Risk Analysis, Prospect Evaluation & Exploration Economics

Course Description

This 4 to 5-day course covers all aspects of the evaluation and investment analysis of exploration prospects. It has a strong practical orientation that uses actual prospects and realistic exercises to illustrate the applications and mechanics of the various concepts and analytical procedures.

The course follows the characteristic chain of considerations that attends exploration projects, including both theory and application, and integrates the geotechnical, leasing, economics, and management aspects of such ventures. The course utilizes the latest methods for dealing with risk and uncertainty, and uses exercises in which in which participants can win or lose small amounts of money to reinforce these concepts.

Course Outline

1. Introduction
2. Statistics—the Language of Uncertainty
3. Probabilities and Distributions
4. Coping with Uncertainty
5. Estimating Petroleum Resources
6. Expect Value and Chance of Prospect Success
7. Truncation Issues
8. RMAG Exercise
9. Decision Trees and the Value of Information
10. The Most Crucial Decision: Selecting New Exploration Plays
11. Exploration Economics: Estimating Profitability
12. Economic Yardsticks
13. Dealing with Risk
14. Prospect Inventories and Portfolio Management
15. Acquisition Strategies and Bidding
16. Performance Tracking
17. Company Prospect Reviews
18. Capstone Exercise: Antelope Ranch

Who Should Attend

This course is intended for geoscientists, engineers, managers, landmen, and economists interested in all phases of exploration analysis and decision-making.

Recipients of Training

This course has been presented hundreds of times in open and internal courses, and most recently to Anadarko, Chevron, Chesapeake, Fieldwood, Hunt Oil, Husky, Murphy, Noble Energy, Pertamina, PTTEP and Repsol.

Transferring E & P Risk Assessment Expertise
Instruction • Software Tools • Practical Consultation