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YEAR COURSE OFFERED: 2015

**SEMESTER COURSE OFFERED:** Fall

**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.

# **Energy Trading**

**Finance** 

Spring 15 Monday 6:00-9:00 p.m.

Art Smith easmith2@uh.edu tel: 979.218.2325

Text: Commodity Trading Manual; Blackboard Vista

Grading: 15% class participation, 15% assignments; 70% Exams

TA. Blake Sammons, blake.sammons@outlook.com

## Course Outline

January 26 Introduction

February 2 Energy Trading Organization; Risk Management

February 9 Contract Instruments; Valuation in Contract Trading

February 16 Exam I (20%) "Commodity Trading Manual

February 23 Valuation in Contract Trading

March 2 Valuation in Contract Trading

March 9 Valuation in Contract Trading

<u>March 23</u> <u>Exam II (40%)</u>

March 30 Guest Speaker

April 6 Options & Fundamental & Technical Analysis

April 13 Trading Petroleum Markets

April 20 Trading Natural Gas Markets

April 27 Trading Power Markets

<u>May 4</u> <u>Exam III (40%)</u>

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

Defining the types of risks faced by energy 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 WebCT)

## **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 & Techincal Analslysis**

- 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