

COURSE SYLLABUS

YEAR COURSE OFFERED: 2017

SEMESTER COURSE OFFERED: Spring

DEPARTMENT: Finance

COURSE NUMBER: 4370/7376

NAME OF COURSE: Energy Trading

NAME OF INSTRUCTOR: Art Smith

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 4370/7376

Spring 2017 Monday 6:00-9:00 p.m.

Art Smith easmith@bauer.uh.edu tel: 979.218.2325

Text: *Commodity Trading Manual*; Blackboard

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

TA.

**Energy Trading : an introduction to Commodity/Contract
Market Economics, Arbitrage and Asset Optimization.**

Course Outline

January 23 Introduction & Energy Trading Organization; Risk Management

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January 30 Guest Lecture: Geoffrey Lakings:
Analytical Framework Tailored Intelligent Solutions

February 6 Contract Instruments; Valuation in Contract Trading

February 13 **Exam I (20%) Required Readings**

February 20 Valuation in Contract Trading

February 27 Valuation in Contract Trading

March 6 **Exam II (40%)**

March 20 Options

March 27 Trading Petroleum Markets

April 3 Guest Lecture: Bruce Kish CMT, Crude Trader,
*Technical & Fundamental Analysis, Arbitrage, Asset
Optimization and the life of a Crude Trader*

April 10 Trading Natural Gas Markets

April 17 Guest Lecture: Ed Coel, hedge fund trader

April 24 Trading Power Markets

May 1 **Exam III (40%)**

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

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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*”

Commodity Trading Manual Hardcover – June 10, 1999

by [Chicago Board of Trade](#) The (Author) **Amazon or UH Bookstore**

<http://www.kisfutures.com/CMECommodityTradingManual.pdf>

The Domino Effect by E. Russell Brazier

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*

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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)

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