Overview. The global oil and gas industry is among the largest and most important segments of our global economy. This course will provide you with a commercially-oriented introduction to the global oil and gas industry and how it is regulated. We will survey a number of legal and regulatory issues faced by oil and gas companies in light of four dominant trends – changing competition rules, environmental concerns, geopolitical developments and disruptive technologies. Energy companies face long term capital investment decisions in ever-more-rapidly changing markets. Legal counsel play a substantial role in the evaluation and mitigation of risk, implementation of public policy, and resolution of conflicts or disputes related to both existing and emerging risks.

Attendance and Participation. Given the broad range of topics we will cover, participation is an important component of this course. I will circulate a sign-in sheet at every class. Please come prepared to each class.

From the student handbook: “Regular and punctual attendance at all class sessions is required of each student . . . A student who, even though registered for a course, has not regularly attended, participated, or otherwise met class requirements may, at the professor’s option be withdrawn, excluded from attending class sessions, excluded from . . . submitting a final paper (with the same consequences as a voluntary failure to . . . submit a final paper), or receive a lowered grade in the course. Even if a student has passed all examinations, academic credit will not be awarded and no student will be advanced, nor will a degree be conferred, if attendance or participation is unsatisfactory.”

Schedule. The class will meet on Mondays, from 3:30 - 5:30 PM, in McDonough Hall 160. Class will not meet on September 7 (Labor Day) or October 12 (Columbus Day). There is a mandatory makeup class on Tuesday, October 13.

Reading. There is no casebook, but there are weekly reading assignments linked to this syllabus. Any additional assignments will be posted on Canvas.

Papers. There is a final paper required in this class of at least 20 pages. We will discuss paper topics by mid-semester. The paper is due on or before December 18, 2015. Please note that extensions will not be granted other than for documented extraordinary circumstances. Late papers will receive a grade reduction. Please review the policies regarding plagiarism to ensure your work is properly cited.
Grading. Grading will be based on two components: class participation (30%); final paper (70%).

Contact Information. While I will not have formal office hours, please contact me by email to arrange a mutually convenient time to meet before or after class. My contact information is:
Anticipated Course Discussion and Initial Reading Assignments

I. Reference Materials

- CFTC Glossary
- FERC Glossary
- INGAA: Industry Glossary (pp. 85-131)

II. Introduction

- Class 1 (August 31): Introduction I
  - Introductions and Review of Syllabus
  - Introduction to the Oil and Gas Industry
  - Categories of Risk – Competition Regulation, Environmental, Geopolitical and Disruptive Technologies
  - The Players – Upstream, Midstream, and Downstream
  - The Regulators

Reading

- Natural Gas Explained (Basics Tab)
- Oil: Crude and Petroleum Products Explained (Basics and In Depth Tabs)
- FERC Energy Primer (pp. 1-34)
- International Energy Agency (IEA) 2015 Executive Summary on Energy and Climate Change (pp. 1-5)

Recommended Reading

- Energy Information Administration (EIA) Annual 2015 Energy Outlook Presentation (pp. 1-36)

- Class 2 (September 14): Introduction II
  - A closer look at the Players, Structure, Risk, and Risk Mitigation
Case Study – B.P. Horizon Accident

Reading

- BP Presidential Commission Report (vi-xii, 55-85) (recommended - chapters 2, 5 & 8)
- National Geographic: Is Another Deepwater Disaster Inevitable (pp. 1-5)
- Reuters: U.S. Supreme Court rejects BP challenge to Gulf spill settlement (pp. 1-2)

III. Competition Regulation

- Class 3 (September 21): US Gas Physical Infrastructure Development and Regulation
  - Interstate and Intrastate Pipelines and FERC Tariff Structure
  - Price Hubs
  - Storage

Reading

- Adventuresinenergy.org Interactive Introduction (review tabs on left)
- INGAA: Pipeline Construction and Operations (pp. 1-18)
- NaturalGas.org: History of Regulation (pp. 1-7)
- NaturalGas.org: Overview of Current Regulation (pp. 1-5)

  - Wholesale Gas Market Defined
  - Physical and Financial Gas Market Regulation

Reading

- What FERC Does (pp. 1-2)
- FERC Energy Primer: Financial Markets and Trading (pp. 103-115)
- FERC 2014 State of the Markets (pp. 1-22)
- CFTC 2014 Summary of Performance (pp. 1-16)
• **Class 5** (October 5): Manipulation of Wholesale Trading Markets
  ° Roles of the CFTC, the FERC and the FTC
  ° EU Regulation Under REMIT and Competition Law

**Reading**

° [FERC Energy Primer: Market Manipulation](#) (pp. 117-122)
° [FERC 2014 Staff Report on Enforcement](#) (pp. 2-29)
° [CFTC 2014 Enforcement Results](#) (pp. 1-5)
° [FTC Guide to Complying with Petroleum Market Manipulation Regulations](#) (pp. 1-10)
° [Cadwalader Memo on 2014 REMIT Report](#) (pp. 1-3)

• **Class 6** (Tuesday, October 13): 2014 Deregulation of Mexican Oil, Gas and Power Sectors
  ° Overview of Privatization and Competition
  ° Gas Pipeline Development
  ° Related Power Plant Development
  ° Oil and Gas Exploration

**Reading**

° [EIA Overview of Mexico](#) (pp. 1-14)
° [CRS Report: Mexico’s Oil and Gas Sector: background, Reform Efforts, and Implications for the United States](#) (pp. 1-26)

### IV. Environmental Products and Risk

• **Class 7** (October 19): Regulating Carbon
  ° Kyoto Treaty
  ° EU Carbon Credit Regime
  ° US Regional Emissions Allowances Markets – RGGI, Western Initiative
° Carbon Tax or Trading Market?

**Discussion of Paper Topics**

**Reading**

° [EU Emissions Trading System (ETS) Factsheet](#) (pp. 1-6)
° [EU Climate Action Website](#) (review tabs on left)
° [2015 EU Court of Auditors Report on ETS](#) (pp. 11-13, 55-69)
° [CRS: The Regional Greenhouse Gas Initiative: Lessons Learned and Issues for Congress](#) (pp. 1-20)
° [E&E: China’s ambitious cap-and-trade plan rolls down a long, bumpy runway](#) (pp. 1-3)

- **Class 8** (October 26): Green Energy
  ° Renewable Portfolio Standards
  ° Green Energy Standards and Markets
  ° Biofuel Subsidies

**Reading**

° [National Council of State Legislators RPS Map & DSIRE Map](#)
° [NREL: Status and Trends in the U.S. Voluntary Green Power Market](#) (pp. 1-5)
° [New York RPS Performance Report](#) (pp. 1-24)
° [Manhattan Institute: The High Cost of Renewable-Electricity Mandates](#) (pp. 1-15)
° [Center for Global Development Paper on Biofuels](#) (pp. 1-5, 25-28)

- **Class 9** (November 2): Keystone XL Case Study
  ° Canadian Tar Sands
  ° Existing Rail Transport
  ° Federalism Issues
Reading

- **State Department Final Supplemental Environmental Impact Statement – Executive Summary** (January 2014) (pp. 1-44)
- **Comments of TransCanada in Support of Determination that the Keystone XL Pipeline Project is in the National Interest of the United States** (March 7, 2014) (pp. 1-35)
- **Letter Submitted by TransCanada to State Department Regarding EPA Comment Letter on Final Supplemental EIS** (February 10, 2015) (pp. 1-5)
- **EPA Comment Letter** (February 2015) (pp. 1-3)
- **Letter Submitted by TransCanada to Secretary of State John Kerry and the State Department Regarding Supplemental Information** (June 29, 2015) (pp. 1-12)

**Recommended Reading**

- **National Energy Board Reasons for Decision** (March 2010)
- **TransCanada Keystone XL Presidential Permit Application** (May 4, 2012)
- **Overview of the Supplemental EIS Public Comment Process** (June 29, 2015)

- **Class 10** (November 9): Polar Energy Case Study
  - Mining the Antarctic
  - Madrid Protocol
  - Antarctic Treaty Framework

**Reading to be Supplied**

V. **Geopolitical Risk**

- **Class 11** (November 16): Bribery and Geopolitical Considerations
  - US Foreign Corrupt Practices Act (FCPA)
  - US Sanctions Regime

**Reading to be Supplied**

VI. **Risk Resulting from Disruptive Technology/Events**
• **Class 12** (November 23) Fracking and Cyber Security
  - History of Fracking, Current Output and Projections
  - Environmental Concerns and Regulation
  - Cyber Security – Attacks on Oil and Gas Infrastructure

  **Reading to be Supplied**

VII. **Conclusion**

• **Class 13** (November 30)
  - Recap of Course Themes with Final Case Study
  - Evaluations

VIII. **Papers Due by December 18**

• Email one copy to dfe6@law.georgetown.edu and submit another via the online paper management system.