Welcome to the 2nd offering of the ASU EarthScope seminar! The goal of this course is to explore the new results that have emerged from the EarthScope Project, a major NSF-funded initiative in the Earth Sciences. Our meetings will alternate between lectures that emphasize a specific method and/or technique, and discussions that explore the application of that method towards understanding something about the Earth using EarthScope as a framework for discussion. The collection of methods and techniques include: seismic methods, GPS, magnetotellurics, and analysis of drill cores. Since the current range of EarthScope-related published results is heavily weighted towards seismic data (the USArray Transportable Array has been producing high quality usable data for over 5 years), this course will have a focus on implications drawn from seismic work.

Our alternating lecture/discussion format will be presented by 2-person teams. Associated with every lecture will be a few publications corresponding to the topic of that particular lecture/discussion sequence. While the 2-person team is responsible for giving the lecture and leading the discussion, each and every one of us is responsible for reading the literature associated with the lectures and discussions. Guidelines for suggested approaches toward the lectures and discussions are included in a separate document for the course.

Course objectives: By the end of this course, you should:

- Have a better understanding of the structure and dynamics of the western United States
- Improve your ability to present scientific methodologies
- Improve your ability to present and discuss scientific research