1301. Earth Systems in Taos. Examines geologic change within the earth as governed by physical, chemical and biological processes, and interactions between the solid earth, oceans, atmosphere and biosphere. 3 hours of lecture and one 2-hour laboratory each week. Recommended for all geology tracks. This course will specifically inspect the practice of the scientific method by investigation of the processes affecting geologic and environmental change in the southwestern United States. Offered only through the SMU-in-Taos program. Course will satisfy either the laboratory science requirement (2320) or the second-term writing requirement (2321).

GEOLOGY 1301: EARTH SYSTEMS

SMU in Taos, 2013

Lecture M-F, 8:30-1:00 P.M.

Laboratory: Tuesdays, Wednesdays, Thursdays, 1:30-4:00 P.M.

Field Trips: 8:30 – 5:30 P.M. Instructor: Neil Tabor

Text (READING LIST): Earth's Dynamic Systems, 10th edition, Hamblin and Christiansen

<u>Date</u> Week 1	Lecture Topic (Readings in text & Handout) Laboratory Mineral LD
June 4	Mineral I.D. Arrival, organizational meeting
June 5	Valles Caldera/Frijoles Canyon field trip
June 6	Introduction and Minerals (Chapters 1, 2, 3)
June 7	Minerals (Chapter 3)
June 8	No classes – Wellness
June 9	No classes – Wellness
June /	TVO Classes — Welliness
Week 2	
June 10	Igneous rocks (Chapter 4) Igneous Rock I.D.
June 11	Field trip to John Dunne Bridge
June 12	Sedimentary Rocks, Metamorphic Rocks (Chapter 5, 7)
	Sedimentary Rock I.D.
June 13	Structural Geology, Geological time (Chapters 7, 8)
June 14	Field trip to Sedimentary strata along Trail 18
Week 3	
June 15	No classes – Wellness
June 16	No classes – Wellness
June 17	Midterm Examination
June 18	Earthquakes, Magnetism, Plate Tectonics (Chapters 17-21)
T 10	Topographic Maps
June 19	Field Trip to Ghost Ranch
June 20	Earthquakes, Magnetism, Plate Tectonics (Chapters 17-21)
June 21 June 22	Earthquakes, Magnetism, Plate Tectonics (Chapters 17-21) No classes – Wellness
June 22 June 23	No classes – Wellness No classes – Wellness
Julie 23	No classes – Weilliess
Week4	
June 24	Field trip to Wild and Scenic Rivers Structural Maps
June 25	River systems and Groundwater systems (Chapters 12 & 13)
June 26	Glacial Systems (Chapter 14)
June 27	Field trip to Wheeler Lake
June 28	Climate Systems
June 29	No classes – Wellness
June 30	No classes – Wellness

Week 5

July 1 July 2 July 3 Earth Resources Final Examination
Departure from SMU-in-Taos