

Brooklyn College Department of Chemistry

Environmental Chemistry, CHEM 4780– FALL 2017

Required Text: *Environmental Chemistry, 5th Edition*; Baird and Cann;
W.H. Freeman and Company, New York

Supplemental Text: *Chemistry for Environmental Engineering and Science, 5th Edition*;
Sawyer, McCarty and Parkin; McGraw Hill

Useful Website: <http://whfreeman.com>

Contact Information and Office Hours:

Dr. Mathias
3315 Ingersoll
Wednesday & Thursday 12:30-1:30 PM
jmathias@brooklyn.cuny.edu

Counseling

Undergraduate Chemistry Advisor:

Prof. Mariana Torrenta 3 3151N
mariana.torrente@brooklyn.cuny.edu

Chemistry Department

Office: 359 New Ingersoll; phone extension 5457

Webpage: <http://academic.brooklyn.cuny.edu/chem/index.htm>

Academic dishonesty is prohibited in the City University of New York.

Cheating, plagiarism, internet plagiarism and obtaining unfair advantages are violations of policies of academic integrity and are punishable by penalties, failing grades, suspension and expulsion. For more information about CUNY policy on academic integrity see <http://www.brooklyn.cuny.edu/bc/policies/pdt7CUNY%20PolicyAcademicIntegrity.pdf>

Drop Dates:

September 14 is the last day to DROP a course without a grade.

November 10 is the last day to apply for non penalty withdrawal (*i.e.*, W grade).

Grading:

Your final grade will be determined as follows:

50% (2) Lecture Exams

25% Presentation

25% Final Exam

Lecture Exams: Topics to be announced

- **First Lecture Exam:** Wednesday, October 4
- **Second Lecture Exam:** Wednesday, November 8

Final Exam: Monday, December 18, 10:30-12:30 PM

Homework Assignments:

It is recommended that you do Exercises and Problems from your textbook; solutions to exercises and answers to the odd-numbered problems are found at the end of the text.

Additional problem sets will be given out during the semester.

These exercises and problems will serve as a guide to the type and level of difficulty of exam questions.

Homework is NOT collected; however, the investment of time you make in this area will be reflected in your mastery of the material and, hence, your final grade.

Chemistry 4780: Lecture Topics

PART I	
Basic Chemical Concepts and Applications to Environmental Chemistry from: -General & Analytical Chemistry -Physical Chemistry -Organic Chemistry -Colloidal Chemistry -Nuclear Chemistry	
Statistical Analysis of Analytical Data	
Quantitative Analysis	
Instrumental Analysis	
	Chapter references from 5th edition
PART II Atmospheric Chemistry & Air Pollution	Chapters 1-4
PART III Energy & Climate Change	Chapters 5-9
PART IV Water Chemistry & Pollution	Chapters 10-12
PART V Toxic Organic Compounds	Chapters 13-15
PART VI Soil Pollution	Chapter 16
PART VII Presentations	