TEXAS A&M UNIVERSITY

SYLLABUS

Course title and number	PETE 689: Probabilistic Reserves Evaluation
Term	Spring 2016
Meeting times and location: Instruction	RICH 1009 W 1:50-5:00 p.m.

Course Description and Prerequisites

Oil and gas reserves definitions and reporting regulations. Probabilistic reserves estimation methods. Unconventional resources characterization. Reserves valuation techniques.

Prerequisites

PETE 353 or approval of instructor

Learning Outcomes and Course Objectives

This course will equip students to classify and categorize petroleum resources properly and to estimate and report these resources (especially reserves) correctly using probabilistic estimation procedures. Students will be able to estimate reserves and non-reserves resource volumes using probabilistic techniques in unconventional (low permeability) resource petroleum accumulations.

Instructor Information

Name	John Lee, Professor
Telephone number	979.845.2208
Email address	john-lee@tamu.edu
Office hours	Monday and Tuesday, 9:00-11:00 a.m.
Office location	710C Richardson Building

Textbook and/or Resource Material

Oil and Gas Property Evaluation, by John D. Wright, published by Thompson and Wright LLC, August 2015, IISBN 978-0-9896749-0-4..

Grading Policies

Homework	20%
Mid-semester exams (2)	50%
Final Exam	30%
Total	100%

Grading Scale

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

Course Topics, Calendar of Activities, Major Assignment Dates

Homework will be due before the start of each class, and will be submitted electronically. Late homework will not be accepted without prior approval except in emergencies. Classes will be recorded and students may access the recordings. Students are expected to attend class.

Week 1	SPE Petroleum Resources Management System
Week 2	SEC reserves reporting requirements
Week 3	Basic probability and statistics
Week 4	Probability distributions 1
Week 5	Probability distributions 2
Week 6	Expected value
Week 7	Decision trees
Week 8	Overview of probabilistic reserves estimation procedures
Week 9	Monte Carlo simulation 1
Week 10	Monte Carlo simulation 2
Week 11	Capen's alternative to Monte Carlo simulation
Week 12	Unconventional resources 1
Week 13	Unconventional resources 2
Week 14	Unconventional resources 3
Week 15	Statistical ultimate recovery methodology for resource plays

Americans with Disabilities Act (ADA)

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 you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

Coursework Copyright Statement: (Texas A&M University Policy Statement)

The handouts used in this course are copyrighted. By "handouts," this means all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy them, unless you are expressly granted permission.

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writing, etc., that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

If you have any questions about plagiarism and/or copying, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty".

Academic Integrity

For additional information please visit: http://aggiehonor.ramu.edu

"An Aggie does not lie, cheat, or steal, or tolerate those who do."