MAF Special Topics Course Proposal
Water Resources: Policy and Management
Prof. Daniel Suman
Summer 2010 – Kunming, China

Instructor – Daniel Suman, Prof. of Marine Affairs & Policy, Rosenstiel School of Marine and Atmospheric Science, UM

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Goal – The goal of this course is to present a broad spectrum of water management issues and their policy implications. We will obviously focus specifically on the USA and China with examples, course discussion topics, guest speakers, and field trips. Topics include the hydrologic cycle, watersheds, groundwater, water and ecosystems, water and public health, drinking water, wastewater, water and development, water and agriculture, water and energy, wetlands and wetland restoration, and management of international rivers.

Background - I have taught this course during the Summers of 2008 and 2009 at the Asian International Rivers Centre (AIRC) at Yunnan University (YU) in Kunming, China. This course was funded by a two-year grant from the ACC International Programs. I brought 20 UM and ACC to YU and the Hanoi University of Mining and Geology in Vietnam for a 6 week course. During both years, we were joined by an equal number of Chinese and Vietnamese students. In 2010 we will continue this course experience in China with a course open to UM advanced undergraduate students, as well as graduate students.

Course Evaluation – Evaluation for this course will be based on the following criteria. Students are expected to attend all class and activities and have prepared the indicated readings.

   Class Participation – 20%

   Daily Journal – 20% (I expect students to keep a journal in which you indicate your activities and observations related to the course.

   Simulation Exercise – 20%

   Group Exercises – 40%
Course Readings — Course readings will be posted on Blackboard under MAF XXX course documents. Additionally, I will provide students with a CD with the readings and materials.

Course Introduction (Prior to Departure from UM)


Mitchell (ed.), TOURISM AND DEVELOPMENT IN YUNNAN


Hydrologic Cycle (24 May)

http://www2010.atmos.uiuc.edu/(Gh)/guides/mtr/hyd/smry.rxml

http://www.physicalgeography.net/fundamentals/8b.html


Groundwater (24-25 May)


Tarlock, WATER RESOURCE MANAGEMENT, pp. 550-556.
Cech, PRINCIPLES OF WATER RESOURCES: HISTORY, DEVELOPMENT, MANAGEMENT, AND POLICY, pp. 84-97.

Lawford et al. (eds.), Groundwater Issues, WATER: SCIENCE, POLICY, AND MANAGEMENT, pp. 79-98.

**Watersheds (25-26 May)**


**Water and Ecosystems (26 May)**

Katz, Going with the Flow: Preserving and Restoring Instream Water Allocations

Tarlock, WATER RESOURCE MANAGEMENT, pp. 11-15.


**Wetlands & Wetland Restoration (28 May)**


**Water and Development (29 May)**


**Water and Public Health**


**Water and Energy**


**Water and Agriculture**

Environmental Justice (31 May)
Hervic, A Call to Action: The Moral Imperative for a Universal Right to Water. INTERNATIONAL LAWYER.

Drinking Water (31 May)

Wastewater (31 May)
Helmer & Hespanhol, WATER POLLUTION CONTROL (1997).

Water Quality (2 June)
Tarlock, WATER RESOURCE MANAGEMENT, pp. 673-679.
Cech, PRINCIPLES OF WATER RESOURCES: HISTORY, DEVELOPMENT, MANAGEMENT, AND POLICY, pp. 112-135.

Dams (8 June)
Tarlock, WATER RESOURCE MANAGEMENT, pp. 760-767.
Climate Change (8 June)
Tarlock, WATER RESOURCE MANAGEMENT, pp. 26-33.

International Rivers & Water Allocation (10 June)
Tarlock, WATER RESOURCE MANAGEMENT, pp. 1049-1060.
Lawford et al. (eds.), Moving Borders from the Periphery to the Center: River Basins, Political Boundaries, and Water Management Policy, WATER: SCIENCE, POLICY, AND MANAGEMENT, pp. 143-159.

Course Resource:
Water Resources Data Bank
Gleick, WATER IN CRISIS (1993), pp. 120-128.