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## Agricultural and Resource Economics (A,RESEC)

A,RESEC 201 Production, Industrial Organization, and Regulation in Agriculture 4 Units

Department: Agricultural and Resource Economics Course level: Graduate Term course may be offered: Fall

Grading: Letter grade.

Hours and format: 3 hours of Lecture and 1 hour of Discussion per week for 15 weeks.

**Prerequisites:** Economics 201A or equivalent or consent of instructor. Basic concepts of micro and welfare economics: partial and general equilibrium. Industrial organization: monopolistic competition, vertical integration, price discrimination, and economics of information with applications to food retailing, cooperatives, fishing, and energy.

## A,RESEC 202 Issues and Concepts in Agricultural Economics 4 Units

Department: Agricultural and Resource Economics Course level: Graduate Term course may be offered: Spring

Grading: Letter grade.

Hours and format: 3 hours of Lecture and 1 hour of Discussion per week for 15 weeks.

**Prerequisites:** Economics 201A-201B or consent of instructor. History, institutions, and policies affecting agriculture markets and environmental quality. Producer behavior over time and under uncertainty. Asset fixity and agricultural supply models.

## A,RESEC 210 Probability and Statistics 3 Units

Department: Agricultural and Resource Economics Course level: Graduate Term course may be offered: Fall Grading: Letter grade. Hours and format: 3 hours of Lecture per week for 15 weeks.

**Prerequisites:** Graduate standing or consent of instructor. This is an introduction to probability theory and statistical inference. It is primarily intended to prepare students for the graduate econometrics courses 212 and 213. The emphasis of the course is on the principles of statistical reasoning. Probability theory will be discussed mainly as a background for statistical theory and specific models will, for the most part, be considered only to illustrate the general statistical theory as it is developed.

## A,RESEC 211 Mathematical Methods for Agricultural and Resource Economists 4 Units

Department: Agricultural and Resource Economics Course level: Graduate Term course may be offered: Fall Grading: Letter grade.

Hours and format: 4 hours of Lecture and 1 hour of Discussion per week for 15 weeks.

Prerequisites: Consent of instructor.

The goal of this course is to provide entering graduate students with the basic skills required to perform effectively in the graduate program and as professional economists. The lectures place heavy emphasis on intuition, graphical representations, and conceptual understanding. Weekly problem sets provide the opportunity to master mechanical skills and computational techniques. Topics covered include real analysis, linear algebra, multivariable calculus, theory of static constrained optimization, and comparative statics.