9-2003

GEOL 395.01: Process Geomorphology

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SYLLABUS for Process Geomorphology

DATE	TOPIC	READING (Ritter et al)
Sep 2	Introduction	1
Sep 5	*No lab*	
Sep 8	Material properties of rock and soil	4: 92 – 102
Sep 10	Weathering processes	3: 42 – 61, 73 – 78; 4: 80 – 92
Sep 12	*Soil properties*	
Sep 15	Soil creep	4: 102 – 105
Sep 17	Hillslope evolution	4: 125 – 133
Sep 19	*Hillslope evolution I: Continuity eqn*	
Sep 22	Runoff processes	5: 135 – 140
Sep 24	Subsurface flow	
Sep 26	*Hillslope evolution II*	
Sep 29	Shallow landsliding	4: 100 – 102, 105 – 125
Oct 1	Deep-seated landsliding	
Oct 3	*Shallow landslide I*	
Oct 6	Sediment transport by overland flow	5: 173 – 176
Oct 8	Channel initiation	5: 144 – 147
Oct 10	*Shallow landslide II*	
Oct 13	Open channel flow	6: 190 – 195
Oct 15	Hydrographs, floods	5: 141 – 144, 154 – 156, 164 – 173
Oct 17	*Model Watershed*	
Oct 20	Sediment transport	6: 195 – 200
Oct 22	Channel geometry	6: 206 – 214
Oct 24	*Sediment transport I*	
Oct 27	Longitudinal profiles	6: 211 – 213
Oct 29	Terraces, knickpoints, baselevel	6: 228 – 231; 7: 232 – 247
Oct 31	*Sediment transport II*	
Nov 3	Bedrock channel incision	6: 202 – 203
Nov 5	Channel patterns	6: 214 – 228
Nov 7	*Stream ordering*	
Nov 10	Bank erosion	6: 200 – 202
Nov 12	Channel networks	5: 147 – 160
Nov 14	*Bank stability analysis I*	
Nov 17	Fuvial system: perturbations	6: 225 – 231
Nov 19	Fire and erosion	
Nov 21	*Bank stability analysis II*	
Nov 24	Sediment Budgets and Yields	5: 175 - 185
Nov 26	Glaciers and periglacial processes	9: 296 – 312; 10: 322 – 335; 11: 371 – 386
Dec 1	Climate and geomorphology	2: 35 – 41
Dec 3	Tectonic geomorphology	2: 25 – 31
Dec 5	*Glaciers*	
Dec 8	AGU? TBD	
Dec 10	AGU? TBD	