Course Agenda

Financial Introduction
- View example oil and gas company financial statements
- Highlight line items most relevant to oil and gas
- Description of how course content will address oil and gas line items

Revenue: Oil and Gas Products and Product Marketing
- Production types and characteristics
  - Crude oil (composition, API gravity and sulfur content)
  - Natural gas (gas types, wet/dry gas, and gas processing)
  - Condensate
  - Natural gas liquids
- Oil, gas and NGL measurement and pricing units
- Factors that affect product pricing (transportation, quality, area differentials and timing)

Exploration, Exploration Costs and Unconventional Development
- Oil and gas formation, migration and traps
- Conventional vs. unconventional development
- Geological and geophysical methods/tools used by geoscientists
- Exploration decision factors
- Accounting treatment of exploration-related costs
- Successful-efforts vs. full-cost accounting

Commercial Terms: Mineral Rights and Leasing
- Ownership of oil and gas rights in U.S. vs. rest of world
- U.S. ownership distribution (private, federal, state, Indian and private)
- Severance of mineral rights from surface rights
- Ownership of oil and gas production (Rule of Capture)
- State regulatory agencies and conservation laws
- Vertical and horizontal well spacing examples
- Oil and gas leasing
- Royalty payments and statements
- Severance/production taxes and other royalty cost deductions
- Joint ownership and net mineral acres
- Pooling and unitization (voluntary and compulsory)
- Net revenue interest
- Title opinions and division orders
- How the division order database is used by multiple organizational functions
- Brief overview of federal leasing
- Mention of other types of interests (NPRI, ORI, NPI, carried interests, farm outs)
• Accounting treatment of leasing and unproved property acquisition costs

**Joint Operations: Operated vs. Non-Operated**
• Reasons for joint operations
• Model-form joint operating agreements
• Review of key provisions in the AAPL model form JOA
• Operator duties and partner approvals
• Authority for Expenditure (AFE)
• JOA accounting procedure
• Direct costs and operator overheads
• Joint interest bills (JIBs)
• JV auditing process
• Net vs. gross reporting

**Drilling and Completion and Treatment of Costs**
• Drill site preparation and related costs
• Video and animations showing drilling process for a horizontal well
• Key drilling costs and tangible vs. intangible
• Overview of post-drilling costs required to complete a drilled well and establish production
• Well evaluation techniques (mud logging, well logs, production tests, and coring)
• Hydraulic fracturing and well completion
• Brief overview of offshore drilling
• Accounting treatment of drilling costs

**Development and Production Operations and Costs**
• Oil and gas project economics
• Modeling, simulation and development considerations
• Artificial lift
• Example production site layout
• Production processing facilities
• Comingling and well tests
• Depletion stages and enhanced recovery
• Offshore production and platforms

**Reserves, DD&A, Impairment, Abandonment and Disclosures**
• Oil and gas reserves
• Capitalized costs, DD&A and impairment review
• Asset retirement obligation (abandonment)
• Overview of supplemental oil and gas disclosures