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**YEAR COURSE OFFERED:** 2022

**SEMESTER COURSE OFFERED:** Spring

**DEPARTMENT:** Finance

**COURSE NUMBER:** 4370/7376

**NAME OF COURSE:** Energy Trading

**NAME OF INSTRUCTOR:** Art Smith

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**The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.**  
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## **Energy Trading**

Finance 4370/7376

Spring 2022 Monday 6:00-9:00 p.m.

**(dates to be determined before 1<sup>st</sup> Class for  
Assignment due dates and Exam dates)**

Art Smith [easmith@bauer.uh.edu](mailto:easmith@bauer.uh.edu) tel: 979.218.2325  
Office hours by appointment

TA: TBD

Text: *Commodity Trading Manual January 1998*  
Bookstore has course packet Fin 4370/7397 or Amazon  
**(Sections I & II is what you will be tested on)**

*The Domino Effect January 2016* by E. Russell Braziel  
Amazon Kindle or Hard Cover Book  
**(Responsible for entire book)**

## **Blackboard (articles)**

Blog to follow: [rbnenergy.com](http://rbnenergy.com)

Grading: **20% assignments; 80% Exams**

### **Course Description :**

Energy Trading is a course in applied economics and fits under the general heading of Commodity Economics. The physical characteristics of the energy markets contains physical commodities that move at a snails pace from producer to consumer to the literal flick of a switch from producer to consumer. The economics principals and tools to analyze these markets are the same across the spectrum of energy markets.

This course is designed to move the student along a rather steep learning curve. This has often been referred to by my students as a jargon course. This can also be said of economics in general. The jargon the student learns in Energy Trading is that of the commercial side of the energy markets. That is, a student successfull in Energy Trading will be able to go a trading floor & understand what is going on in a very short period of time. Here to fore, one had to learn on the job.

If the student spends the time to read the two books, study the presentations and complete the homework the light bulb should light up, the aha moment. Economics can be a bit counter intuitive until the logic sinks in.

The student's grade for Energy Trading is a direct reflection on the amount of time and effort put in !

Energy Trading will meet on campus the first day of class on and then toward the end the class will meet for guest speakers. Class presentations are available for all topics on the first day of class and each homework has hard deadline.

The first two exams are given in CASA and the final will be held on campus during the last day of scheduled classes.

# Course Outline

Course Introduction

Guest Lecture: Geoffrey Lakings

*Analytical Framework Tailored Intelligent Solution*

Melcher 114

**Exams are given during class hours (Monday 6pm-9pm)  
Via Respondus Lockdown Browser with camera**

Energy Trading & Risk Management aka *ETRM*

Valuation in Commodities I

**Homework**

Valuation in Commodities II

**Homework**

**Exam I “Commodity Trading Manual” & “The  
Domino Affect” (20% of total grade)**

Options

**Homework**

Trading Petroleum Markets

**Homework**

Trading Natural Gas Markets  
**Homework**

**Exam II** (35% of total grade)  
**Covers ETRM & Valuation I & II**

Trading Power Markets  
**Homework**

**Guest Lectures** Location TBD

**Exam III** (45% of total grade) **cumulative**

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**All Presentations and Homework are available on January 14....due dates for Homework is at midnight on the date given due.**

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**Energy Trading Risk Management**

Defining the types of risks faced by energy/commodity companies, introduction to the organization of the trading organization; front office, middle office & back office.

**Valuation in Contract Trading**

A detailed examination of valuation of contracts. A discussion of OTC and futures markets, their trading instruments and relative risks. Spreads, basis, the forward curve, storage and transportation valuation will be examined. Technical &

fundamental analysis

### **Options**

A basic introduction to options, their valuation and how they are used in energy trading

### **Trading Petroleum Markets**

A look at how petroleum markets are organized and traded

### **Trading Natural Gas Markets**

A look at how natural gas markets are organized and traded

### **Trading Power Markets**

A look at how electricity markets are organized and traded

## **Energy Trading “*Required Reading*”**

Reference Material by Topic (In Power Points & Other Articles in BlackBoard)

### **Energy Trading Organization; Risk Management**

- Intro to risk mgt (Powerpoint)
- *Energy Swaps*
- *Energy Trading Risk Glossary*
- *The Evolution of a Market*

### **Valuation in Contract Trading**

- Valuation of Commodities
- *Fundamentals of Commodity Spot & Futures Markets – instruments, exchanges & strategies*

### **Fundamental & Technical Analysis**

- Market Analysis (PowerPoint)
- *The Importance of Fundamental Analysis*
- Tech Analysis Final (PowerPoint)

### **Options**

- Options Presentation (PowerPoint)

## **Petroleum**

- Crude Petroleum Products (PowerPoint)
- *The Oil Market as World Market*
- *Development of a Sour Crude Market*
- *The Oil Market*
- *Crude Oil EOG 2012*
- *CAPP Canada & North America annual oil*
- *Petroleum Products*

## **Natural Gas**

- Natural Gas Presentation (PowerPoint)
- *Instruments, venues and diagrams*
- *The Natural Gas Market*
- *Natural Gas*
- *The gas market as the energy market of the next decades*
- *Links for shale production description*
- *LNG the Hedged Diversion and its Risky Relative*

## **Power**

- Power Trading Presentation (PowerPoint)
- *Power Trading*
- UH Energy Power(PowerPoint)
- *Spot & Forward Electricity Markets*
- *Competitive Electricity Markets around the World*