

CHEMISTRY 310S
ENVIRONMENTAL ORGANIC CHEMISTRY

• **Fate, Disposition, and Persistence of Environmental Pollutants** •

Spring, 2010

LM 159 Lecture T,R 4-5 pm; 'occasional' Discussion T or R 5 to 6 (optional)

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Office Hrs. W 4 to 5 LM 321A
& after class T/R 5 to 6

Date & Day	Lecture #	Lecture Topic	Book Chapter
T January	5	1 Environmental Chemistry-Intro	1, 2
R	7	4 Atmospheric Oxidation	6
T	12	"	
R	14	"	
T	19	5 Photodegradation	
R	21		
T	26	6 Hydrolysis-I	8
R	28	"	
T February	2	7 Hydrolysis-II	
R	4	8 Reduction	
T	9	9 Microbial Degradation	7
R	11	"	(1st HW Due) 9
T	16	<i>Reading Week</i>	
R	18	<i>Reading Week</i>	
T	23	11 Plant/ Animal Reactions	
R	25	Midterm Exam	
T March	2	12 Solubility-I	
R	4	13 Solubility-II	
T	9	14 Bioconcentration/bioaccumulation	5
R	11	15 Sorption	(Pap Rev Due) 3
T	16	16 Volatility	
R	18	"	4
T	23	17 Air Water Exchange	
R	25	18 Transport	(2nd HW Due)
T	30	19 Stratospheric Ozone Depletion	
R April	1	20 Summary & Conclusions	

Useful Text: *Chemical Concepts in Pollutant Behavior*, Ian Tinsley, Wiley

Note: *These chapters are recommended reading and provide helpful background to lecture material; **Note:** Other texts are very useful ~ **Environmental Organic Chemistry** is **exceptionally good** on a number of topics. From time to time research articles will be provided, via the course web site, for your reading enjoyment.

Note: Lectures 2 and 3 are in the 'lecture handouts' but will only be briefly discussed; for Lecture 3 written notes are provided. For Lecture 2 the only purpose is to introduce some typical structures of pesticides, natural or industrial chemicals, etc that will be common examples throughout the course. Do some web searching/reading to get an idea of what each is and start to decipher structure 0000

Lecture Handouts: Purchase at the Chem Club; 2nd floor Room LM 203

AudioFiles of Lectures: <http://www.chem.utoronto.ca/coursenotes/CHM310/index.html>