GEOMORPHOLOGY
Geography 4350/5350 – Spring 2025
Lecture, Lab & Exam Schedule

DATE	TOPICS
Jan 14	Introduction; getting organized; Q&A
	PART I. STRUCTURES - THE RESISTIVE FRAMEWORK
16	Global geomorphology – orogenesis, tectonic structures of North America
21	**Lab 1: Tectonic structures of Texas (EESAT 340)**
23	Diastrophism - Folded, faulted and tilted strata
28	Diastrophism - Landforms related to structures
30	**Lab 2: Landforms and geologic structures**
Feb 4	Volcanic structures – igneous rocks as geologic components
6	**EXAM I**
	PART II. MATERIALS - THE RESISTIVE ELEMENTS
11	Strength of rock and soil - soils on slopes
13	Strength of rock and soil - strength of rock
	PART III. PROCESSES - AGENTS OF ENERGY EXPENDITURE
18	Gravity - slope processes and landforms
20	**Lab 3: Landslides**
25	Gravity - hydrologic cycle and hill slopes
27	Water I: stream networks
March 4	**Lab 4: Streams in Denton (mini field trip)**
6	**EXAM 2**
10-16	**SPRING BREAK**
18	Water II: stream erosion
20	**Lab 5: North Texas stream networks**
25	**Review lecture "Water III: river valleys and floodplains*" before coming to class. In class we will do "Lab 6: North Texas floodplains"**
27	**No class**
29	**Field Trip to Dallas County**
April 1	**Lab 7: Hydrological Effects of Urbanization: White Rock Creek (EESAT 340)**
3	**Lab 8: Woodbine sandstone outliers in Denton (mini field trip)**
8	**Lab 9: Flood control in Denton (mini field trip)**
10	**EXAM 3**
15	Waves - coastal processes and landforms
17	**Lab 10: Coastal marsh sedimentation on the Trinity River estuary (EESAT 340)**
	PART IV. LEGACY OF THE QUATERNARY
22	Glacial Landforms
	PART V. APPLIED GEOMORPHOLOGY
24	Lake sedimentation in Texas
29	Coastal erosion in Texas
May 1	Review (optional). Project due in class.
?	**FINAL EXAM**.

*be sure to cover channel, bluff, floodplain, terrace, valley, interfluve, alluvium, bedrock, oxbow lake.