

## **GEOG4750 (GEOG5960.02) Fluvial Geomorphology**

University of North Texas

Department of Geography

Spring 2011

MW 2:00 PM—3:20 PM, ENV360

**Class Web Site:** [http://www.geog.unt.edu/~fpan/phtml/geog4750\\_spring2011.html](http://www.geog.unt.edu/~fpan/phtml/geog4750_spring2011.html)

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**Textbook:** Ro Charlton, Fundamentals of Fluvial Geomorphology, Routledge, 2008.

### **General Outline:**

1. Introduction  
---rivers, fluvial system, empirical and theoretical approaches
2. Drainage networks  
---catchment delineation, network analysis, drainage density, hillslope processes, channel initiation, network evolution
3. Catchment processes  
---catchment hydrology, catchment denudation
4. Fluvial processes  
---mechanics of flow, threshold of erosion, sediment transport, sediment deposition
5. Adjustment of channel form  
---characteristics of adjustment, cross-sectional form, bed configuration, channel pattern, channel gradient and the longitudinal profile
6. Channel change through time  
---evidence of change, cause of change, the effects of floods, fluvial response to climatic change, channel change and human activity

**Grading:** 10% attendance and class participation, 30% homework, 30% midterm, 30% final

**Final Exam:** The final will be a take-home examination distributed on Wednesday, May 4. It will be due at 5pm on Wednesday, May 11. Collaboration in any way on the final exam is not allowed and will constitute an honor code violation.

**Policy on Late Homework:** Homework is due in class on the date specified. Homework turned in up to 1 week late will lose 25% credit, up to 2 weeks will lose 50% credit and after 3 weeks will receive no credit.

**Disability Accommodations:** The Department of Geography, in cooperation with the Office of Disability Accommodation, complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request before the 12th class day.

*The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.*