

# Structural Styles

## INTRODUCTION

This live online course is designed for participants who want to develop a thorough understanding of structural geology and hydrocarbon migration and entrapment.

This course is presented by Applied Stratigraphix and will be taught by Dr. Molly Turko who is a structural geology expert and has over 10 years of experience in the oil and gas industry.

The training consists of five modules and each module runs for 3-hours and is taught live on Zoom.

Participants will have an opportunity to be interactive and ask the instructor questions.

## COURSE CONTENT

**MODULE 1** - This module covers the different structural styles including the type of faulting to expect, the kinematics of faulting for proper structural cross-sections and maps, stress regimes, and the impact of the mechanical stratigraphy on each style of faulting and fracturing that develops. Module 1 starts by looking at extensional structures from the rift scale down to the outcrop scale.

**Module 2** - Contractional deformation can occur through thick-skin (basement involved) or thin-skin (basement not involved) deformation, or both. In this module, we will look at each structural style along with the role of mechanical stratigraphy.

**MODULE 3** - This module will focus on the structural styles of strike-slip, including transpressional and transtensional structures that develop during wrench tectonics and at the macroscopic (field) scale.

**MODULE 4** - In this module, we will focus on reactivated structures including inversion, as well as transpression and transtension structures that develop in response to a preexisting structure. Examples include inverted rifts and structures that developed through multiple tectonic events.

MODULE 5 - This module introduces salt tectonics in contraction and extension and how deformation differs in both passive and active margins.

## WHO SHOULD ATTEND

This course is targeted for:

- Geologists
- Geophysicists
- Petrophysicists
- Engineers

## ABOUT THE INSTRUCTOR

Dr. Molly Turko has over 10 years of experience in the oil and gas industry and is a subject matter expert in structural geology. She has had the opportunity to work in multiple basins in the U.S including the Anadarko, Ardmore, Powder River, Appalachian, Onshore Gulf Coast, and Rocky Mountain Basins. She received both a B.Sc. and an M.Sc. in geology from the University of Tulsa followed by a Ph.D. from the University of Oklahoma. Molly's passion is mentoring and teaching, but her favorite role is leading structural geology field courses in Nevada and Southern Oklahoma.

## REGISTRATION INFORMATION

Course Date: February 22-26, 2021

Time: 11:00 AM to 2:00 PM US Central Time.

Cost: \$1250.00 per person

Please register online [HERE](#).