

MURRAY STATE UNIVERSITY

DEPARTMENT: EARLY CHILDHOOD AND ELEMENTARY EDUCATION

COURSE PREFIX: EDU

COURSE NUMBER: 668

CREDIT HOURS: 3

I. TITLE: Agriculture and the Environment in the Classroom

II. COURSE DESCRIPTION AND PREREQUISITE(S): The study of agriculture and the environment as it relates to origination and production of food and fiber and how this connects to topics, skills, and concepts that are included in the K-12 classroom. This program is conducted in conjunction with the Kentucky Department of Agriculture (field experience required).

Prerequisites: Admission to the graduate program as a regular or visiting student and permission of instructor.

III. COURSE OBJECTIVES: Course activities are centered on the attainment of the objectives listed below. Curriculum connections will be made to the Kentucky Academic Standards. Following each objective, and enclosed in parentheses, are numbers which reference Kentucky's Teacher Standards (KTS) and the North American Association for Environmental Education's (NAAEE) Guidelines for the Initial Preparation of Environmental Educators. Candidates will be able to

1. describe and provide examples of the importance of agriculture as it relates to our society's standard of living. (KTS 1-3, 7-10/ NAAEE 1-4);
2. identify, compare and contrast the roles agriculture has in the consumption and production of renewable resources to achieve sustainability. (KTS 1-3, 5-8/ NAAEE 1-6);
3. provide linkages between agriculture and daily life as it relates to producing, growing, distributing food and fiber. (KTS 1-4/ NAAEE 1-4);
4. show how agriculture has evolved over the past two centuries in the United States and the impact of this evolution upon society. (KTS 1-3, 7-10/ NAAEE 1-4);
5. provide examples of best management practices and its relation to agricultural production and the waste cycle. (KTS 1-3/ NAAEE 1-4); and
6. develop and apply a unit of study with hands-on experiences that connects the K-12 Core Content for Assessment to the production and distribution of food and fiber. (KTS 1-3, 6-10/ NAAEE 1-6).

IV. CONTENT OUTLINE:

- A. Introduction: Distributions of Materials and Readings
- B. Multi-media Program – "Scarecrow" (challenges of the family farm)
- C. Where Do We Get Our Food? (Pizza Culture)
- D. Pullen Farm – What it teaches and what is learned about farming
- E. Aquaculture – alternative crops and production and distribution
- F. Murdock Farm – ways of reducing fertilizer, herbicides, and pesticides.
- G. Top soil, its function in food production, its role in non-point source pollution
- H. Farming practices in the 1800's through the 1900's
- I. Economics of farming
- J. The Chicago Grain Market and Its Impact Upon Production and Consumption of farm products
- K. Production and use of ethanol/biodiesel
- L. Tracing of products from its natural resources to its disposal
- M. Use of animal bi-products to produce useable resources
- N. Farmers and best management practices (rules and regulations)
- O. Impact of urban sprawl upon food production and green space
- P. Waste and the problems and opportunities it provides
- Q. Composting on small and large scales and its impact on the waste stream and land fills

V. INSTRUCTIONAL ACTIVITIES:

- A. Class Participation

- B. Large group instruction
- C. Small group instruction
- D. Simulations
- E. Videos
- F. Guest speakers

VI. FIELD, CLINICAL AND/OR LABORATORY EXPERIENCES: Students are required to attend all field and in-class sessions. Field trips are made throughout Western Kentucky within a radius of approximately 60 miles of Murray State University.

VII. TEXT, REFERENCES AND RESOURCES:

TEXT:

Project Food, Land and People

RESOURCES:

Four Rivers Watershed Watch; Kentucky Agriculture and the Environment in the Classroom Mobile Science Activity Center; Kentucky Corn Growers Association; Kentucky Division of Conservation; Kentucky Division of Energy; Kentucky Division of Water; Kentucky Farm Bureau; Kentucky 4-H; Kentucky Poultry Federation; Kentucky Soybean Association; KY Thoroughbred Association; COEHS Curriculum Library; Murray State University College of Science and Engineering Technology; Project Food Land and People; Project WET (Water Education for Teachers); U.S. Natural Resource Conservation Service; Waterfield Library; West Kentucky Aquaculture Cooperative; Guest Speaker

VIII. EVALUATION AND GRADING PROCEDURES:

- A. Group/Cooperative Learning/Class Participation: in order to maximize learning in this class, each participant must be actively and positively engaged in discussions and activities during the class.
- B. Unit of Study: each participant will be asked to develop a unit of study based on an agricultural/environmental principal with special emphasis on “sustainability”. (

IX. ATTENDANCE POLICY: Students are expected to adhere to the MSU Attendance Policy in the current *MSU Bulletin*.

X. ACADEMIC HONESTY POLICY:

Murray State University takes seriously its moral and educational obligation to maintain high standards of academic honesty and ethical behavior. Instructors are expected to evaluate students’ academic achievements accurately, as well as ascertain that work submitted by students is authentic and the result of their own efforts, and consistent with established academic standards. Students are obligated to respect and abide by the basic standards of personal and professional integrity.

Violations of Academic Honesty include:

Cheating - Intentionally using or attempting to use unauthorized information such as books, notes, study aids, or other electronic, online, or digital devices in any academic exercise; as well as unauthorized communication of information by any means to or from others during any academic exercise.

Fabrication and Falsification - Intentional alteration or invention of any information or citation in an academic exercise. Falsification involves changing information whereas fabrication involves inventing or counterfeiting information.

Multiple Submission - The submission of substantial portions of the same academic work, including oral reports, for credit more than once without authorization from the instructor.

Plagiarism - Intentionally or knowingly representing the words, ideas, creative work, or data of someone else as one’s own in any academic exercise, without due and proper acknowledgement.

Instructors should outline their expectations that may go beyond the scope of this policy at the beginning of each course and identify such expectations and restrictions in the course syllabus. When an instructor receives evidence, either directly or indirectly, of academic dishonesty, he or she should investigate the instance. The faculty member should then take appropriate disciplinary action.

Disciplinary action may include, but is not limited to the following:

- 1) Requiring the student(s) to repeat the exercise or do additional related exercise(s).
- 2) Lowering the grade or failing the student(s) on the particular exercise(s) involved.
- 3) Lowering the grade or failing the student(s) in the course.

If the disciplinary action results in the awarding of a grade of E in the course, the student(s) may not drop the course.

Faculty reserve the right to invalidate any exercise or other evaluative measures if substantial evidence exists that the integrity of the exercise has been compromised. Faculty also reserve the right to document in the course syllabi further academic honesty policy elements related to the individual disciplines.

A student may appeal the decision of the faculty member with the department chair in writing within five working days. Note: If, at any point in this process, the student alleges that actions have taken place that may be in violation of the Murray State University Non-Discrimination Statement, this process must be suspended and the matter be directed to the Office of Institutional Diversity, Equity and Access. Any appeal will be forwarded to the appropriate university committee as determined by the Provost.

XI. NON-DISCRIMINATION POLICY STATEMENT:

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. In particular and without limiting the preceding and pursuant to and consistent with the requirements of Title VI of the Civil Rights Act of 1964 and its regulations 34 CFR 100 et seq.; Section 504 of the Rehabilitation Act of 1973 and its regulations 34 CFR 104; Title IX of the Education Amendments of 1972, 20 USC 1681 et seq., and its regulations 34 CFR 106 et seq; and the Age Discrimination Act of 1975 and its regulations 34 CFR 110, Murray State University does not discriminate on the basis of race, color, national origin, sex, handicap, or age in its educational programs and activities. This non-discrimination in education programs and activities extends to employment and admissions and to recruitment, financial aid, academic programs, student services, athletics, and housing. Murray State is required by Title IX and 34 CFR part 106 not to discriminate on the basis of sex and the prohibition against sex discrimination specifically includes a prohibition of sexual harassment and sexual violence. For more information, contact the Executive Director of Institutional Diversity, Equity, and Access/ Murray State University Title IX Coordinator, Murray State University, 103 Wells Hall, Murray, KY 42071 Telephone: (270) 809-3155 Fax: (270) 809-6887; TDD: (270) 809-3361; Email: msu.titleix@murraystate.edu.