

Syllabus...

The Story of Our Planet Earth: The First 4.5B Years

OLLI South, Spring 2024

Facilitator: Stu Gentry

Thursday Mornings, 9:30 to 11:30, April 4 through May 23 In person at Columbine United Church

This class will look at the history of our planet, starting with its formation 4.5B years ago. We will move through the first appearances of solid land and the Moon, the emergence of life, and the evolution of our current continents. Along the way we will look at such topics as the formation of oceans, the appearance of oxygen in our atmosphere, the movement of plants and animals onto land, the rise and fall of dinosaurs, the living nature of glaciers, and the Pacific Ring of Fire. We will also spend time looking specifically at Colorado's geologic history. We will use the Denver basin, the ancestral vs. modern Rockies, and the Colorado Plateau as our laboratory for understanding these processes. We will close out the class by taking a virtual road trip through the rest of the U.S. to understand why the different regions of our country each ended up with their own unique geologic personality.

This is a course on geology, but we will not spend much time trying to sort out mineral names or specific rock formations. Nor will we attempt to memorize the names of the various geologic eras and periods. It will instead take a broader view of our physical world. It will highlight the nature of the processes that shaped the world in the past and that continue to transform our planet today. The goal is that by the conclusion of the class, we will be able to travel across the country and be able to recognize the general landforms that we see and have a sense of the forces of nature that most have helped shape those features.

The class will be designed around a mixture of videos and presentations. There are no assigned readings for this course. Students are expected to provide their own wonderment as to the natural world around us.

Class date

Topics To Be Covered
(subject to change)

Apr 4	The Formation of our Planet from Stardust to Hard Rock
Apr 11	The Early Earth – The First 4 Billion Years
Apr 18	The Origins of Life on Earth
Apr 25	Plate Tectonics and the Continual Reshaping of the Continents
May 2	The Geologic History of Colorado – Part I The Ancestral Rockies and the Modern Rockies
May 9	The Geologic History of Colorado – Part II Fire & Ice: The San Juan Mtns and Colorado's Glaciers
May 16	Oil... Black Gold... Texas Tea Colorado's Commercial Natural Resources
May 23	A Geologic Road Tour Across the Rest of the U.S.