

MBIO 2230 Introductory Biogeochemistry – Fall 2017
COURSE OUTLINE

INSTRUCTOR: Dr. David Kattenburg
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TEXT: *Biogeochemistry: An Analysis of Global Change* (3rd Edition) – required;
W.S. Schlesinger & E.S. Bernhardt

CLASSES: Tuesdays & Thursdays, 8:30 – 9:45 A.M.

COURSE EVALUATION:

Midterm # 1 (Oct. 12; multiple choice): 25%
Midterm # 2 (Nov. 14; multiple choice): 25%
Final Exam (TBA; multiple choice): 50%

COURSE DESCRIPTION/SCHEDULE:

September 7: Introduction (Chapter 1)
September 12/14: Origins (Chapter 2)
September 19/21: Atmosphere (Chapter 3)
September 26/28: Lithosphere (Chapter 4)
October 3/5: Biosphere: terrestrial carbon/nutrient cycling (Chapters 5 & 6)
October 10/12: **MIDTERM 1 (Oct. 12)**; Biosphere: nutrient cycling cont. (Chapters 5 & 6)
October 17/19: Wetland ecosystems/inland waters (Chapters 7 & 8)
October 24/26: Wetland ecosystems/inland waters cont.; Oceans (Chapters 9)
Oct. 31/Nov. 2: Oceans continued (Chapter 9)
November 7/9: Global water cycle (Chapter 10)
November 14/16: **MIDTERM 2 (Nov. 14)**; Global water cycle continued (Chapter 10)
November 21/23: Global carbon cycle (Chapter 11)
Nov. 28/30: Global nitrogen and phosphorus cycles (Chapter 12)
December 5/7: Global sulphur & mercury cycles; final thoughts (Chapter 13)

NOTES:

- **VOLUNTARY WITHDRAWAL DATE:** November 17; Grades for your second midterm, on November 14, will be posted by mid-day on Nov. 17.
- Students are urged to attend all classes, pay attention and ask good questions. Classes will begin at 8:30 a.m. *sharp*. Please arrive on time – better yet, early. Steady, habitual late arrivals are a source of distraction. They will be dealt with at Dr. Kattenburg's discretion.
- Midterm exams will be multiple choice. Midterm # 1 will cover lecture material up to that point. Material not covered will not be in the exam. Midterm # 2 will cover material discussed after Midterm # 1 (i.e. it will not be cumulative).
- An exam missed for personal/family/medical emergencies (with note) may be rescheduled. Please contact Dr. Kattenburg immediately.
- Grade conversions at:
http://umanitoba.ca/faculties/health_sciences/medicine/admissions/8847.html
A+ (>90%), A (80-89.9%), B+ (75-79.9%), B (70-74.9%), C+ (65-69.9%), C (60-64.9%), D (50-59.9%), F (<50%, or <45% in final exam).
- Students are welcome to audio-record classes, and to use laptops or tablets for note-taking or quick reference. Other forms of smart phone use (e.g. texting) are frowned upon, especially if they generate smiles, whispers or other forms of distraction.
- Academic dishonesty guidelines posted at:
<http://umanitoba.ca/faculties/science/undergrad/resources/webdisciplinedocuments.html>
- Students with disabilities are directed to Student Accessibility Services (<http://umanitoba.ca/student/saa/accessibility/>). Dr. Kattenburg will be delighted to discuss your situation with you.
- Biogeochemistry makes the world go round. Positive and negative feedbacks are absolutely natural and welcome.