

Reservoir Ecology Biology 7471 Spring 2008

Dr. Alan Groeger (E-mail ag11@txstate.edu)

OFFICE: Room 262 Aquatic Station 245-3815

OFFICE HOURS: Tuesday and Thursday 9-11:00 am

Please take advantage of my office hours for help in Reservoir Ecology- if my office hours are inconvenient, other times may be arranged. During office hours you may also find me in room 258. Chapter readings (chapters in parentheses) below are from the textbook – Thornton, K.W., B.L. Kimmel, and F.E. Payne. 1990. Reservoir Limnology: Ecological perspectives. John Wiley & Sons, New York. 246 pp. There will also be supplemental readings assigned.

COURSE DESCRIPTION: In Reservoir Ecology we will focus on reservoirs as ecosystems, and the physical, chemical, geological, and biological components that make up and shape these systems. We will then stress the various trophic levels/communities that characterize and often drive various processes within reservoir ecosystems. Our field work (lab) will focus on the study of reservoirs of various structure (e.g. basin size and shape, water residence time, biological structure, ...) and processes occurring within them.

YOUR GRADE: The following percentages will be how you are evaluated in this course: 35% for your presentation, 25% Final (midterm?), 15% class participation, and 25% for class projects.

ATTENDANCE POLICY: I expect you to attend every lecture and every lab session that meets.

<u>LECTURE</u>	<u>SUBJECT</u>	<u>READING</u> (see course syllabus)
1	Introduction	T&S p385-410
2	Reservoir as human resources	Wurbs 1998
3	Reservoirs as ecosystems	Straskraba 1995
4	Hydrology and hydrodynamics I. Inflow advection	T,K, and P, CH2
5	Hydrology and hydrodynamics II. Outflow	"
6	Hydrology and hydrodynamics I. Wind generated dynamics	Imberger 1995
7	Watershed interactions and loadings	T,K, and P, CH3
8	Sediments and sedimentary processes in reservoirs	"
9	Texas reservoirs	Ground and Groeger 1994
10	Dissolved oxygen	T,K, and P, CH4 T&S p211-226
11	Nutrients	T,K, and P, CH5
12	Primary production	T&S p439-456 T,K, and P, CH6
13	Eutrophication in reservoirs	"
14	Management options/strategies	Wurbs 1999
15	Environmental degradation due to dam building	United Nations sponsored report, 2000
16	Socioeconomic aspects of new reservoirs	"
17	Case studies from under-developed regions	"
18	Fisheries management	T&S p 529-570
19- xx	Student presentations	As determined
	Course summary	

**DEPARTMENT OF BIOLOGY
ADDENDUM TO GENERAL EDUCATION SYLLABI**

Texas State University-San Marcos Honor Code

As members of a community dedicated to learning, inquiry, and creation, the students, faculty, and administration of our University live by the principles in this Honor Code. These principles require all members of this community to be conscientious, respectful, and honest.

We Are Conscientious:

We complete our work on time and make every effort to do it right. We come to class and meetings prepared and are willing to demonstrate it. We hold ourselves to doing what is required, embrace rigor, and shun mediocrity special requests, and excuses.

We Are Respectful:

We act civilly toward one another, and we cooperate with each other. We will strive to create an environment in which people respect and listen to one another, speaking when appropriate, and permitting other people to participate and express their views.

We Are Honest:

We do our own work and are honest with one another in all matters. We understand how various acts of dishonesty, like plagiarizing, falsifying data, and giving or receiving assistance to which one is not entitled, conflict as much with academic achievement as with the values of honesty and integrity.

The Pledge for Students

Students at our University recognize that, to insure honest conduct, more is needed than an expectation of academic honesty, and we therefore adopt the practice of affixing the following pledge of honesty to the work we submit for evaluation:

I pledge to uphold the principles of honesty and responsibility at our University.

The Pledge for Faculty and Administration

Faculty at our University recognize that the students have rights when accused of academic dishonesty and will inform the accused of their rights of appeal laid out in the student handbook and inform them of the process that will take place.

I recognize students' rights and pledge to uphold the principles of honesty and responsibility at our University.

**Texas State Endorses
Wingspread Journal's Seven Principles
for Good Practice in Undergraduate Education**

1. Student-faculty contact
2. Cooperation among students
3. Active learning
4. Prompt feedback
5. Time on task
6. High expectations, and
7. Respect for diverse talents and ways of learning