



ENVS4450: Air, Water and Land Pollution

Daniel B. Short, Ph.D.

Environmental Chemist

215 John Jay
Robert Morris University
Moon Township, PA 15108

Tel: (412) 397 3260

Email: Short@rmu.edu



ENVS4450: Air, Water and Land Pollution

Contact Information

Instructor: Dr. Daniel Short

Office: 215 John Jay

Laboratory: John Jay Science Laboratories
(Environmental Science and Chemistry)

Office Phone: (412) 397-3260

E-mail: short@rmu.edu

Office/Lab Hours: <http://www.localendar.com/public/dnashort>. Also by appointment. Students are encouraged to see me immediately after class.

Web Site: <http://academics.rmu.edu/~short/index.htm>

Course Description

ENVS4450 Air, Water and Land Pollution. This is an advanced course in environmental science and addresses many present-day air, water and soil quality problems from an international perspective. The course covers many critical issues such as acidification, eutrophication, land-use changes, and pollution by metals and synthetic chemicals. Other topics include research techniques, methods of monitoring and global environmental change. Prerequisites: METO3500, GEOL3000 and BIOL2370 (3 credits)

Course Format

During class sessions the course material will be presented in a lecture format. We will discuss principles, examine theories, and work through examples.

- (i) To prepare for lecture you should read the chapter in advance.
- (ii) During lecture take notes on everything presented.

Course Outline (Subject to change)

1	Introduction		
2			
3	The Atmosphere		
4			
5	The World's Waters: A Chemical Contaminant Perspective		
6			
7	Soils and Land Contamination		
8			
9	Investigating the Environment		
10			
11	Ecological and Health Effects of Chemicals		
12			
13	Environmental Management		
14			

Attendance

Attendance of each scheduled lecture session is strongly advised. If you are absent when a presentation is scheduled you are required to provide me with documentation (note from doctor, health center, or appropriate College administrator).

Changes in the class schedule, information on coursework and other notices will be given in the lectures and via the RMU email system. It is **your** responsibility to keep up-to-date with these changes.

Participation and Active Learning

I expect students to attend class regularly and to be on time. You are encouraged to be an actively engaged member by answering questions, raising questions, initiating discussions and being prepared to share your knowledge with the class. While class participation is not an explicit component of your grade in this course, students who are actively participating on a regular basis and who are on the border between two grades will receive the higher of the two possible grades.

The chosen textbook should not be used as the sole source of information. Additional texts, journals, the Internet, library and other media should all be sought out as a way of enriching your learning experience.

You should plan on spending about 4-6 hours a week working on the course. It is to your advantage to spread this time out evenly over all the days in a week, rather than trying to spend 4-5 hours in a single day once a week.

More suggestions for success in this course are provided in this document.

Disturbances

As a student you have the right to hear the lectures and the class discussions. Every student should respect the rights of others in their class. Therefore, I reserve the right to **lower** the grade or **dismiss** from class anyone exhibiting improper behavior which disturbs the class. This includes, but is not limited to: arriving late to class (tardiness), leaving early (reverse tardiness), consumption of food (drinks allowed), use of cell phones, and disturbing others through talking.

LATE ARRIVAL TO CLASS is discouraged. It disrupts the other students and the instructor. Never disrupt a class in progress. It is disrespectful to both your professor and fellow students.

Assessment

This course will be assessed on the basis of written assignments.

Grading:

A 93-100 - Outstanding. A thoroughly comprehensive, well-organized and well-written answer or exercise. (Some degree of originality of ideas and treatment may compensate for deficiencies in coverage and organization.)

A- 89-92

B+ 86-88

B 83-85 - Achievement significantly above the level necessary to meet course requirements; coverage, organization and writing satisfactory.

B- 80-82

C+ 77-79

C 70-76 - Achievement meets course requirements, i.e., an evident understanding of the material presented, even with minor deficiencies of coverage, organization, and/or writing.

D 60-69 - Achievement worthy of credit even though course requirement is not fully met, and coverage organization, and/or writing show clearly evident deficiencies.

F <60 Performance indicating that there are serious deficiencies in a student's understanding of the course material, usually accompanied by poor coverage, lack of organization, and/or inadequate writing.

Coursework

There will be seven pieces of coursework assigned in class on a bi-weekly basis.

Attending lectures and reading the text book is not an adequate means to master this subject. You must make every effort to read outside of the material presented to you in class.

Academic Honesty

In this course you are encouraged to study with other students. Your **submitted work must be all your own** and should not resemble other students.

Copying material from other students, the Internet or other sources and submitting it towards the grade in your course is unacceptable, does not qualify as being your own work and is viewed as plagiarism.

Every student at Robert Morris University should make themselves familiar with the University's code of conduct in regards to academic honesty. Any violations of this code in terms of cheating or plagiarism will be investigated fully, with the maximum penalty of failing the course.

Recommended Materials

Text – Harrison, R.M. (2006) *An Introduction to Pollution Science*. The Royal Society of Chemistry, London.

Learning Aids

Communicate with your instructor – you should take full advantage of the availability of your instructor outside of the classroom for face-to-face meetings and via telephone/email contact.

Cooperative learning Groups – students are asked to form groups of 4-5. Groups should sit together when requested. Group discussions, exercises, and assignments may occur in lecture. Each group may find it helpful to study together outside of class.

University Center for Student Success – students who may be eligible to receive learning support or physical accommodations should contact the

Center for Student Success. To learn more about their services, call (412) 262-8349 or visit their offices in Franklin Center.

Disability

Your success as a student is of utmost importance to me. Students with special requirements that can be accommodated and are covered by the Students with Disabilities Act should contact the instructor.

Copyright Information

This is not a department syllabus. It is the property of Dr. Daniel Short based on the University's course description for ENVS4450. It is not to be shared/distributed to prospective or present full or part-time ENVS4450 faculty without the written permission of Dr. Daniel Short.

No Food or Phone Calls are Permitted in the Classroom



ENVS4450: First Day 'Fill-In' Sheet

1. Name: _____
 2. How do you want to be called? _____
 3. Lecture Section: _____ Lab Section: _____
 4. EMAIL address: _____ @ rmu.edu
 5. Your dorm, cell, or home phone: _____
- If you don't remember, send me an e-mail message.
(If you don't have a rmu email account, sign up for one at the computer center).
6. Year in school (please check one): (Fr) (So) (Jr) (Sr)
 7. Check one: (a) new student; (b) continuing student;
(c) transfer from (name of your previous school) _____
 8. Your major: _____ minor: _____ undecided:
 9. Name and location of high school: _____
 10. Give the number of credit hours you are taking this semester: _____
 11. Give the number of hours per week you are working (paid or volunteer): _____
 12. Rate yourself in terms of listening and note taking skills
(A) Average; (B) Better than average; (C) Need help
 13. Rate yourself in terms of reading, comprehension, and retention
(A) Average; (B) Better than average; (C) Need help
 14. You are recommended to have a buddy system in this class. Do you know other persons in this class:
(Yes) Names: _____ (No)
 15. Please tell me a couple of interesting things about yourself.

When completed, please return to the instructor. Thank you.