

## ECOTOXICOLOGY- Fall 2015

### I. ECOTOXICOLOGY-The Chemical Players (362-632)

#### Learning objectives

- 1) Overview of major toxicological classes and compounds impacting the environment
- 2) Understanding how different classes of compounds have become an ecological concern
- 3) Understanding environmental compounds through case studies

Date	Day	Lecture No.	Class of Contaminate	Topic	Lecturer	Required Reading*
2-Sep	W	1	Introduction	Intro to Ecotoxicology	Bradfield	
4-Sep	F	2	Naturally occurring toxins	Mycotoxins	Keller	Pages 5-17
7-Sep	M	3	Naturally occurring toxins	Natural toxins	Karasov	
9-Sep	W	4	Naturally occurring toxins	Natural toxins	Karasov	
11-Sep	F	Discussion		Discussion/ Quiz 1		
14-Sep	M	5	Inorganic Contaminants	Nanoparticles	Pederson	Pages 29-36
16-Sep	W	6	Inorganic Contaminants	Heavy Metals	Thiboldeaux	
18-Sep	F	7	Inorganic/organic Contaminants	Volatile gasses	Schauer	
21-Sep	M	Discussion		Discussion/Quiz 2		
23-Sep	W	8	Organic Contaminants	PCBS/Dioxins/PAH	Bradfield	Pages 36-66
25-Sep	F	9	Organic Contaminants	Insecticide/Herbicide	Groves	
28-Sep	M	10	Organic Contaminants	Agricultural waste	Hemming	
30-Sep	W			Exam Review	TA	
2-Oct	F			Exam-Module 1	TA	

\*Book- Fundamentals of Ecotoxicology: Fourth Edition by Michael C. Newman; page numbers need confirmation

#### Notes:

Lectures should be focused on the ecological perspective of the class of contaminate with a focus on where the compounds are found, factors influencing distribution including transport and fate of compounds, health and exposure effects to both the environment and human health and finally the lecture should end with a relevant case study to demonstrate a real world example to the students.