

Module Syllabus

University of Jordan
Department of Biological Sciences.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
Microbial Ecology 742
Spring , 2008

- Instructor* : Prof. Adel M. Mahasneh.
Professor of Microbiology.
- Office* : 314, Biology Building
amahasneh@ju.edu.jo
- Office Hours* : By appointment.
- Class Meetings* : As per schedule.
- Required Textbook:* Microbial Ecology, by R.M. Atlas and R. Bartha, 4th edition, Addison Wesley Longman, 1998, ISBN 0-8053-0655-2.
- Grading* :
1. ***Exams***; there will be one midterm exam (40%) and a final exam, which counts 40% towards the course grade.
 2. ***Research proposal***; (10%) students must prepare a research proposal during the course of the term with deadlines as noted on the accompanying schedule.
 3. ***Current journal articles***; (10%) before each class, students must go to the library and look through research journals and find a paper related to that week's topic. The paper must be a description of actual research, not a review article or commentary. After reading the article, the student must prepare a one page typewritten summary of the article to be turned in at the end of the class. You must also submit a photocopy of the original article. Several students will be selected during class each week to share their findings with the group. The instructor will review the summaries and articles and return them, although no specific grade is put on the assignments. Students will receive credit for the assignment provided their summary gives a full description of the research.

Tentative Schedule

Week	Topic	Readings
1	Introduction, evolution and biodiversity.	Chapters 1 & 2.
2 + 3	Population interactions.	Chapters 3, 4 & 5.
4 + 5	Microbial communities and ecosystems. Research proposals: Topics due.	Chapters 6 & 7.
6 + 7	Communities & Ecosystems (cont'd).	Chapters 8 & 9.
8	Research proposals: Outlines due. Midterm Exam (1 hour). Biogeochemical cycling.	Chapters 10 & 11.
9 + 10	Biodegradation and waste treatment.	Chapters 12, 13 & 14.
11 + 12	Energy recovery, disease control.	Chapters 15 & 16.
13	Research proposals: Final documents due.	
14 + 15	Panel reviews.	
	Final Exam.	

Prof. Dr. Adel M. Mahasneh
Department of Biological Sciences
Faculty of Science
University of Jordan
Amman - Jordan
Fax No. (962 - 6) 849150