

# EARTH & PLANETARY SCIENCES (EPS)

College of Letters & Science

Coming for Fall 2026.

## **EPS 134 – Environmental Geology & Land Use Planning (3 units)**

*Course Description:* Geologic aspects of land use and development planning. Geologic problems concerning volcanic and earthquake hazards, land stability, floods, erosion, coastal hazards, non-renewable resource extraction, waste disposal, water resources.

*Prerequisite(s):* (MAT 017A or MAT 019A or MAT 021A); (GEL 001 or EPS 001 or GEL 050 or EPS 050); (PHY 001A or PHY 007A or PHY 009A or PHY 009HA); EPS 100 recommended.

*Learning Activities:* Lecture 2 hour(s), Laboratory 3 hour(s).

*Enrollment Restriction(s):* Not open for credit to students who have taken GEL 134.

*Grade Mode:* Letter.

*General Education:* Science & Engineering (SE).

## **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).