

### **Production Geology for Other Disciplines - PGD**

### COURSE

#### About the Course

Have you ever wondered why it seems like Geologists rarely give you a straight answer? Do they appear to be constantly avoiding direct answers to apparently simple questions? Are there never-ending qualifiers tacked to the answers they provide? "Usually, for the most part, chances are, often, almost all the time, maybe, could be, should be, can be, it depends..." What do you do with the ranges of the interpretations offered? This course will clear these questions... you will understand what makes the production geosciences tick; you will be able to phrase the appropriate questions, and then you will be able to deal with the answers.

Geological factors bear directly on and usually control engineering activities such as drilling, logging, testing, completion, development, and production, as well as all financial decisions associated with development. This course assumes the participant has some understanding of elementary geology, but it will provide a review of key geological principles and environments of deposition, all keyed to focus on the practical impact of geological models and uncertainty on appraisal and development. Without a common understanding between geologists and engineers, there can be no real interdisciplinary communication or teamwork in reservoir development and production activities. Engineering, financial, and geological coordination and understanding are the objectives of this course.

"Real life examples as well as example problems were evenly distributed among topics at reasonable times throughout the week. I think the class overall was very great, with a knowledgeable instructor who answered questions very well. Wonderful course!" - Reservoir Engineer, United States

### **Target Audience**

Production/completion/reservoir engineers, financial staff, professional staff from disciplines other than geology, and managers involved with reservoir management, and development/production, who might require an understanding of geological data, its variability, and the effects of the data, and its interpretation, on their projects and jobs. This course is also appropriate for geologists early in their career development that are slated for production or development positions.

#### You Will Learn

Participants will learn how to:

 Understand the sources of geological data and the interpretation of that data, including maps, crosssections, electric logs, and seismic sections

- Recognize the relationships between paleo-environmental interpretations and the practical application of these interpretations to field development
- Recognize and appreciate uncertainty in geological and geophysical data/interpretation
- Understand the uncertainty surrounding the geologist's interpretation.... "Why won't they give me a straight answer?"
- Recognize ways in which geological data is presented for evaluation in integrated asset teams
- Understand and more realistically evaluate geological data and interpretation
- Understand geological interpretation impact on production and development...pro and con

# **Course Content**

- Correlation and stratigraphy
- Structural interpretation
- Seismology
- Clastic/carbonate deposition including an introduction to Unconventional Reservoirs
- Reservoir geology
- · Reservoir characterization and modeling
- Volumetrics
- Well planning
- Reservoir appraisal
- Field development
- Uncertainty analysis

# **Product Details**

Categories: <u>Upstream</u> Disciplines: <u>Geology</u> Levels: <u>Foundation</u> Product Type: <u>Course</u> Formats Available: <u>In-Classroom</u> Instructors: <u>PetroSkills Specialist</u> <u>Andrew Harper</u> <u>Larry Lens</u>