Petroleum Engineering 621
Petroleum Development Strategy
Syllabus and Administrative Procedures
Fall 2010

Instructor: John Lee
Contact Information: Phone 979-845-2208; Email john.lee@pe.tamu.edu
Office: Rooms 407-C, 407-D Richardson Building
Office Hours: Generally open

Class Schedule: TBA
Basis for grade:

- Midterm exam ................................. 30%
- Final examination ............................. 50%
- Homework, class and web discussion .................. 20%

Course Description:

Course Description: This course broadly deals with “applications of the variables, models and decision criteria used in modern petroleum development … “ (from current Texas A&M Graduate Catalog). During the spring 2010 offering of the course, the applications studied will include (1) stochastic investment evaluation techniques, emphasizing evaluation of future cash flow from exploration and development projects, (2) methods of estimating future production, and (3) stochastic methods of estimating and evaluating project resources and reserves. Special emphasis will be placed on the SEC reserves reporting rules, modernized and effective January 1, 2010 and on the SPE Production Resources Management System (PRMS), adopted in 2007.

Class Schedule: To be announced

Topics Covered:

1. Statistics and Probability
2. Expected Value and Decision Trees
3. Risk Attitudes and Expected Utility Theory
4. Monte Carlo Simulation
5. Reserves Definitions and Disclosure Requirements
6. Probabilistic Reserves Estimates

Basis for grade:

- Midterm exam 30%
- Final exam 50%
- Homework and class discussions 20%
Topics Covered:
7. Statistics and Probability
8. Expected Value and Decision Trees
9. Risk Attitudes and Expected Utility Theory
10. Monte Carlo Simulation
11. Reserves Definitions and Disclosure Requirements
12. Probabilistic Reserves Estimates

Notes:
1. Homework is due at the start of class, and should be submitted electronically unless specified otherwise. Late homework will receive the grade zero.
2. As part of homework assignments, you will be responsible for preparing reviews of all papers assigned for discussion in class. Please follow paper review guidelines, provided separately to you.
3. Discussion questions will be posted in Vista for each paper we read in class. Please post a comment for each question; if you agree with a previously posted comment, please say (I agree with student x’s comment). Of course, if you disagree, say so and provide the response you believe to be correct. Continue the dialog at least until every student in class has responded and, if necessary, until the class has reached a consensus on the question. You should post your comments prior to the start of class in which the paper or topic is to be discussed in class.
4. Examinations will be open book.
5. Class discussions will include reading assignments and homework. Please come to class prepared to discuss the assigned topics for the day.
6. Assignments and other course materials will be posted on Vista. You will need to establish a Vista account for this class and monitor the web site regularly – at least daily.

Vista Account
Because course information will be posted on Vista regularly, I ask that you please monitor at least once a day. To set up your Vista account for this course, please consult with either Mary Lu Epps or Ted Jones in the department elearning office.

Academic Integrity Syllabus Statement
"An Aggie does not lie, cheat, or steal or tolerate those who do."

All syllabi shall contain a section that states the Aggie Honor Code and refers the student to the Honor Council Rules and Procedures on the web
It is further recommended that instructors print the following on assignments and examinations:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."

________________________________

Signature of student

Americans with Disabilities Act (ADA) Policy Statement

The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the UCC by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information.

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe that you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of the Koldus Building, or call 845-1637.