MAR 8140 ORGANIC GEOCHEMISTRY

2007 Spring

Instructors: Ming-Yi Sun Chuanlun Zhang William Miller
(706) 542-5709 (803) 725-5299 (706) 542-4299
mysun@uga.edu zhang@srel.edu bmiller@uga.edu

1/9 Introduction/global carbon cycling (Sun)
1/11 Organic chemistry background (Sun)
1/16 Particulate organic matter (Sun)
1/18 High molecular weight DOC (colloids) (Sun)
1/23 Dissolved organic matter (Miller)
1/25 Photooxidation of DOM (Miller)
1/30 Paper discussion-I (Miller)
2/1 Recent diagenesis (Sun)
2/6 Carbon preservation (Sun)
2/8 Carbon and nitrogen isotopes (Sun)
2/13 Paper discussion-II (Sun)
2/15 Protein/amino acids (Sun)
2/20 Carbohydrates (Sun)
2/22 Lignins (Sun)
2/27 Paper Discussion-III (Sun)

3/1 Midterm Exam

3/6 Hydrocarbons (Sun)
3/8 Fatty acids, triglycerides, wax esters (Sun)
3/12-16 Spring break
3/20 Pigments (Sun)
3/22 Sterols (Sun)
3/27 Alcohols and alkenones (Sun)
3/29 Isotopic fractionations associated with biosynthetic pathways (Zhang)
4/3 Microbial lipids of bacteria-general species (Zhang)
4/5 Microbial lipids of bacteria-thermophilic autotrophs (Zhang)
4/10 Humic substance/kerogen (Sun)
4/12 Paper Discussion IV (Sun)
4/17 Microbial lipids of bacteria-sulfate and iron-reducing bacteria (Zhang)
4/19 Microbial lipids of archaea-general (Zhang)
4/24 Microbial lipids of archaea-methanogens and crenarchaota (Zhang)
4/26 Biosynthetic pathways of microbial lipids (Zhang)
5/1 Paper Discussion-V

5/3 Final Exam