

**NATURAL SCIENCES DEPARTMENT
HOSTOS COMMUNITY COLLEGE
OF THE CITY UNIVERSITY OF NEW YORK**

ENV 120 SEC ENVIRONMENTAL CHEMISTRY-LEC CODE:
3 credits, 3-hr lecture

Instructor: Prof. Roberto Manzocco

Meets:	Room
Email:	
Office hours:	
Phone:	
Contact Policy:	<ul style="list-style-type: none">○ When sending an e-mail, be sure to put key information in the Subject area. Make sure to include your full name and class section in the text.○ Notify me immediately if you need to cancel or change an appointment.○ If you need to reach me urgently, contact the Department's secretary at (718) -518-4129. Leave a brief message and your contact information.

PREREQUISITE: ENVIRONMENTAL SCIENCE 1(ENV.110)

COURSE DESCRIPTION: The student will learn how to classify and name organic compounds according to functional groups. The students will further be encouraged to explain the health and environmental effects of pesticides, social problems associated with inadequate diet (malnutrition), availability of food, food preservation, food additives, drug usage and their attendant government regulations.

REQUIRED COURSE MATERIALS:

Textbook: Chemistry for Changing Times, 13th edition (2013)
By John W. Hill and Doris K. Kolb
Pearson Prentice Hall, ISBN: 0-13-228084-1

Grade Distribution:

3 Midterm Exams	20 % each
Final Exam	30%
Attendance, Participation	10%

Objectives: At the end of this course, students will acquire knowledge that allows them to:

- classify organic compounds according to their functional groups
- name organic compounds using the IUPAC nomenclature
- understand how organic compounds may react with each other
- compare and contrast plant and animal cells
- learn about the structure and functions of some important organelles
- discuss the importance of good nutrition and the consequences associated with some nutrient deficiencies
- understand and discuss the positive and negative impacts of food additives
- discuss the social implications of the use of fertilizers, pesticides and herbicides in agriculture
- learn about food poisoning and the causative agents associated with it
- understand drug action and function
- explain the underlying causes of alcoholism and discuss the attendant economic and social implications
- develop a better understanding of drug abuse and discuss the socioeconomic implications associated with it

WEEK	CHAPTER	SECTION	TOPIC	HOMEWORK ASSIGNMENT
1			Introduction to the course.	
2	1, 2, 3		Chemistry, Atoms, Atomic Structure	
3	4, 5		Chemical Bonds, Chemical Accounting, Organic Chemistry	
	9	9.1-9.3		
4	9	9.4-9.6	Alcohol, Phenols, Ethers, Aldehydes, Ketones	TBA
5	9	9.7-9.8	Organic Acids, Esters, Amines, Amides, Alkaloids	TBA
==== EXAM 1: Chapter 9 =====				
6	16	16.1- 16.2	Biochemistry: The Cell, Carbohydrates	TBA
7	16	16.3- 16.5	Lipids, Proteins,	TBA

Enzymes

8	16	16.6	Nucleic Acids	TBA
9	16	16.7- 16.8	Protein Synthesis, Genetic Engineering, Recombinant DNA	TBA

==== EXAM 2: Chapter 16 =====

10	17	17.1- 17.3	Food, Carbohydrates, Fats, Cholesterol, Proteins	TBA
11	17	17.4-17.7	Minerals, Vitamins, Water, Starvation, Food Additives, Problems with our food	TBA
12	18	18.1- 18.3	Pain Relievers, Antihistamines, Antibiotics, Antiviral Drugs	TBA
	18	18.4-18.5	Anticancer Drugs, Hormones, Steroids, Birth Control	TBA

==== EXAM 3: Chapter 17 and Sections 18.1-18-5 of Chapter 18 =====

13	18	18.6-18.8	Heart, Mind, Nervous System, Brain Amines, Anesthetics, Depressants, Narcotics, Anti-anxiety Agents, Stimulants, LSD, Marijuana, Drug Problems	TBA
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14	19	19.1- 19.2	Nutrition, Vitamins, Minerals, Electrolytes,	TBA
		19.3-19.6	Diet, Exercise, Fitness	TBA
15	20	20.1-20.4	Fertilizers, Pesticides Herbicides, Defoliants Sustainable Agriculture	TBA
16	21	21.1-20.6	Household Chemicals	TBA
	22	22.1-20.7	Poisons	TBA

==== FINAL EXAM (Chapters 18-19-20-21-22) ==
Thursday December 17, 9:30-12:00

Attendance, Participation, etc.

- Please make sure that you read the syllabus carefully. Make notes of requirements and deadlines. If anything is unclear, contact me for clarification.
- The syllabus is subject to change. Always bring your syllabus to class in case changes are announced. I will announce all changes in class and post an updated version on the course on Blackboard.
- Attend class and participate in class discussions. Attendance and participation also count towards your grade. More than 3 absences will be reflected on your final grade.
- Students who arrive 10 minutes late or more will be marked absent

Academic Integrity:

Hostos Community College believes that developing student's abilities to think through issues and problems by themselves is central to the educational process. Since the Hostos College degree signifies that the student knows the material s/he has studied, and the practice of academic dishonesty results in grades or scores that do not reflect how much or how well the student has learned, understood, or mastered the material, the College will investigate any form of academic dishonesty brought to its attention. If the charge of academic dishonesty is proved, the College will impose sanctions. The three most common forms of academic dishonesty are cheating, plagiarism, and bribery.

In the collegiate setting, cheating is defined as the purposeful misrepresentation of another's work as one's own. Faculty and students alike are responsible for upholding the integrity of this institution by not participating either directly or indirectly in act of

cheating and by discouraging others from doing so. Plagiarism is a form of cheating which occurs when persons, even if unintentionally, fail to acknowledge appropriately the sources for the ideas, language, concepts, inventions, etc. referred to in their own work. Thus, any attempt to claim another's intellectual or artistic work as one's own constitutes an act of plagiarism. In the collegiate setting, bribery involves the offering, promising, or giving of items of value, such as money or gifts, to a person in a position of authority, such as a teacher, administrator, or staff member, so as to influence his/her judgment or conduct in favor of the student. The offering of sexual favors in exchange for a grade, test score, or other academic favor, shall be considered attempted bribery. The matter of sexual favors, either requested or offered, in exchange for a grade, test score or other academic favor, shall also be handled as per the Sexual Harassment procedures of the College.

If you are suspected of plagiarism or cheating or if you attempt to bribe or influence your professor, you will be immediately reported to the college's Academic Integrity Officer. You will be unable to drop the class. The penalties range from an F with a score of 0 for an assignment to Failure for the entire term to expulsion from The City University of New York.

Students are expected to attend all class meeting in the courses for which they are registered. Classes begin at the times indicated in the official schedule of classes. Arrival in class after the scheduled starting time constitutes lateness.

The maximum number of absences is limited to 15% of the number of scheduled class hours per semester and a student absent more than the indicated 15% is deemed excessively absent. Attendance is monitored from the first official day of classes. In the case of excessive absences or lateness, the instructor has the right to lower the grade, assign a failing grade, or assign additional written work or readings.

Absences due to late registration, change of program, or extenuating circumstances will be considered on an individual basis by the instructor. Each department and program may specify in writing a different attendance policy. Instructors are required to keep an official record of student attendance and inform each class of the College's or department attendance policy.