

**ESS 426. FLUVIAL GEOMORPHOLOGY 2006**

LECTURE: T TH 10:30 – 11:50  
 LAB: M 10:30-12:20 (mainly)

ROOM 022 JOHNSON HALL  
 ROOM 117 JOHNSON HALL

Instructor: Derek Booth (Wilcox Hall 164)  
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 office hours: T TH 1:30-2:30 or by appointment  
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 office hours: MW 1:30-2:30

**CLASS WEB SITE:** <http://gis.ess.washington.edu/grg/courses.html>

**Text:** *Fluvial Forms and Processes*, David Knighton (1998, paperback edition)

Date	Mtg. & Lect. #	Subject	Required Reading
3/27	1 (1)	Introduction, History, and Definitions: 1 (in Monday lab	see also Chpt. 1
3/28	2 (1)	Introduction, History, and Definitions: 2	
<b>[no class Thursday March 30]</b>			
4/4	3 (2)	Fluid Mechanics: 1	Chpt. 4 p, 96-113 (1 week +)
4/6	4 (2)	Fluid Mechanics: 2	
4/8	<b>FIELD TRIP 1: Field Methods and Roughness Determination on Swamp Creek</b>		
4/11	5 (2)	Fluid Mechanics: 3	
4/13	6 (3)	Sediment Transport: Mechanics	Chpt. 4, p. 113-150 (1 week +)
4/18	7 (3)	Sediment Transport: Bedload	
4/20	8 (3)	Sediment Transport: Bed & Suspended Loads	
4/22	<b>FIELD TRIP 2: Channel and Flow Interactions on North Creek</b>		
4/25	9	Review; Discussion of Field Trips and Reports	
4/27	10 (4)	Channel Form—The Bankfull Channel	Chpt. 5 (2 weeks)
5/2	11 (4)	Channel Form—The Bankfull Channel	
5/4	12 (4)	Floodplains and Terraces	
5/9	13 (4)	Channel Patterns and River Profiles	
5/11	14 (5)	Channel Classification	
5/13	<b>FIELD TRIP 3: Channel Migration on the Green River</b>		
5/16	15 (6)	Hillslope Hydrology	Chpt. 2; Chpt. 3, p. 65-80
5/18	16	Channel Initiation and Drainage Networks	Chpt. 2 (cont.); Chpt. 3, p. 80-95
5/23	17	Channel Response	Chpt. 6
5/25	18	Human Effects	Chpt. 6 (after p. 316)
5/30	19	River Restoration	
6/1	20	Ecological Influences of Fluvial Processes	
6/5	<b>[INDEPENDENT PROJECTS DUE 6/5 NOON]</b>		

**Report #1 DRAFT due 4/20 in class**

**Report #2 ABSTRACT due 5/4 in class**

**Report #1 FINAL due 5/4 in class**

**Ind. proposals (1 p.) (if needed) due 5/9 in class**

**Report #2 due 5/16 in class**

**Report #3 due 6/1 in class**