

Quantification of Geological Risk

Taught in a three (3) day format, this course focuses on the concepts and principles of statistics as it applies to the petroleum system, estimation under uncertainty, EUR assessment given success, and chance of success for prospects. In the three day format an integrated team exercise is available, as well as sections on performance tracking and value of information.

This course focuses on the first two days of our flagship five day course on Exploration Risk Analysis, primarily on the geotechnical concepts and principles of estimating under uncertainty, especially as related to the measurement of and communication about your prospects. We make use of (1) realistic games and exercises to illustrate principles and mechanics of estimating methods; and (2) analytical procedures involved with uncertainty and risk associated with modern petroleum exploration. The course identifies fallacies and unintended consequences of many corporate procedures for conducting petroleum exploration, and shows explorers how to get better at what they do.

Course Outline

- Day 1:** Introduction
Statistics
Dealing with Uncertainty
- Day 2:** Estimating Ultimate Recovery
Chance of Success and Expected Value
RMAG Exercise Introduction
- Day 3:** RMAG Solution
Value of Information
Play Analysis
Portfolio Analysis (focusing on the exercise insights about tradeoffs)
Performance Tracking