

CHEMISTRY 310S
ENVIRONMENTAL ORGANIC CHEMISTRY

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

Spring, 2011

LM 161 Lecture T,R 4-5 pm; 'occasional' Discussion T or R 5 to 6 (optional)

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Office Hrs. F 3 pm LM 321A
& after class T/R 5 to 6

Date & Day	Lecture #	Lecture Topic	Book Chapter
T January	11	1 Environmental Chemistry-Intro	1, 2, 15, 16
R	13	4 Atmospheric Oxidation	4
T	18	"	
R	20	"	
T	25	5 Photodegradation	
R	27		
T February	1	6 Hydrolysis-I	7
R	3	"	
T	8	7 Hydrolysis-II	
R	10	8 Reduction	
T	15	9 Microbial Degradation	
R	17	"	(1st HW Due)
T	22	<i>Reading Week</i>	
R	24	<i>Reading Week</i>	
T March	1	11 Plant/ Animal Reactions	
R	3	Midterm Exam	
T	8	12 Solubility-I	14
R	10	13 Solubility-II	
T	15	14 Bioconcentration/bioaccumulation	
R	17	15 Sorption	(Pap Rev Due)
T	22	16 Volatility	
R	24	"	
T	29	17 Air Water Exchange	
R	31	18 Transport	(2nd HW Due)
T April	5	19 Stratospheric Ozone Depletion	5
R	7	20 Summary & Conclusions	

Useful Text: *Principles of Environmental Chemistry; James E Girard; (Jones and Bartlett)*

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 structures.

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

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