CONTINENTAL TECTONICS
GEO 382T/GEO 339T
Fall, 2021

Instructor: Mark Cloos
Office: JGB 6.112
Phone: 471-4170
Office Hours: Anytime the door is open
Lecture: 28240  TTH  9:30-11:00  JGB 3.204
Text: None required - numerous handouts.
Prerequisite: Structural Geology (GEO 428) or equivalent course with a grade of C and consent of instructor.
Topics Include: Geologic principles and early tectonic theories (3 lectures)
New observations leading to plate tectonic theory (3)
Key ideas in the plate tectonic revolution of the 1960s (4)
Origin and structure of the Earth (2)
Ocean spreading ridges and ophiolites (3)
Rifting, core complexes and passive margins (3)
Subduction zones, trenches and volcanic arcs (3)
Accretionary complexes, subduction zone seismicity (3)
Collisional orogenesis (2)
Transform margins (2)

Grade: 1) Two, one-page reviews of papers (5+ pages) (excluding Geology, GSA Today, EOS, GRL, Leading Edge).
Reviews due September 15 and November 15.
2) Review a pre-2005 UT MS thesis or PhD dissertation:
Due October 15
3) 339T/Term Paper; 382T/Prepare 15± pg NSF-style research proposal.
4) 15 minute class presentation on research proposal/paper.
5) Mid-term exam. TBD
6) Final exam (3 hr). Take home test

Course Objectives: To understand how the Earth works and how we figured it out
To think like a scientist instead of a student.
Help launch you on your thesis or dissertation.

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