Gulf Coast Association of Geological Societies and the Gulf Coast Section of SEPM

10 Short Courses

60th Annual Convention October 10-12, 2010 San Antonio, Texas

Hosted by the South Texas Geological Society



Short Course #1 – Critical Elements of Gas Shale Evaluation

Instructor: Randall S. "Randy" Miller, Core Laboratories **Date:** One Day Short Course, Saturday October 9th, 2010

Time: 8:00am-4:00 pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course will be of interest to geologists, geophysicists, paleontologists, petrophysicists, stratigraphers, reservoir engineers, exploration managers and strategic decision makers who are considering operations in gas shale plays.

Summary:

Many E & P companies are either actively involved in developing gas shale reservoirs or are exploring for new potential gas shale reservoirs. This short-course will highlight the key parameters and data relationships that are critical for identifying productive gas shales. These include reservoir geology, mineralogy, geochemistry, petrophysical properties, gas adsorption, geomechanical properties, fluid compatibility, and stimulation design and reservoir simulation. In addition, core-log integration techniques for gas shale petrophysical log models will be presented along with gas-in-place calculations and estimates of ultimate recovery. Case histories of different gas shale plays will be utilized to demonstrate the critical elements of Gas Shale Evaluation.

Short Course #2 – Evaluation of Shale Gas Reservoirs with Focus on the Eagleford

Instructor: Rick Lewis, Schlumberger

Date: One Day Short Course, Sunday, October 10th, 2010

Time: 8:00am-4:00 pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course will be of interest to geologists, geophysicists, paleontologists, petrophysicists, stratigraphers, reservoir engineers, exploration managers and strategic decision makers who are considering operations in gas shale plays.

Summary: N/A

Short Course #3 – Geology & Geophysics Applied in Industry

Instructor: **Fred W. Schroeder** (ExxonMobil Retired) **Date**: One Day Short Course, Saturday, October 9, 2010

Time: 8:00am-4:00 pm

Room: 203B

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course will be of interest to geology students, graduate students, and working geologists who desire a fundamental understanding of the uses of seismic and subsurface data as applied in industry.

Summary: This course is designed to provide attendees with insight into how geology and geophysics are applied within our industry. Through a combination of short lectures and handson, paper exercises, we will look at:

- The Focus of Industry
- The Basics of Prospecting
- Structural Analysis Using Seismic Data
- Stratigraphic Analysis Using Seismic Data
- Well-Seismic Ties
- Mapping a Direct Hydrocarbon Indicator (DHI)

Short Course #4 - Multicomponent Seismic Stratigraphy & Technology for Evaluating Fracture Systems of Unconventional Reservoirs

Instructor: Bob A. Hardage, Bureau of Economic Geology **Date:** One Day Short Course, Sunday, October 10, 2010

Time: 8:00am-4:00 pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course will be of interest to geologists, geophysicists, petrophysicists, exploration managers, and strategic decision makers who are searching for new tools and evaluation methods to assess fracture systems in unconventional reservoirs.

Summary:

Multicomponent seismic technology is an emerging science that is becoming the business driver for many oil and gas ventures. In this class, we will examine P and S wavefield illumination concepts, unified P and S interpretations, and multicomponent data applications and case histories. Class topics will include:

- Vector Seismic Sources
- Vector Seismic Sensors
- P and S Reflectivities
- Multicomponent Imaging Principles
- Fracture Physics and Multicomponent Applications
- Depth Registration of P and S Images
- Integrated P and S Interpretation
- Multicomponent Case Histories

Course notes will be provided. All lecture material is presented as digital PowerPoint graphics that are provided to attendees. Applications to shale gas and unconventional reservoirs will be stressed.

Short Course #5 – Basic Log Analysis

Instructor: Tom Fett, Consulting Petrophysicist, San Antonio, Texas **Dates:** Half Day Short Course, Saturday Afternoon, October 9, 2010

Time: 1:00pm-4:00pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum 50 persons.

Who Should Attend?

This short course will be of interest to new geologists and engineers, experienced geologists looking for a refresher course, graduate students, geophysicists, oil and gas investors, and non-technical managers who seek a fundamental understanding of log analysis and the information derived from logging tools.

Summary:

This Short Course is essentially Log Analysis 101. It is intended to be a free wheeling "black board" style discussion of the basics of practical log analysis. It will follow the evolution of petrophysics from the perspective of the acquisition of the parameters needed to understand reservoirs and their ability to store & produce fluids (mainly oil & gas). The discussions will be designed so that new geoscientists can follow and understand the topics. Small digressions into more advanced examples will give them exposure to some of the complexities and nuances of the "art" of log analysis. More experienced geoscientists looking for a refresher course should find these topics of special interest.

Short Course #6 – Advanced Log Analysis of Shale Gas and Tight Gas Reservoirs

Instructor: Tom Fett, Consulting Petrophysicist, San Antonio, Texas; Others TBA

Dates: One Day Short Course, Sunday, October 10, 2010

Time: 8:00am-4:00 pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course will be of interest to geologists, geophysicists, petrophysicists, exploration managers, and strategic decision makers who seek to keep up with the latest logging technologies available in the industry, and want to understand the latest methods to use those technologies to evaluate and analyze tight and unconventional reservoirs.

Summary:

Advanced log analysis tools and techniques will be presented by experts in the newer developments. While service company experts will be presenting these new tools & techniques; they will be encouraged to approach the course from an application, rather than a "sales", perspective. The latest approaches to the evaluation of non-conventional reservoirs such as the shales and tight reservoirs will be featured.

Short Course #7 – Carbon Sequestration

Instructors*: Sue Hovorka, Ramon Trevino, J.P. Nicot, Bureau of Economic Geology, The University of Texas at Austin, Steven Bryant, Sanjay Srinivasan, Larry Lake, Carlos Torres-

Verdin, Department of Petroleum and Geosystems Engineering, The University of Texas,

Austin, Sandia Technologies Personnel, Houston, TX, Hilary Olson, Institute for Geophysics,

The University of Texas at Austin

Dates: One Day Short Course, Sunday October 10th, 2010

Time: 8:00am-4:00 pm each

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This introductory level short course will be of interest to undergraduate and graduate students in geology, geologists, engineers, petrophysicists, exploration managers and strategic decision makers who wish to better understand the influence of CO2 in the environment, and on our economy.

Summary:

This Short Course will cover the following topics:

Introduction to Carbon Sequestration

Carbon Sequestration Project Development

Carbon Sequestration Site Characterization-Subsurface Geology

CO2 Injection, Monitoring, Petrophysics, & Geophysics

Carbon Sequestration Project/Risk Assessment

Short Course #8 – Career Development, Adaptive Skills, Ethics, &

Project Management

Instructor: TBA

Dates: One Day Short Course, Sunday, October 10, 2010

Time: 8:00 pm-4:00pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course is designed for geology students, graduate students, and working geologists in the early stages of their careers who desire to develop better skills for working in a professional team environment.

Summary: This course will help attendees to develop the professional, ethical, and interpersonal relationship skills necessary to work with colleagues, and to be a productive member of a professional asset management team.

^{*}actual instructor list may vary slightly

Short Course #9 – Ethics I

Instructor: Cary Barton (Barton, East & Caldwell, LLP) **Dates:** One Hour Short Course, Monday, October 11, 2010

Time: Noon-1:00pm

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course is for professional geologists, geophysicists and engineers who seek to satisfy their ethics requirement for State Certification.

Summary: Ethics I, Ethics II, are identical courses that will evaluate various moral, ethical, and legal situations that arise in the practice of geoscience and engineering. The class will discuss the proper courses of action for the geoscientists or engineer to follow in order to maintain the appropriate standards of professional conduct.

Short Course #10 – Ethics II

Instructor: Cary Barton (Barton, East & Caldwell, LLP) **Dates:** One Hour Short Course, Tuesday, October 12, 2010

Time: 7:00 am-8:00am

Room: TBA

Tuition: \$TBA per person; price includes course notes and refreshments.

Enrollment: Maximum TBA persons.

Who Should Attend?

This short course is for professional geologists, geophysicists and engineers who seek to satisfy their ethics requirement for State Certification.

Summary: Ethics I, Ethics II, are identical courses that will evaluate various moral, ethical, and legal situations that arise in the practice of geoscience and engineering. The class will discuss the proper courses of action for the geoscientists or engineer to follow in order to maintain the appropriate standards of professional conduct.