**ACE 427: Commodity Price Analysis and Forecasting**

**Department of Agricultural and Consumer Economics**

**University of Illinois at Urbana-Champaign**

**Fall 2018**

**12:30-1:50pm TR**

**Professor:** Dr. Mindy L. Mallory

**Course Location:** 166 Bevier Hall

**Office:** 319 Mumford Hall

**Office Hours:** After Class T and TR, or by appointment

**Webpage:** <http://mindymallory.com/>

**Course Website:** <https://compass2g.illinois.edu/>

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**Course Description**

In this course you will learn what drives prices in commodity markets. We will first learn fundamental supply and demand characteristics of key commodity markets like corn, soybeans, wheat, and livestock. These fundamental characteristics drive how we approach price analysis and determine the key features we need to understand current prices and forecast future prices. Considerable time will be spent introducing the student to important sources of information (from the United States Department of Agriculture, e.g.) that is critical to market participants. Also, students will follow market analysis produced by academic economists, commercial grain handlers, professional brokers, market advisors, and proprietary traders and others to gain an understanding of who does commodity price analysis professionally, and how they implement the topics in this course to their professional activities on a daily basis.

At the beginning of each class, we will discuss the latest developments in Corn, Soybean, Wheat, Cattle, and Hogs markets.

*Tuesdays*

On Tuesdays we will have a typical lecture/discussion style class session.

*Thursdays*

Thursdays we will hold lab sessions where we will recreate and/or extend (in Excel) analysis from the readings. The purpose of this is to sharpen your skills as a commodity analyst, and to put power skills in Microsoft Excel to work in a real-world setting.

**Course Objectives**

Upon completing the course students will be able to:

1. state the seasonal production cycle of corn, soybeans, and wheat in the U.S. and in major commodity producing countries.
2. state the significance of fixed biological factors such as planting time, weather, and harvest conditions on commodity prices.
3. determine when important information is scheduled to arrive publicly to market participants from the USDA and other sources.
4. communicate the effect of the announced information to the market and future prices.
5. develop fundamental price models based on balance sheets.
6. develop models for forecasting ending stocks, supply, and use of commodities.
7. develop forecasting models based on futures prices using time-series techniques.

**Required Text**

Readings from texts and web sources will be assigned and distributed as needed. Primary readings can be found on the web at <http://mindymallory.com/PriceAnalysis/>.

**Other Texts and Resources for Market Commentary**

[Farmdoc Daily](http://farmdocdaily.illinois.edu/): Main extension communication by the department of ACE. The stuff by Darrel Good (now Todd Hubbs) and Scott Irwin about commodity prices is good as gold.

[WILL Agriculture](http://will.illinois.edu/agriculture): Champaign-Urbana’s public radio station has a dedicated section devoted to agriculture and particularly commodity markets important to Central Illinois. Todd Gleason is a prominent figure there, and he hosts market commentary 3-4 times a day with guests from local risk management companies.

[The Andersons](http://andersonsgrain.com/): Very large grain merchandiser also providing risk management services to farmers. They regularly provide market commentary for free on their website.

[ADM](http://www.admis.com/knowledge-center): One of the ‘big three’ commodity companies. They provide market commentary out of their Investor Services Business.

[Farm Futures](http://www.farmfutures.com/farm-futures-market-update): Farm Futures is a popular trade magazine focused on agriculture and commodity markets. They provide daily market commentary.

[Market to Market](http://www.iptv.org/mtom/): Popular AG show on Iowa Public Television. A regular component of the show is to provide weekly market commentary.

**Homework**

Most homework will be collected in the form of students turning in their completed Excel lab exercises that we work through together on Thursday class sessions. Typically, we will have one homework per week, due Sunday evenings at 11:59pm. We will usually get through the whole thing during our Thursday class session, but occasionally you will need to finish a few steps after class on your own.

**Late homework assignments will be penalized with a 10% reduction (out of 100% for the assignment) per day.**

**Weekly Reading and Extra Credit Opportunity**

Each Tuesday we will open the lecture by discussing current commodity market trends and fundamentals. Before class you are responsible for reading [Todd Hubbs’ Weekly Outlook Report](http://farmdocdaily.illinois.edu/authors/todd_hubbs/) published on FarmDoc Daily every Monday. In the course students may take advantage of a modest **extra credit opportunity** by writing a post on the course’s blog hosted within the Compass page. The post must include a 500 word response and/or extension and include one chart or figure to earn points. Each post can earn an extra 1% toward your final grade, with a maximum of 2% or two posts per student. Posts must be submitted by 12am Monday morning, responding to the latest Weekly Outlook Report available. This ensures you must write the blog post contemporaneously with market action. You cannot at the end of the semester decide you need the extra credit and write posts responding to Outlook Reports from September, for example.

**Midterm Exams**

There will be three midterm exams held **September 27th**, **Nov 1nd**, and **December 11th**  during normal class time in the usual lecture location. The each consecutive exam will build upon the material from earlier parts of the course, and so should be considered cumulative.

If you need to miss one of our exam dates do to an approved University activity, please notify me as soon as possible. If you miss an exam due to a sudden illness or emergency contact me as soon as you are aware you cannot make the exam.

You are responsible to bring a calculator to exams. Use of a cell phone calculator will not be allowed.

**Final Exam**

There will be no traditional final exam.

**Final Projects**

Detailed information about the final projects can be found on the Compass2g website under ***Final Projects***.

In lieu of a traditional final exam, students will develop a final project. This will entail an outlook report due on **December 11**.

**Grades**

Homework ……………………………….19%

Midterm Exams…………………………72% (24% for each Midterm Exam)

Group Final Project……………………9%

Extra Credit…………………………………2% (maximum)

*Total……………………………………….*.100%

### **Contacting Us with Questions**

We welcome questions related to exams, as long as they are made prior to 24 hours before the exam. After that we will not answer email questions or discussion board questions related to the exam. Study early. Study often.

### **Honor Code and Academic Integrity**

We will adhere to the academic integrity rules specified in the university policy manual. Please visit this link for details.

<http://www.admin.illinois.edu/policy/code/article1_part4_1-401.html>

### **Disability Accommodations**

Disability Accommodations -To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to [disability@illinois.edu](mailto:disability@illinois.edu).

**Run > Hide > Fight**

Emergencies can happen anywhere and at any time. It is important that we take a minute to prepare for a situation in which our safety or even our lives could depend on our ability to react quickly. When we’re faced with almost any kind of emergency – like severe weather or if someone is trying to hurt you – we have three options: Run, hide or fight.

# Run

**Leaving the area quickly is the best option if it is safe to do so.**

 Take time now to learn the different ways to leave your building.

 Leave personal items behind.

 Assist those who need help, but consider whether doing so puts yourself at risk.

 Alert authorities of the emergency when it is safe to do so.

# Hide

**When you can’t or don’t want to run, take shelter indoors.**

 Take time now to learn different ways to seek shelter in your building.

 If severe weather is imminent, go to the nearest indoor storm refuge area.

 If someone is trying to hurt you and you can’t evacuate, get to a place where you can’t be seen, lock or barricade your area if possible, silence your phone, don’t make any noise and don’t come out until you receive an Illini-Alert indicating it is safe to do so.

# Fight

**As a last resort, you may need to fight to increase your chances of survival.**

 Think about what kind of common items are in your area which you can use to defend yourself.

 Team up with others to fight if the situation allows.

 Mentally prepare yourself – you may be in a fight for your life.

Please be aware of people with disabilities who may need additional assistance in emergency situations.

# Other resources

 **police.illinois.edu/safe** for more information on how to prepare for emergencies, including how to run, hide or fight and building floor plans that can show you safe areas.

 **emergency.illinois.edu** to sign up for Illini-Alert text messages.

 **Follow the University of Illinois Police Department** on Twitter and Facebook to get regular updates about campus safety.

**Tentative Schedule:**

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| **Week**  **1** | **Aug 28** | Chapters 1,2, and 3 Introductions | **30** | Lab for Chs 1, 2, and 3 |
| **2** | **Sept 4** | Chapter 4 Hedging Basics | **6** | Lab for Ch 4 |
| **3** | **11** | WASDE report breakdown and Chapter 5 Prices over Space and Time | **13** | Lab for Ch 5 |
| **4** | **18** | Chapter 6 and 7 Balance Sheet Analysis/Price Reaction | **20** | Lab for Ch 6 and 7 |
| **5** | **25** | Chapter 8 Forecasting Production | **27** | **Midterm 1** |
| **6** | **Oct 2** | Chapter 9 and 10 Forecasting Use of Corn and Soybeans | **4** | Lab for Ch 9 and 10 |
| **7** | **9** | Chapter 11 Ending Stocks and Price | **11** | WASDE Breakdown and Lab for Ch 11 |
| **8** | **16** | Chapter 12 World Production | **18** | Lab for Ch 12 |
| **9** | **23** | Chapter 13 The Soybean Crush | **25** | Lab for Ch 13 |
| **10** | **30** | Chapter 14 The Ethanol Crush | **Nov 1** | **Midterm 2** |
| **11** | **6** | Chapter 15 The Cattle Crush | **8** | WASDE Breakdown and Lab for Ch 14 and 15 |
| **12** | **13** | Chapter 16 Hog Markets | **15** | Lab for Ch 16 |
| **13** | **20** | **Thanksgiving Break** | **22** | **Thanksgiving Break** |
| **14** | **27** | Chapter 17 Crude Oil and the Crack Spread | **29** | Lab for Ch 17 |
| **15** | **Dec 4** | Chapter 8 Forecasting Production (Advanced) | **5** | Advanced Lab for Ch 8 |
| **16** | **12** | **Midterm 3** |  |  |