0) Interdepartmental with Environmental Science and Policy and Fisheries and Wildlife. Administered by Community, Agriculture, Recreation and Resource Studies. RB: ecology, statistics, and calculus'
Introductory quantitative modeling of environmental systems.
- 853 The Industrialization of American Agriculture**
Fall of even years. 3(3-0)
Impact of industrial agriculture on farms, production systems, rural communities and the environment. Agricultural research to create sustainable agriculture and rural life.
- 854 Agriculture and Social Movements**
Spring of even years. 3(3-0)
Theoretical and empirical issues in social movements. History of United States agrarian insurgency. Contemporary analysis of agrifood insurgency, grievances, organization, ideology, economic and political structures. Role of culture.
- 857 Culture and Rurality**
Spring of odd years. 3(3-0)
Culture, meaning, values, ideology, and identity in rurality, agriculture, and development. Cultural production and reproduction in rural communities and agriculture including power and inequality. Socio-cultural life of markets and commodities, alternative agri-food networks, and sustainable development.
- 862 Community Program Development - Theory and Practice**
Fall of even years. 3(3-0)
Community program development theory and practice for formal and non-formal program developers. Participant experiences used to connect theory and practice.
- 865 Facilitative Leadership**
Fall, Summer. 1(1-0)
Facilitative leadership in groups, organizations and communities. Techniques, processes, and skills for leading groups to generate and prioritize ideas, set goals, and create action plans. Practical experience emphasized.
- 872 Parks and Protected Areas Policy and Management**
Spring of odd years. 3(3-0) Interdepartmental with Forestry. Administered by Community, Agriculture, Recreation and Resource Studies. SA: PRR 842
Historical and institutional approach to national park and wilderness policies. Variations in policy implementation across United States natural resource management agencies. International protected areas policies and issues. Relationship between policy and resource management.
- 873 Culture, Communities and Tourism**
Fall of even years. 3(3-0)
Multi-disciplinary exploration of culture, heritage, cultural landscapes, ecotourism. Contribution of cultural institutions and resources to economy, tourism and community development. Relationship between natural environment and cultural expression. Positive and negative impacts of cultural tourism. Domestic and international examples.

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- 875 Tourism and Global Change**
Spring of odd years. 3(3-0) Interdepartmental with Geography. Administered by Community, Agriculture, Recreation and Resource Studies.
Inter-relationship among tourism and economic, social, political, and environmental forces. Local, national, and international levels. Focus on vulnerable, less developed regions with the lowest natural levels of adaptation to global, social, and environmental change.
- 876 Marketing Tourism, Leisure, and Natural Resources**
Spring of odd years. 3(3-0) RB: One undergrad or grad marketing class.
Classic and contemporary marketing theories and methods in planning and design marketing.
- 878 Tourism, Conservation and Development**
Fall of even years. 3(3-0)
Theory and practice of using tourism as a means of conserving natural and cultural resources and promoting economic growth at the local and regional level. Case studies.
- 890 Independent Study in Agriculture, Community and Recreation**
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students. Approval of department.
Supervised individual study in an area of community, agriculture, and recreation.
- 891 Selected Topics in Agriculture, Community and Recreation**
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students in the College of Agriculture and Natural Resources or in the Department of Community, Agriculture, Recreation and Resource Studies or in the Community, Agriculture, Recreation and Resource Studies major. Approval of department.
Selected topics in community, agriculture, and recreation studies of current interest and importance. Offered first ten weeks of semester.
- 891B Advanced Topics in Community, Food and Agriculture**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Selected, advanced topics in community, food and agriculture. Topics vary.
- 892B Ecological Food and Farming Systems Seminar**
Fall, Spring. 1 credit. Interdepartmental with Crop and Soil Sciences. Administered by Crop and Soil Sciences.
Experiential learning, and multidisciplinary and applied research, in ecological food and farming systems.
- 894 Field Practicum in Sustainability Studies**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open to graduate students in the Department of Community, Agriculture, Recreation and Resource Studies.
Integration of knowledge, skills and program objectives with field-based scholarship or training in programs in domestic or foreign settings. Practice, observation, and analysis through field experiences. Writing, analysis, and evaluation.
- 895 Case Studies in Community, Agriculture, Recreation and Resource Studies**
Fall. 3(3-0) P: ACR 800 and ACR 802 R: Open to graduate students in the Department of Community, Agriculture, Recreation and Resource Studies.
Case studies in community, agriculture, recreation and tourism, natural resources and environmental systems. Use of multi-disciplinary teams in addressing complex policy, planning, development, and management issues.
- 898 Master's Professional Project**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to masters students in the Department of Community, Agriculture, Recreation and Resource Studies.
Master's project, non-thesis research, practicum or other professional development capstone experiences.
- 899 Master's Thesis Research**
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to masters students in the Department of Community, Agriculture, Recreation and Resource Studies.
Master's thesis research.
- 999 Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to doctoral students in the Department of Community, Agriculture, Recreation and Resource Studies.
Doctoral dissertation research.