COURSE SYLLABUS

YEAR COURSE OFFERED:  2014

SEMESTER COURSE OFFERED:  Fall

DEPARTMENT:  Finance

COURSE NUMBER:  4372

NAME OF COURSE:  Upstream Economics

NAME OF INSTRUCTOR:  Donald Bellman

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.

Learning Objectives

Understanding the business decisions involved with the exploration and production of oil and gas, including dealing with high levels of risk and uncertainty.

Ability to prepare and analyze cash flow forecasts for oil and gas production operations, including complex commercial agreements and tax considerations.

Understanding the basis for evaluating petroleum reserves and their financial significance.

Understanding issues associated with dealing with sovereign owners of natural resources.

Major Assignments/Exams

Participation on a student team in a competitive simulated oil and gas exploration and production venture, concluding with an assessment of the team’s results and lessons learned

Two brief recommendation memos relating to case studies discussed in class

Two financial analysis homework problems

A final examination
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Required Reading

“Journey To Sakhalin (A), (B), (C),” case study (Harvard Business School, 2007) Obtain a copy online from Harvard Business Publishing Web Site using a link provided in class.

“Ambitious Oil Company (A) case study (J. Tomlinson, 2008) available via Blackboard.

“New Rigor at Maradarko Exploration.” Obtain a copy online from bauerenergycases.com.

Recommended Text


List of discussion/lecture topics and other activities

1. PetroChallenge simulation (competitive team game)
2. Exploration and production processes
3. Reserve estimation
4. Dealing with sovereign governments to gain access to oil and gas reserves
5. Matching investment strategy with organizational objectives and capabilities
6. Modeling upstream business cash flow
7. Petroleum fiscal systems
8. Natural gas and natural gas liquids
9. Valuing information