

GEOMORPHOLOGY
Geography 4350 – Spring 2024
Lecture, Lab & Exam Schedule

DATE	TOPICS
Jan 16	Introduction
	PART I. STRUCTURES - THE RESISTIVE FRAMEWORK
18	Global geomorphology – orogenesis, tectonic structures of North America
23	Lab 1: Tectonic structures of Texas (EESAT 336)
25	Diastrophism - Folded, faulted and tilted strata
30	Diastrophism - Landforms related to structures
Feb 1	Lab 2: Landforms and geologic structures
6	Volcanic structures – igneous rocks as geologic components
8	EXAM I
	PART II. MATERIALS - THE RESISTIVE ELEMENTS
13	Strength of rock and soil - soils on slopes
15	Strength of rock and soil - strength of rock
	PART III. PROCESSES - AGENTS OF ENERGY EXPENDITURE
20	Gravity - slope processes and landforms
22	Lab 3: Landslides
27	Gravity - hydrologic cycle and hill slopes
29	Water I: stream networks
March 5	Lab 4: Streams in Denton (mini field trip)
7	EXAM 2
11-17	SPRING BREAK
19	Water II: stream erosion
21	Lab 5: North Texas stream networks
26	Water III: river valleys and floodplains
28	Lab 6: North Texas floodplains
30	Field Trip to Dallas County
April 2	Lab 7: Hydrological Effects of Urbanization: White Rock Creek (EESAT 336)
4	Lab 8: Woodbine sandstone outliers in Denton (mini field trip)
9	Lab 9: Flood control in Denton (mini field trip)
11	EXAM 3
16	Waves - coastal processes and landforms
18	Lab 10: Coastal marsh sedimentation on the Trinity River estuary (EESAT 336)
	PART IV. LEGACY OF THE QUATERNARY
23	Glacial Landforms
	PART V. APPLIED GEOMORPHOLOGY
25	Lake sedimentation in Texas
30	Coastal erosion in Texas
May 2	Review (optional). Project due in class.
7	FINAL EXAM , Tuesday May 7th, 10.30-12.30 am.