
YEAR COURSE OFFERED: 2024

SEMESTER COURSE OFFERED: Fall

DEPARTMENT: Finance

COURSE NUMBER: 4370/7376

NAME OF COURSE: Energy Trading

NAME OF INSTRUCTOR: Art Smith

CLASSROOM LOCATION TBD and Online

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 2023 Monday 6:00-9:00 p.m.

Art Smith

easmith@bauer.uh.edu tel: 979.218.2325

Office hours by appointment

TA: **Masoud Neshastehriz** email: masoud.n71@gmail.com

Text: ***Commodity Trading Manual, January 1998,***
ISBN 0817456009

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**

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 online (Zoom) the first day of class 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.

There will be several guest lectures live on campus. The demand for human capital within the energy trading sector is strong !

Course Outline

- January 23** **Course Introduction**
Guest Lecture: Geoffrey Lakings
Market Status Quo
- Exams are given during class hours (Monday 6pm- pm)**
Via Respondus Lockdown Browser with camera
- February 15** **Energy Trading & Risk Management aka *ETRM***
Homework due
- February 20** **Exam I “Commodity Trading Manual” & “The Domino Affect” (20% of total grade)**
- March 1** **Valuation in Commodities I**
Homework due
- March 8** **Valuation in Commodities II**
Homework due
- March 20** **Guest Lecture TBD**
- March 27** **Exam II (25% of total grade)**
Covers ETRM & Valuation I & II

- March 29** **Options**
Homework due
- April 5** **Trading Petroleum Markets**
Homework due
- April 10** **Guest Lecture TBD**
- April 12** **Trading Natural Gas Markets**
Homework due
- April 10** **Guest Lecture TBD**
- April 19** **Trading Power Markets**
Homework
- April 24** **Class Wrap Up – Final Exam discussion**
Guest Lecture: Geoffrey Lakings
Market Changes Since January 23rd class
- Guest Lectures on Campus**
(3/6, 3/20, 4/3, 4/10, 4/17)
- May 1** **Exam III (35% of total grade) cumulative**

Attendance at Guest Speakers sessions will be noted.

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

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*