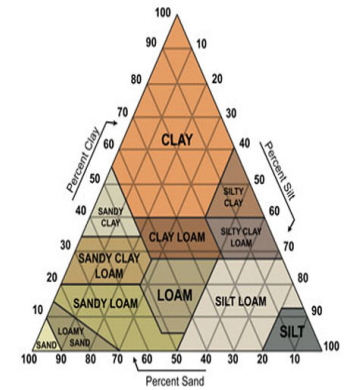
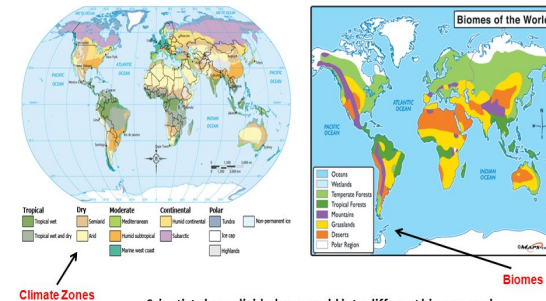


GEOTECHNICAL CLASS ASSIGNMENT

- Mexico city clays [amplify](#) earthquake vibrations causing [tremendous damage](#) as seen during the recent September 19, 2017 earthquake. To complete this assignment, please research the type of soil deposits found in Mexico City
- From a humanitarian standpoint, what was the human loss of life during the recent earthquake? What is the estimated damage? Please provide references.
- What do research articles state about why the damage you see in Mexico City is more than you see in other parts of the world for a similar magnitude earthquake?
- What characteristics of these deposits cause the amplification of earthquake vibrations?
- Do the current building codes in Mexico City take into account these site conditions? If not, how can they?
- What are some of the construction strategies that future civil engineers can employ so that damage can be minimized and human life preserved?



Climate Zones, Vegetation Regions, Biomes, and Ecosystems



Scientists have divided our world into different biomes, such as, grasslands, deserts, rainforests, deciduous forests, and marine environments. A biome is a large geographical region with plants and animals that are able to live in that location with its particular climate because they have adapted in different ways to the amounts of water, heat, and soil in that area.



It's a dirty job, but somebody has to do it.

Site Assessment (Foundation Engineering) or Soil Types (Soil Classification, Site improvement)

Mexico city clays [amplify](#) earthquake vibrations causing [tremendous damage](#) as seen during the recent September 19, 2017 earthquake. To complete this assignment, please research the type of soil deposits found in Mexico City using journal and conference articles. It will also be useful to refer to the [Geotechnical Extreme Events Reconnaissance website](#) to obtain assessment information of recent earthquakes.

- a) From a humanitarian standpoint, what was the human loss of life during the recent earthquake? What is the estimated damage? Please provide references.
- b) What do research articles state about why the damage you see in Mexico City is more than you see in other parts of the world for a similar magnitude earthquake?
- c) What characteristics of these deposits cause the amplification of earthquake vibrations?
- d) Do the current building codes in Mexico City take into account these site conditions? If not, how can they?
- e) What are some of the construction strategies that future civil engineers can employ so that damage can be minimized and human life preserved?