## Department: Agricultural and Resource Economics (ARE)

Course No: 110 REV

Credits: 3

Title: Population, Food and the Environment

Contact: Linda Lee

Content Area: Social Sciences (CA2)

**Catalog Copy:** 110. Population, Food, and the Environment. Either semester. Three credits. The role of agriculture in the growth and development of societies throughout the world. Economic and sociological problems of food and fiber needs and production in the developing and the advanced societies.

**Course Information:** Course Information: -The course objectives are (1) to introduce basic economic principles and concepts that can be used to understand and analyze environmental and resource problems, (2) to explore alternative economic, political, and technological solutions to environmental and resource problems, and (3) to apply analytical tools and concepts to specific global, national, and local issues relation to population, food and the environment. The course requirements include two midterms exams and a final exam with multiple choice, true-false, and short answer formats. Quizzes and home works are also required in the course. Weekly reading assignments are from the textbook and class handouts. Videos are shown in class and are also required materials. The major themes addressed in the course include human population growth issues, world food problems, natural resource management issues, environmental pollution, and alternative economic and political solutions to population, resource, and environmental pollution, and environmental pollution.

Meets Goals of Gen Ed: ARE 110 assists undergraduate students in acquiring intellectual breadth and versatility about a broad spectrum of domestic and international food, population, and environmental issues. The course emphasizes using critical judgment to determine the nature and severity of population and environmental issues by presenting a variety of perspectives and viewpoints for analysis. The course attempts to make students aware of environmental, population, and food issues confronting them in the era and society in which they live. Finally, the course helps students understand the process by which they can evaluate and assess continuing issues with respect to population, food and the environment.

<u>CA2 Criteria:</u> Criteria 1. The course introduces students to basic economic principles and concepts including supply and demand, market structure, externalities, and cost-benefit analysis. Criteria 2. The course introduces students to a variety of techniques used by economists in environmental and food policy research. Students will learn to evaluate data collection techniques such as surveys and sources of secondary data. Analytical techniques used to determine price trends in food and resource industries as well as valuation techniques for environmental quality goods will be addressed. The study of global population, food and

environmental problems addresses ethical problems faced by both developed and developing societies as they try to balance economic growth with environmental preservation and protection. Particular emphasis is given to the ethical conflicts created by efforts within the agricultural community to increase global food production.

Criteria 3. The impact of economic policies on individual and group behavior is emphasized throughout the course. Through the study of economic topics such as supply and demand, commodity pricing, market failure, and economic policy analysis, actions of individuals, groups, and countries are evaluated for impacts on global population trends, food production and prices, and environmental quality trends. Students are introduced to both market and governmental policies that may change the behavior of individuals and societies toward resource use and the environment. Criteria 4. The course provides students with the basic tools of economic analysis necessary to analyze interactions between groups in society and basic social issues relating to food production, population, growth, and environmental problems. Social issues include global population growth, natural resource scarcity, and environmental pollution.

**Role of Grad Students:** Graduate student assistants will be used to help create and grade exams and quizzes, monitor exams, and provide assistance to students in after class help sessions. They will be supervised by the course instructor. They will be selected for their ability to work with undergraduate in a small group setting.