

ABUS 415 - Agricultural Price Analysis

Term

Spring 2012

Instructor

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Office Hours and Contact Information

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Office Hours: MTWR: 10a – 1050a, and by appointment.

Course Description :

Analysis of price-determining factors for agricultural products. Business conditions and changes in supply and demand for domestic and international agricultural commodities. Study of structure, conduct, and performance of agricultural markets. Monopolistic practices and relative efficiency of markets. **Prerequisites:** ABUS 301 and MATH 105.

Course Objectives:

I have two main objectives in this course. The first is to help you develop conceptual tools you can use to understand, evaluate, and predict agricultural commodity price movements. This involves working with economic models of perfectly and imperfectly competitive markets to explore how shocks to supply and demand affect agricultural prices within and across individual markets.

My second objective is to help you develop a level of statistical literacy that will enable you to better understand and critique data and conclusions presented by popular news outlets, trade journals, and other sources. In the process, the course will enhance your ability to gather, analyze, interpret, and present data. You will:

1. Learn methods for generating and/or gathering primary and secondary data, and the importance of data types and their appropriate uses.
2. Learn to clearly and concisely describe and present data using graphs, tables, and narrative description.
3. Learn to develop and critique research questions and hypotheses, the appropriate uses of controlled and observational experiments, and to search for answers using data summary statistics and regression models.

4. Learn to construct, analyze, and interpret simple- and multiple-regression models to explore statistical relationships between data such as agricultural prices and their determinants.

Textbook and Required Readings

There is not a required textbook for this course. Required readings will be posted online.

Course Management/Policies

Students are expected to read and adhere to all course policies found in the College of Agriculture Common Course Policies found at:

<http://www.csuchico.edu/ag/assets/documents/syllabi/COACCommonSyllabusPolicies.pdf> These policies include things like: turn off your cell phone during class.

Unless approved by me on a case-by-case basis, NO LATE WORK WILL BE ACCEPTED, AND NO MAKE-UP ASSIGNMENTS OR EXTRA CREDIT WILL BE OFFERED. Generally, if you miss an assignment with a serious and *documented* excuse, such as a medical or family emergency (this does not include colds and flu), then that assignment will be omitted from your grade and more weight will be placed on another assignment.

Grading

Grades will be determined by:

	Approximate Percentage
Homework	35%
Unannounced Quizzes/In Class Work	20%
Midterm	20%
Final Exam (comprehensive)	25%

*Homework is a
BIG deal!!*

Grades will be assigned using the following scale:

93% - 100%	A
90% - 92%	A-
87% - 89%	B+
83% - 86%	B
80% - 82%	B-
77% - 79%	C+
73% - 76%	C
70% - 72%	C-
67% - 69%	D+
60% - 66%	D
Below 60%	Failure

Course Topics

Economics and Commodity Prices: (Re)connecting the Dots

Economics and Agricultural Prices
Perfectly and Imperfectly Competitive Markets

Market Interdependence
Food and Fuel, etc...

Data and Graphing

Data types, collection and storage

Seeing what you have and explaining it to others: Graphing Your Data

Why graph data?

The importance of units (level, change, percent change, index numbers)

Price Data

Supply and Demand

Real versus Nominal prices

Presenting graphs

Crunching the numbers just a little: Summary Statistics

Mean, Variance, etc.

Presenting summary statistics – figures and tables

What can summary statistics tell you, and what CAN'T they tell you?

Correlation and causality – Kleenex and hot chocolate

Correlation coefficients

Data Analysis

Why analyze data?

Designing experiments and developing hypotheses

Controlled vs. observational studies

ANOVA

Simple Linear Regression

Graphical interpretation as a slope and an intercept

Interpreting the regression output (mathematical interpretation)

“Statistical Significance”

Coefficient Estimates: standard errors, t-statistics

Regression Statistics: F-statistic, R-squared and adjusted R-squared

Limitations and pitfalls

Multiple Regression Analyses

Interpreting the regression output

Multiple versus Simple Regression

“Statistical Significance”

Coefficient Estimates: standard errors, t-statistics

Regression Statistics: F-statistic, R-squared and adjusted R-squared

Limitations and pitfalls

Presenting your results – BE CAREFUL, and BE CLEAR!