

COURSE LEVEL Learning Goals

Appreciate the dynamic nature of the Earth's lithosphere and large scale plate motions through time

Relate shallow crustal processes to processes operating in the deep crust and mantle in various tectonic settings (e.g., arcs, continental rifts, etc.)

Describe the relationships between tectonic processes operating within the Earth's crust and mantle with landscape evolution and paleogeography of North America

Explain the growth of the North American continent as a consequence of tectonic accretion

Compare and contrast Precambrian and Phanerozoic tectonic processes as preserved in the rock record of North America

Extract and critically evaluate key concepts bearing on the tectonic evolution of North America from scientific literature (i.e., learn to "skim" scientific literature)

Correctly position the main tectonic elements of North America on a map

Intelligently discuss the plate tectonic evolution of North America with a geologist (and not embarrass any of their professors in the process.....)

Synthesize all available information pertaining to the tectonic evolution of a selected region in North America and prepare a concise written overview of that tectonic history