

AGRY 582 Environmental Fate & Transformation of Chemicals

Course Outline

<u>Week</u>	<u>Lecture/Discussion Topic</u>
1	Chemistry, Structure-Reactivity, Bioavailability {Ron & Larry}
2	Earth Environments – Soil, Water, Sediments {Ron}
3	Earth Environments – Atmosphere / Microorganisms {Ron}
4	Metabolism and Biochemistry {Larry}
5	Metabolism and Biochemistry, Bioenergetics {Larry}
6	Alternative e- donors & acceptors, fermentation, methanogenesis {Larry}
7	Biogeochemical cycles, Diversity of catabolism {Ron}
8	Kinetics {Ron}
9	Biotransformation reactions, Acclimation {Larry & Ron}
10	Petroleum {Larry}
11	Chlorinated compounds {Larry}
12	Pesticides {Ron}
13	Specialty compounds {Ron & Larry}
14	Bioremediation {student presentations}
15	Bioremediation {student presentations}

(Notes 10/1/04 – We are considering having students teach weeks 14 & 15 by presenting lectures about the remediation of specific chemicals. This will provide a link to the specific chemical literature review papers they have been working on all semester)

Still to be decided:

Book?

Student work products - Review paper {yes}, Final Exam {?}, Mid-term Homework {?}, Bioremediation Lecture {yes?}