Geog 4/527: Fluvial Geomorphology
Spring 2016; 2:00-3:20 Tues-Thurs
Prof. Patricia McDowell

Course content and goals: The course covers four themes.
• Processes that shape river channels
• Ecological interactions in the channel and riparian zone
• How channels and floodplains evolve through time
• River restoration and human impacts on river channels

The learning objectives are:
• Understand and be able to apply basic concepts of river behavior such as channel-flow interactions, sediment transport, channel morphology, channel-ecological interactions, etc.
• Analyze river hydrology, sediment transport and morphology using spreadsheets and simple models.
• Understand and be able to apply basic field skills in fluvial geomorphology.
• Effectively use relevant web pages and geospatial tools to collect information and solve problems about rivers.
• Demonstrate effective written, verbal and graphic communication skills.

Grading: Test 1 30%, Test 2 20%, exercises 60% (6 labs @ 10 pts each). For undergrads, your lowest lab score will be dropped. For grad students, all 7 labs will count and your score calculated on that basis.

Course Format: Class meets twice a week, with lecture and discussion interwoven. There is no separate lab meeting; labs will be introduced in class. Two labs require you come on a field trip, usually offered on a weekend day or Friday afternoon. (If you cannot come on field trips, see Pat McDowell for alternatives.) There is a transportation fee ($5-10) for those who go on the field trips.

Schedule: This schedule may change. Lecture topics may shift around.