

Approved Courses Offered by College of Agriculture and Life Sciences Departments for Meeting Requirements for Secondary Major or Minor in International Agriculture

Required Course: Agron 342: World Food Issues: Past and Present

3 Cr.

(Cross-listed with ENV S, FS HN)

Issues associated with global agricultural and food systems including ethical, social, economic, environmental, and policy contexts. Investigation of various causes and consequences of overnutrition/undernutrition, poverty, hunger, access, and distribution.

****AgEdS 496A**

1-3 Cr.

International Agricultural Travel Course

One to three credits each time taken. Extended field trips to study agriculture and education related topics. Location and duration of trips will vary. Pre-trip sessions arranged.

****Agron 496A**

Cr. Arr.

International Agricultural Travel Course

Tour and study of production methods in major crop and livestock regions of the world. Influence of climate, economics, geography, soils landscapes, markets, and other factors on crop and livestock production. Location and duration of tours will vary. Check with department for current offerings.

****An S 496A**

Cr. Arr.

International Agricultural Travel Course

Repeated (approx. one-half credit per week traveled in each An S 496 and Agron 496). Prereq: Students enroll in both An S 496 and Agron 496. Tour and study of production methods in major crop and livestock regions of the world. Influence of climate, economics, geography, soils, landscapes, markets, and other factors on livestock and crop production. Locations and duration of tours will vary. Summer tour will usually visit a northern location and winter tour will usually visit a southern location. Information usually available 9 months before departure.

****Econ 496**

1-3 Cr.

International Economics Travel Course

One to three credits each time taken. Tour and study of international agricultural and/or nonagricultural economies, markets and institutions. Locations and duration of tours will vary.

****Hort 496**

1-3 Cr.

International Horticulture Travel Course

Credits may be repeated. Study and tour of production methods in major horticultural regions of the world. Influence of climate, economics, geography, soils, landscapes, markets, cultures, and history of horticultural crops. Location and duration of tours will vary.

**** Soc 496**

3 Cr.

Agriculture and Rural Development in Ireland

Comparative analysis of the agricultural and rural development needs of Ireland and the U.S. Course involves a 2 week tour of the Irish countryside where students can observe and experience small town and farm life.

**** Nrem 496A**

3 Cr.

Travel Course

Limited enrollment. Extended field trips.

A Ecl 455 3 Cr.	International Wildlife Issues Biological, political, social, and economic factors affecting the management of international wildlife resources.
*AgEdS 461/561 3 Cr.	Technology Transfer and the Role of Agricultural and Extension Education Impact of agricultural and extension education processes on development and their role in the transfer of agricultural technology. Utilizing situational analysis techniques to analyze and solve problems in international agricultural education programs.
Agron 160 3 cr.	Water Resources of the World (<i>Cross-listed with ENV S, GEOL, MTEOR</i>). Study of the occurrence, history, development, and management of world water resources. Basic hydrologic principles including climate, surface water, groundwater, and water quality. Historical and current perspectives on water policy, use, and the role of water in society and the environment.
Agron 180 3Cr.	Global Agriculture in a Changing World A scientific investigation of the global distribution of climate, soils and agricultural production and consumption. Physical processes that connect natural resources to agriculture and the environment. How global change drives increasing demand for agricultural production.
*Agron 404/504 3 Cr.	Global Change (<i>Cross-listed with ENV S, GEOL, MTEOR</i>) Recent changes in global biogeochemical cycles and climate; models of future changes in climate system; impacts of global change on agriculture, water resources and human health; ethical issues of global environmental change.
Agron 406 3 Cr.	World Climates (<i>Cross-listed with ENV S, MTEOR</i>) Distribution and causes of different climates around the world. Effects of climate and climate variations on human activities including society, economy and agriculture. Current issues such as climate change and international efforts to assess and mitigate the consequences of a changing climate. Semester project and in-class presentation required.
Agron 446 3 Cr.	International Issues and Challenges in Sustainable Development (<i>Cross-listed with GLOBE, INTST</i>) Interdisciplinary study and comparison of agricultural systems around the world, including analysis of biophysical, social, economic, and political determinants of the systems. Emphasis on the interrelationships among system determinants. Analysis of system constraints and solution strategies. Evaluation of the productivity and sustainability of the systems. Team project and report.
Agron 450 3 Cr.	Issues in Sustainable Agriculture (<i>Cross-listed with ENV S</i>) Agricultural science as a human activity, contemporary agricultural issues from agroecological perspective. Comparative analysis of intended and actual consequences of development of industrial agricultural practices.

AN S 441 3 Cr	International Animal Agriculture (<i>Cross-listed with GLOBE</i>) An overview of animal agriculture with emphasis in developing countries. Historical, economic, environmental, and political considerations will be assessed and evaluated. Issues related to gender, resilience and sustainability for different production systems including alternative livestock species, will be investigated. The role of animal source foods in attainment of global food security will be discussed.
An Sc 495 R Cr.	Ag Travel Course Preparation
Econ 355 3 Cr.	International Economics Explanations of causes of international trade and the impact of trade on welfare and employment patterns. Analysis of government policies towards trade, such as tariffs, quotas, and free trade areas. Theory of balance of payments and exchange rate determination, and the role of government policies. Examination of alternative international monetary arrangements.
Econ 385 3 Cr.	Economic Development Current problems of developing countries, theories of economic development, agriculture, and economic development, measurement and prediction of economic development, measurement and prediction of economic performance of developing countries, alternative policies and reforms required for satisfying basic needs of developing countries, interrelationships between industrialized countries and the developing countries, including foreign aid.
Econ 455 3 Cr.	International Trade Rigorous treatment of theories of international trade and its impact on domestic and world welfare and the distribution of income. Theoretical analysis of government policies towards trade, such as quotas, tariffs and free trade areas. Theory of exchange rate and balance of payments determination and the role of government policy, study of efficiency of the foreign exchange market. Examination of alternative international monetary
Econ 457 3 Cr.	International Finance National income accounting and balance of payments; foreign exchange rates and exchange rate markets; money, interest rates, and exchange rate determination; prices, exchange rates, and output in the short run; international monetary arrangements; fixed versus flexible exchange rates; optimal currency areas; international capital flows; currency and financial crises in emerging markets.
Econ 460 3 Cr.	Agricultural, Food, and Trade Policy Description and analysis of economic problems of U.S. agriculture. Explanation and economic analysis of government policies and programs to develop agriculture, conserve agricultural resources, address consumer food concerns, stabilize farm prices, and raise farm incomes. The influence of macropolicy, world economy, and international trade on U.S. agriculture.

- Ent 374** **Insects and Our Health**
3 Cr. Identification, biology, and significance of insects and arthropods that attack people and animals, particularly those that are vectors of disease.
- For 460** **Agroforestry Systems**
3 Cr. Agroforestry systems in temperate and tropical regions. Ecological, socioeconomic and political aspects of Agroforestry.
- GLOBE 360X** **Global Health.** (*Cross-listed with MICRO 360X and V MPM 360X*).
3 Cr. Global Health explores health and its determinants across the world with a commitment to the many disciplines and variables that influence health. The course will stress the interconnectedness of humans, animals, and the environment, with emphasis on poor countries.
- Soc 220** **Globalization and Sustainability** (*Cross-listed with ANTHR, ENV S, GLOBE, ME, MAT E*).
3 Cr. An introduction to understanding the key global issues in sustainability. Focuses on interconnected roles of energy, materials, human resources, economics, and technology in building and maintaining sustainable systems. Applications discussed will include challenges in both the developed and developing world and will examine the role of technology in a resource-constrained world.
- Soc 345** **Population and Society**
3 Cr. Human population growth and structure, impact on food, environment and resources. Comparison of US with other societies around the world.
- Soc 348** **Global Poverty, Resources, and Sustainable Development**
3 Cr. Trends in hunger, poverty, resource use and development. Assessment of theories, policies, and programs to promote sustainable livelihoods, resource management, and development at local and national levels. Examine solutions through institutional efforts and grassroots social movements.
- Soc 411** **Social Change in Developing Countries**
3 Cr. Social change and development in developing countries; international interdependence; causes and consequences of persistent problems in agriculture, city growth, employment, gender equality, basic needs; local and worldwide efforts to foster social change and international development.

*Dual-level courses-primarily for Graduate students, open to qualified undergraduate students. Contact the Instructor.

**Travel courses can be used to meet study abroad portion of requirements for secondary major or minor in International Agriculture.

Students are advised to ask their advisor about additional courses that are internationally focused in the department then contact Dr. Ebby Luvaga (luvaga@iastate.edu), CALS Coordinator for International Agriculture as a Secondary Major for approval.

Last updated, September 17, 2020