Portfolio Management and PlanRA Software

Course Outline
This 2-day course introduces E&P portfolio management with a holistic view including topics impacting portfolio selection such as: geologic dependencies, clustered development dependencies, dry hole tolerance, commercial thresholds, alignment with corporate goals, and how risk aversion affects decision-making that impacts portfolio optimization. Rose's PlanRA software is used for the course exercises.

One of the critical factors in adding E&P value is effective portfolio management. In turn, effective portfolio management requires unbiased evaluations of opportunities. An optimized portfolio is made up of a selection of opportunities that maximizes the chance of achieving the company's strategic goals. Portfolio selection is not an easy task because strategic goals are not all aligned with each other. For example, long-term reserves growth and immediate production goals tend to come from different opportunities. Trade-offs are present in each opportunity, and they need to be balanced to optimize a portfolio.

PlanRA will be used to aggregate selected prospects from an exploration inventory to show the range of possible outcomes for several candidate portfolios. Compare simulation results of different portfolios for metrics and goals such as resources addition, number of discoveries and developments, costs and value can be used to choose the optimum portfolio of opportunities to invest in.

Hands-on software training will get students up to speed quickly on the many input features and display options that PlanRA has. Learn how to use cross plots to easily spot biased assessments. Use a "traffic-light" matrix that facilitates portfolio selection using pre-defined and custom efficiency metrics. Learn how to model shared geologic dependencies, clustered development dependencies, and dry hole tolerance. The course ends with a capstone team exercise simulates a drilling portfolio from a 40 well inventory and teaches how to maximize the chance of meeting multiple corporate goals constrained by a drilling budget and commitment wells.

Course Schedule
1. Introduction to Portfolio Management
2. Portfolio Effect – Aggregation
3. Portfolio Selection is a Commercial Decision
4. Geologic Dependency - Impact on Portfolio Decisions
5. Clustered Development Dependencies
6. Risk Aversion – Impact on Decision-Making
7. Introduction to Portfolio Management Software – PlanRA
8. Build & Manage Portfolios using PlanRA
9. Exercises in Portfolio Selection & Analysis
10. Advanced software functionality assisting portfolio selection
11. Capstone team exercise to optimize a drilling portfolio subject to constraints & commitments

Who Should Attend
This course is intended for geoscientists, engineers, economists, portfolio analysts, and managers who are involved in building an inventory of opportunities or directly involved in portfolio selection to achieve multiple strategic goals.