COLORADO STATE UNIVERSITY  
DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS  

Agricultural and Resource Economics (AREC) 412  
Agricultural Commodities Marketing  
Fall 2018

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Office Hours: 12:30-2:00 p.m. M-F, and by appointment.

Class Meeting Time and Location: A-206 Clark Building from 2:00-2:50 p.m. MWF.

Online Course Timing: The online version will run concurrently with the campus version. The schedule for all assignments, including examinations, is identical between the online and campus course.

Course Objective:

Agricultural marketing and agribusiness principles applied to current marketing problems related to livestock and field crops.

This is a course on agricultural commodity markets and commodity futures and options markets. Emphasis will be on major commercial agriculture field crops and livestock. (There will be no horticultural crops.) The course will involve study of the role of futures markets as an institution in a market economy, as well as use of futures contracts and options on futures contracts in firm asset and risk management. Topics emphasized will be: mechanics of futures and options trading, hedging strategies, basis relationships between cash and futures markets, fundamental and technical behavior of commodity futures prices, market analysis, market regulation, and commodity market performance.

Prerequisites:

Agricultural and Resource Economics 310: Agricultural Marketing is a requirement. It is recommended that students be in their junior or senior year at university. An intermediate or junior-level agricultural marketing course and agribusiness management course are the most useful supporting courses. Statistical and graphical analysis through the use of spreadsheets will be conducted. Therefore, skills in MSExcel, statistics, and econometrics will be useful. Market data and other commodity market information will be gathered so knowledge of search engines and different information sources will be useful.

Course Materials:

The course text is Agricultural Futures and Options: Principles and Strategies, Second Edition, by W.D. Purcell and S.R. Koontz. It is available in PDF form on the class website. The book The New Market Wizards by Jack D. Schwager will be discussed at the end of the semester. Subscribing to the Wall Street Journal is also a requirement. Class material will be posted at http://webdoc.agsci.colostate.edu/koontz. I will have course material for use in the online system. Students should make sure the email address tied to their eID is up-to-date and a Colorado State University email is preferred.
Examinations, Problems Sets, and Grading:

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two One-Hour Mid-Term Examinations</td>
<td>200</td>
</tr>
<tr>
<td>Final Examination</td>
<td>150</td>
</tr>
<tr>
<td>Problem Sets and Quizzes</td>
<td>300</td>
</tr>
<tr>
<td>Writing Assignments</td>
<td>100</td>
</tr>
<tr>
<td>Discussion, Research, and/or Participation</td>
<td>100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>850</strong></td>
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The instructor reserves the right to change the number of points allocated in the Discussion, Research and Participation section of the grading formula. It is unlikely but changes may also be made to problem sets and quizzes. Any changes will be communicated.

Four 50-point problem sets will be assigned. This work will cover techniques discussed in the course and like material will comprise portions of exams. Problem sets will be completed outside of class and must be turned in before class on the due date. Late problem sets will receive a reduced score unless prior arrangements are made. Problem sets are to be an independent effort by a team of two students. Some across team communication is encourage but if there is evidence that the effort has not been independent then no credit will be earned. Students in the online section will complete work individually.

Approximately five 20-point quizzes will be given and each will, in general, be announced. The quizzes are used to familiarize students with the types of questions asked on tests and to develop problem solving skills. There are no make-up quizzes. Students must communicate with the instructor prior to missing a quiz. If you do that then you will be excused from that quiz requirement.

Participating in a futures trading simulation is a course requirement. I have a strong preference for using a platform such as TD Ameritrade’s *ThinkorSwim* or DTN’s *ProphetX*. I have a strong preference that you do not use too-simple platforms. This is a new portion of the course and will be developed during the semester. I anticipate that students will work in teams of 2-4 people. Teams will follow futures markets of interest. Teams will make simulated trades. I anticipate that the teams will report to the instructor and other teams during the semester. We will meet on a limited number of Fridays after class or Saturdays during the semester – in October and/or November. Teams will present trades, analysis, successes or failures, and summarize their learning. Engagement in some commodity market of interest to you is what this requirement is intended to do. Participating in the activity, and accompanying write-up, is worth 50 points of the Participation requirement.

Students not able to participate in the trading simulation will complete a short research project. It is anticipated that distance students will make use of this requirement. Students taking the course for graduate credit will complete the research project and the trading simulation. The research project is worth 50 points of the Participation requirement and is due by the last day of class. The project must have a scientific foundation involving the collection and analysis of data or must be a review of research. It is recommended that one of three project types be pursued. The first project type involves collection of cash and futures market data and development of cash-futures basis information. Statistical and graphical analysis is required. The second project type involves collection of market data and development of price forecasts. Econometric modeling of data is required. The third type involves identification of a topical issue and a review of research on the topic. A well-referenced synthesis of research results is required. Instructor approval of the research project is required and regular communication with the instructor regarding progress is required. The responsibility for communication is with the student.
There will be four one-page 25-point writing assignments. Each assignment will summarize the strategy followed by one of the traders in Market Wizards. If you trade futures contracts, or any investment instruments, then this will be one of the most useful books you will read. Assignments will be graded as follows. Acceptable assignments will receive 100% or 85% of the possible points depending on the quality of the work. Students will have two days to revise work marked unacceptable. Acceptable revised assignments will receive 80% of the possible points. Unacceptable revised assignments will receive 50% of the possible points. An example assignment will be provided.

Reading the Wall Street Journal is a requirement for the course. Students are expected to find and read futures industry, commodity market, and commercial agriculture articles. Participation points may be given for accurate and thoughtful discussion. Students are also expected to take an interest in their investing future. This implies finding and reading articles related to personal and retirement investing. Discussion threads within the course online website can be a means of elaborating on these topics. Participation points may be awarded to quality discussion.

Independent research and synthesis is also an important part of the course. Class material and simulated trading should elicit follow-up discussion outside of class through the course website. This course will also follow current market events – both in commodity markets and investments – and these events are appropriate for electronic discussion. Electronic discussion is also ideal for communicating additional information gathered through independent research. Examples of additional information gathered through independent research include: newsletters, reports, and other objection information. There is an opportunity to receive 50 points for contributions to discussion.

There will be two 100-point mid-term examinations given during the semester. Make-up exams will be the option of the instructor. If any student must miss an exam due to an emergency, or due to a scheduling conflict which is communicated prior to the exam, then the student’s final grade may be based on the other exams taken. The 150-point final examination will be comprehensive with important portions of the course weighted equally or with a slightly heavier influence on the last portion of the course. Material requirements for each exam will be clearly communicated.

Final grades for the class will be determined on the standard 90-80-70-60 scale. Any student receiving less than 60% on the graded course material will receive an “F.” There are no exceptions. If a student shows improvement in exam scores over the semester, the instructor reserves the right to weigh the end-of-semester exams more heavily when calculating that student’s final grade. The instructor will make minimal use the +/- grading system.

Attendance Policy:

There is no formal attendance policy. However, there is a participation policy. This is a learning-by-doing course and there are a variety of means of communicating that you have learned material. But, if you are enrolled in the campus course and need to miss a class meeting for whatever reason then please email me in advance. This is to alleviate any problems satisfying the assignment schedule.

Communication Protocol and Professional Conduct:

Office visits, phone calls, and email are all acceptable means of communication with the instructor. I expect students to use the skills developed in professional communications courses: introduction, purpose, and rapport. Emails must do the following: identify the sender and not just the email address, contain a signature with contact information, and include “AREC 412” at the beginning of the subject
line. The file name of email attachments must include the same, date, sender last name, and a description of the contents of the attachment. I have a strong preference for PDF file types as attachments.

Finally, professionalism is a requirement for in-class and electronic communication. Questioning and discussion are essential. Communications about course or instruction quality that are not objective and related to the spirit of the endeavor are not appropriate. Expressing frustration over the course – without objectivity – is rarely appropriate. Any perception of threatening communication will be forwarded to university officials. Further, it is my prerogative to not respond to non-objective or unprofessional communication. Any assignment containing non-objective communication will not be graded. I will reserve my efforts to engage with students that are engaged in the course in a professional manner. In short, communication must be professional and objective to the course experience. We at Colorado State University subscribe to Principles of Community. Learn it, know it, and follow it.

**Academic Integrity Policy:**

University academic integrity policies are enforced. Students should read and know these policies. Submitting any assignment implies that you complied with the University Academic Integrity Policy.

**Final Exam:**

The final exam is scheduled for Thursday, December 13, from 7:30 AM – 9:30 AM. Any needed changes to this must be established with the instructor by Monday the last week of class.

**Style/Mode of Teaching:**

The teaching style used involves lectures and discussion. The approach in this class will be to introduce and present concepts, work examples and problems related to concepts, and then generalize the problem to encompass the concept. Through this process questions should be asked, answered, issues discussed, and connections made. Teachers call this synthesis and thinkers call this abstraction. The instructor will follow the lecture materials, handouts, and portions of the textbooks closely. However, some of the topics within the textbook will be significantly expanded and others will not be discussed. Also, current market events and conditions will be discussed and used as examples to illustrate important ideas.

This is a learning-by-doing course. The problem sets and the trading simulation are the main method of this approach. The problem sets are based on real world data and decisions. The trading simulator will give students market experience. But this is also a synthesis course. It is important learn tools and examples, and it is also important to see how these fit into broader concepts and general ideas. The real world changes but solid underlying principles do not. Problem Sets will be used to give students experience in the mechanical procedures associated with course material. Additional readings and handouts will be used at times to supplement the course material. The instructor will regularly discuss futures-related and investment-related articles in the *Wall Street Journal*. Students are expected to find and read these articles and are expected to be prepared to discuss them. There is almost always something interesting going on in the markets which fits the context of this course.

This is a senior-level capstone course. I expect you to be prepared and interested in the subject – or at least open to an interest in the subject – as there are great career opportunities. I expect professionalism. This material is what the instructor does for a living. I will be prepared and enthusiastic. I expect you to engage in the course. I will not spend your time with work not related to what professionals do. (And we will both follow university policies.)
Important Colorado State University Policies:

Principles of Community
The Principles of Community support the Colorado State University mission and vision of access, research, teaching, service and engagement. A collaborative, and vibrant community is a foundation for learning, critical inquiry, and discovery. Therefore, each member of the CSU community has a responsibility to uphold these principles when engaging with one another and acting on behalf of the University.

- Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents, and contributions.
- Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.
- Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.
- Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.
- Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

Mental Health
Need Help? CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress or thoughts of hurting yourself or others please know there is help available. Counseling Services has trained professionals who can help. Contact 970.491.6053 or go to http://health.colostate.edu. If you are concerned about a friend or peer, tell someone at by calling 970.491.1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources http://supportandsafety.colostate.edu/tellsomeone. Rams take care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.

Sexual Assault and Violence Elimination
CSU’s Student Sexual Harassment and Violence policy, following national guidance from the Office of Civil Rights, requires that professors follow CSU policy as a “mandatory reporter” of any personal disclosure of sexual harassment, abuse, and/or violence related experiences or incidents shared with the professor in person, via email, and/or in classroom papers or homework exercises. These disclosures include but are not limited to reports of personal relational abuse, relational/domestic violence, and stalking. While professors are often able to help students locate appropriate channels of assistance on campus (e.g., see the CSU Health Network link below), disclosure by the student to the professor requires that the professor inform appropriate CSU channels to help ensure that the student’s safety and welfare is being addressed, even if the student requests that the disclosure not be shared.

For counseling support and assistance, please see The CSU Health Network, which includes a variety of counseling services that can be accessed at: http://www.health.colostate.edu. And, The Sexual Assault Victim Assistance Team is a confidential resource for students that do not have a reporting requirement and that can be of great help to students who have experienced sexual assault. The web address is http://www.wgac.colostate.edu/need-help-support.
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Course Outline

I. The Basics
   A) Futures and options contracts: definitions, terminology, and institutions
   B) Price discovery and futures price behavior
   C) Hedging and producer behavior under risk

II. Hedging
   A) Basis: definition, calculation, normal patterns, and variation
   B) What is risk and risk management?
   C) Basis for Grains: Storage Hedging and Yield Risk
   D) Basis for Livestock
   E) Hedging

Exam 1

III. Fundamental Analysis
   A) Grain: Supply and Use Grain Balance Sheets
   B) Livestock: Forecasting with Elasticities and Derived Demand

IV. Technical Analysis
   A) Introduction
   B) Bar charts
   C) Additional technical tools

V. Profit Margin Hedging
   A) Efficient Markets
   B) Integrating fundamental and technical tools

Exam 2

VI. Options on Commodity Futures
   A) Introduction
   B) Applications of options strategies
   C) Critique and comparison with futures

VII. Regulation and Performance of Futures Markets
   A) Regulation of speculation & futures markets
   B) Performance issues with futures markets

Reading Assignment

Chapter 1

Chapter 2

Chapter 3

Chapter 4, 5, 6

Chapter 11

Chapter 7

New Market Wizards

WSJ
1. Name: ________________________________

2. Class: Junior ☐, Senior ☐, Graduate ☐, and Transfer ☐. (✔ all that apply.)

3. Major: ________________________________

4. Advisor & Faculty Mentor: ________________________________

5. List agricultural and resource economics, economics, and statistics courses that you have completed:

   ______________________________________
   ______________________________________
   ______________________________________

6. Why are you interested in commodity futures markets?

   ______________________________________
   ______________________________________

7. Commodities of Interest: ________________________________

   ______________________________________

8. Do you have any real-world experience in trading futures or involvement in hedging or risk management programs? Do not count “mock” or simulated trading.

   Yes ☐ or No ☐

   If “Yes,” elaborate some. ______________________________________

   I have read the syllabus and understand the course requirements. ________________________________