## EARTH & PLANETARY SCIENCES (EPS)

## College of Letters & Science

Coming for Fall 2026.

## **EPS 164 – Seismology (3 units)**

Course Description: Fundamental principles of seismic wave propagation, earthquake source mechanics, and the structure of the Earth's interior. Stress and strain, body and surface waves, seismic ray theory, earthquake location methods, magnitude scales, and seismic tomography. Theoretical concepts and practical applications in observational seismology. Seismological methods used to study earthquakes, Earth structure, and other geohazards.

Prerequisite(s): (MAT 017A or MAT 019A or MAT 021A); (MAT 017B or MAT 019B or MAT 021B); MAT 022A recommended; ECS 032A or PHY 040 or equivalent python programming course recommended. Learning Activities: Lecture 3 hour(s).

Grade Mode: Letter.

General Education: Science & Engineering (SE).