

Geomorphology Seminar - Spring 2007

“Human Impact on Fluvial Systems”

with Dr. David S. Leigh, Geography Department

Course and Call#: GEOG 8020, #56-476

3 Semester Credit Hours

Time and Place: *to be arranged (email dleigh@uga.edu)*

This seminar will use a recent volume of the journal *Geomorphology* as the basis for readings, that is: *Geomorphology*, Volume 79, Issues 3-4, pp. A1-A2, 143-506 (30 September 2006). This volume summarizes the 37th Binghamton Geomorphology Symposium, which focused on “The Human Role in Changing Fluvial Systems”, Edited by L.A. James and W.A. Marcus. It includes the following papers by leaders in the field:

1. Dedication
2. The 2006 Binghamton Geomorphology Symposium on The Human Role in Changing Fluvial Systems
3. Brief biographical sketches
4. The human role in changing fluvial systems: Retrospect, inventory and prospect
5. The human role in changing river channels
6. Human impact on land-ocean sediment transfer by the world's rivers
7. Human impacts to mountain streams
8. Human impacts on headwater fluvial systems in the northern and central Andes
9. Hydrologic variation with land use across the contiguous United States: Geomorphic and ecological consequences for stream ecosystems
10. Floodplain sedimentation in the Upper Mississippi Valley: Natural versus human accelerated
11. Human impacts on fluvial systems in the Mediterranean region
12. Downstream hydrologic and geomorphic effects of large dams on American rivers
13. Disturbance, stream incision, and channel evolution: The roles of excess transport capacity and boundary materials in controlling channel response
14. Global warming and fluvial geomorphology
15. Confronting hysteresis: Wood based river rehabilitation in highly altered riverine landscapes of south-eastern Australia
16. A geomorphological approach to the management of rivers contaminated by metal mining
17. Human-induced changes in animal populations and distributions, and the subsequent effects on fluvial systems
18. Urban transformation of river landscapes in a global context
19. Geomorphic effects of rural-to-urban land use conversion on three streams in the Central Redbed Plains of Oklahoma

The seminar will consist of weekly readings of these articles plus some tangential articles. Each student will be required to prepare a research paper and present the results of the research to the seminar group.