

SYLLABUS
OIL & GAS ECONOMICS
MASTER OF BUSINESS ADMINISTRATION
KBTU BUSINESS SCHOOL
SPRING 2014

APPROVED

Dean of KBTU Business School

Prof. Yuri Loktionov, Ph.D

« ____ » _____ 2014 year

Program: MBA
Credits: 3
Lecturer: Alex Mosesov

| Personal information | Contact time & place | | Phone | E-mail |
|----------------------|---------------------------|----------------|-------|-------------------|
| | Lectures & Tutorials | Office hours: | | |
| Alex Mosesov Ph.D | According to the schedule | By appointment | 611 | a.mosesov@kbtu.kz |

Prerequisites:

Principles of Economics

Course Description/Overview:

The purpose of this course is to develop theoretical and practical skills in economic evaluation of petroleum projects. It does prescribe general method or process and focuses on ideas and principles, which may become incorporated into corporate procedure.

Petroleum investment is subject to considerable risk and attracts much attention from government. Some of these issues are identified and reviewed. Subject concerns the idea of an asset, as something possessing value or bestowing value on its owner. Methods of quantifying such value are considered.

Materials introduce the concept of the “time value of money”, the idea that money received or spent at different points in time may have different perceived value. The process of discounting derives directly from this idea and forms the basis of much systematic study of investment value.

The course explains the method of cash flow analysis and identifies a number of important parameters, which may be derived. These measures of value have important applications, with respect to property trade and project investment.

The discipline reviews the diversity and significance of government involvement in the petroleum industry. It also reviews the risk environment, within which petroleum investment is made, and identifies and explains some of the important procedures, which may be used to reduce or to quantify risk. These form the basis of risk management in Petroleum Economics calculations.

Required Text:

Vassiliki Theodoridou, Stephan Staber. Advanced Petroleum Economics. 2012.

Period-by-period Schedule:

| Days | Class work | | | |
|------|---|----------|----------|----------------------|
| | Topic | Lectures | Practice | Core Text (CT) Pages |
| 1 | Fundamentals of Petroleum Accounting, General Definitions | 2 | 1 | P. 6, ct1 |
| 2 | O&G Contracts, Costs Accounting | 2 | 1 | P. 11, 34, ct1 |
| 3 | O&G Price & Markets | 2 | 1 | P. 39, ct1 |
| 4 | Concepts of Capital Budgeting | 2 | 1 | P. 61, ct1 |
| 5 | Portfolio Management | | | |
| 6 | MID-TERM EXAM | 2 | 1 | |
| 7 | Risk and Uncertainty, Uncertainty, People & Decisions | 2 | 1 | P. 79, 109, CT1 |
| 8 | Economic Evaluation of E&P Projects, Decision Trees | 2 | 1 | P. 120, 132, CT1 |
| 9 | Cash Flow and Costs, Profitability Measures and Performance | | | P. 7, 14, ct2 |
| 9 | Expected Value Concept | 2 | 1 | P. 37, ct2 |
| 10 | Decision Tree Analysis, Probability Theory | 2 | 1 | P. 45, 52, ct2 |
| 11 | Risk Analysis, Sensitivity Analysis | 2 | 1 | P. 73, 79, ct2 |
| 12 | FINAL EXAM | 2 | | |

Grading Policy and Requirements:

It is up to you to develop and apply the grading policy, grade/points breakdown as you deem important for your course. You are required, though, to follow the below given KBTU grading system for your grading policy. Adapt it to your own course as you feel appropriate/ necessary. If you designed your course as a two-part program with a mid-course assessment period, please take into account that the grading at KBTU envisions that students are awarded grades/points in the proportion of 60% for continuous assessment, while 40% are earned for their performance at the examination. Another compulsory aspect to be included in your grading is students' individual (independent work) which should be not less than at least 30% of the 60 points allocated for continuous assessment. If you do not plan any mid-course assessment period, then you should reserve 40% for the final exam and breakdown the remainder 60% at your own discretion.

Grading is based on KBTU System of Evaluation:

| Points earned | Grade | GPA |
|---------------|-------|------|
| 95 – 100 | A | 4.0 |
| 90 – 94 | A- | 3.67 |
| 85 – 89 | B+ | 3.33 |
| 80 – 84 | B | 3.0 |
| 75 – 70 | B- | 2.67 |
| 70 – 74 | C+ | 2.33 |
| 65 - 69 | C | 2.0 |
| 60 – 64 | C- | 1.67 |
| 55 – 59 | D+ | 1.33 |
| 50 -54 | D | 1.0 |
| < 50 | F | 0 |

Students will be expected to take a responsible approach to studying all sessions and performing assignments based on readings, individual work, case studies, and PP presentations that will provide a joint basis for their performance assessment at the end of the course by the instructor.

Activities and respective portion for the final grade.

Academic Policy:

In addition to traditional class lectures and Power Point presentations, students will be exposed to regular case studies and class discussions of topics pertinent to international economy and business. Besides, students may be grouped to work on case studies, which will require them to study a few cases and to make group presentations during the course. Finally, each student will individually present a project applying frameworks presented in the class to an industry or a company of choice.

Students are Required:

- to be respectful to the teacher and other students;
- to switch off mobile phones during classes;
- not to cheat. Plagiarized papers shall not be graded and may be grounds for failing the course;
- to meet the deadlines. Work submitted late for no valid reason is subject to 50% grade deduction;
- to come to classes prepared and actively participate in classroom work; students who refuse to participate may be marked absent at the teacher's discretion;
- to enter the room before the teacher starts the lesson;
- to attend all classes. No make-up tests are allowed unless there is a valid reason for missing them;
- to follow KBTU academic policy regarding **W, AW, I, F** grades.

A student must earn not less than 30 points in the two attestation periods. If the sum of the two attestation scores is less than 30 points, the student gets the unsatisfactory mark "Fail" (F) and will not be admitted to the final examination.

The final exam score must be not less than 20 points. If the student earns less than 20 points the student gets the unsatisfactory "