Review for Physical Geology Lecture Final - May 10th @ 11:00 a.m.

Plate Tectonics
convergent plate boundary, divergent plate boundary, transform plate boundary, hot spot, continental doming, triple junction, aulacogen, normal faulting, mid-oceanic ridge, convection cells, deep sea trenches, subduction, Benioff zone, volcanic arc, andesite volcanoes, orogenic event, San Andreas Fault, offset, discontinuities

- Know what causes continents to diverge
- Know the geologic features associated with rift valleys
- How do andesitic volcanoes form in the volcanic arc?
- What are the geologic features associated with a subduction zone?
- What happens when continents collide?
- Geologic processes that take place along transform plate boundaries

Hydrologic Cycle & Rivers and Streams
Hydrologic Cycle, hydrology, reservoirs, fluxes, infiltration, runoff, evaporation, precipitation, groundwater, ultimate base level, stream head, stream mouth, channel, banks, drainage basin, stream load, bed load, suspended load, dissolved load, intermittent stream, downcutting, 'V'-shaped valleys, perennial river, 'U'-shaped valleys, sidecutting, meander, floodplain, natural levee, lowland river, upland stream, point bar, cutbank

- the reservoirs and fluxes in the hydrologic cycle
- how does downcutting alter the shape of a river valley?
- how does sidecutting alter the shape of a river valley?
- how do meanders grow?
- what are the geologic features formed by a lowland river ?... an upland stream?

Groundwater
groundwater, water table, perched water table, soil, regolith, bedrock, saturated zone, unsaturated zone, permeability, porosity, artesian wells, aquifer, aquitard, recharge area, karst topography, limestone, sinkhole, sinkhole lake, cave, dripstone, stalactite, stalagmite

- how does water flow underground?
- how are artesian wells formed?
- how does karst topography form?
- how does a cave form ?

Deserts and Dry Climates
desert, subtropical desert, rain shadow desert, polar desert, steppe, loess, sand dunes, pedestal rock, ventifacts, Basin and Range topography, alluvial fans, inselbergs, pediment

- where do subtropical, mid-latitude and polar deserts form?
- how does wind affect: silt and clay particles; sand particles; gravel?
- how does water shape the land in a dry/desert environment ?

Shoreline Environment
crest, trough, wavelength, wave base, wave break, surf, wave refraction, headland, bay, longshore currents, beach drift, beach, spit, baymouth bar, daily tides, high tide, low tide, monthly tides, spring tide, neap tide, lunar phases

- how is wavebase and wave break water depth calculated
- know the processes of how wave refraction shapes the shoreline
- how to tell the direction of movement of longshore currents
- know what causes the daily tides
- know what causes the monthly tides and how they relate to the lunar phases

Comprehensive Component
mineral, rock, Igneous Rock, Sedimentary Rock, Metamorphic Rock, phaneritic texture, porphyritic texture, detrital texture, nondetrital texture, foliated texture, nonfoliated texture, physical properties, fold, fault, Oceanic Crust, Continental Crust, Mantle, Outer Core, Inner Core, Fe-Ni metal, Body waves, Surface waves, Relative Time, Absolute Time, Superposition, Cross-cutting Relationships, Law of Inclusions, Radiometric Age dating

- the definition of a mineral
- mineral physical properties controlled by chemical bonding
- mineral physical properties controlled by chemical composition
- the textures present in the 3 major rock groups
- the three major rock groups and their definitions

- what does stress do to ductile rocks, to brittle rocks ?
- what does seismic body waves tell us about the composition of the earth's interior
- how is relative geologic time determined?
- how is absolute geologic time determined ?