HOSTOS COMMUNITY COLLEGE
Natural Sciences Department
Physical Sciences Unit

ENV 120/ 24611 Course Title: Environmental Science II Session:

Meets: Lecture: Room:
Lab: Room:

Lecture Instructor:
Email:
Telephone number: 718- 518-
Office hours: Room:

Lab Instructor:
Email:
Telephone number: 718- 518-
Office hours: Room:

PREREQUISITE: ENVIRONMENTAL SCIENCE 1(ENV.110/ENV.4014)

Course Description:

This course is a continuation of your studies of environmental chemistry. In this section students will learn how to classify and name organic compounds according to functional groups. Some organic compounds are very relevant to human health and the environment. To broaden our view of the impact of organic chemistry in our life, we will discuss health effects associated with the use of organic compounds, such as pesticides, as well as other important related topics, for example, availability of food, food preservation and food additives.

Student Learning Outcomes: At the end of this course, students will acquire knowledge that will allow them to:

- Classify and name organic compounds according to their functional groups
- 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.

Required textbooks:

Textbook: **<u>Chemistry for Changing Times,</u> 12TH edition (2010) by John W. Hill and Doris K. Kolb**
Pearson Prentice Hall, ISBN: 0-13-605449-8

Week	Chapter	Section	Topic	Homework
1	9	9.1-9.6 9.7 – 9.10	Alkanes, Alkenes, and Alkynes Aromatic and Chlorinated Hydrocarbons Alcohol, Phenols and Ethers	2, 4, 5, 17-26 9, 11, 27-34
2	9	9.11-9.13	Aldehydes, Ketones, Organic Acids, and Esters	35-38
3	9	9.14-9.15	Amines, Amides, and Alkaloids	51-54, 62-66, 71-72
EXAM 1 (Chapter 9)				
4	16	16.1 16.2	Biochemistry: The Cell Carbohydrates	1 27, 17, 18
5	16	16.4-16.7	Lipids, Proteins, and Enzymes	32, 35
6	16	16.8-16.9	Nucleic Acids	40, 41, 47, 50
7	16	16.11	Protein Synthesis, genetic Engineering and Recombinant DNA	54-56, 59, 61
EXAM 2 (Chapter 16)				
8	17	17.1-17.3	Food: Carbohydrates, Fats (cholesterol), Proteins	19, 20, 21, 23, 24, 25
9	17	17.4-17.7	Minerals, Vitamins, Water, and Starvation	31, 15, 16, 36, 40
9	17	17.8-17.12	Food Additives	41-44
EXAM 3 (Chapter 17)				
10	19	19.1-19.3	Nutrition, Vitamins, Minerals, And Electrolytes	TBA
11	19	19.4-19.7	Diet, Fitness and Exercise	TBA

12	18	18.1-18.8	Pain Relievers, Antihistamines, Antibiotics, Antiviral drugs, Anticancer drugs, Hormones, and Steroids	1, 8, 9, 12, 19, 25, 31, 34
13	18	18.1-18.14	Heart, Mind and Nervous Syster Brain Amines, Anesthetics, Depressants and Narcotics	33, 34, 36, 40
14	18	18.14-18.19	Anti-anxiety Agents, Stimulants LSD, Marihuana, Drug Problems	13, 14
FINAL EXAM (Chapter 18 and 19)				

Assignments: Additional assignments will be given throughout the semester. Students will be expected to work on group assignments where their individual contribution will be assessed by the professor and other classmates. Written assignments will also be given, detailed instructions about grading and expected performance will be described in every particular written assignment. To not hand-in an assignments can result in a lower participation grade as well.

Students taking this class have to attend the weekly laboratory. No student under any circumstances will be given a passing grade in this Environmental course without taking and passing the laboratory. Four (4) absences without proper excuse to the lab are equivalent to an F. The lab grade will be 25% of the course grade.

Graded assignments: The Final grade will be determined by the grades on lecture and lab combined as follows:

Lecture	**75%**
Exams	35% (lowest grade will be dropped)
Written assignments	12%
Oral Assignments	12%
Class Participation and Attendance	10%
Homework	6%
Laboratory	25%
Total Grade Course	100%

Policy Grade:

The college uses the following grades: A, A$^-$ for excellent work B$^+$, B, for good work B$^-$, C, for fair work D, for poor work F, for failure I, for incomplete WU, for unfinished incomplete, equivalent to F W, for withdrawn

The grade of Incomplete (I) is given in regular courses upon request of the student for personal emergencies that are verifiable. The faculty member has the responsibility to provide Inc grade only to those students who are passing the course. The student has the responsibility to take the initiative in completing the work, and is expected to make up the incomplete during the first semester in residence after receiving the grade of

Incomplete. If the student does not make up the incomplete during the following semester after receiving it, an F grade may be given by the faculty member without further consultation with the student.

If after the end of the first semester the Inc remains on the record it will be designated as an F and will be computed in the student's GPA.

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	70-76
D	60-69
F	Failure

There is no R grade in this course.

Participation:

Your participation in class is an important part of the final grade. This grade is based primarily on your participation in class discussions, in team projects and your attendance. For each class you miss, you will lose participation points. If your attendance is less than 75%, you will be failed. Notes for excused absences need to be hand in to the professor not later than a week after the absence has taken place, email notifications are highly encouraged.

Academic policies:

Hostos Community College has an evaluation system based o the honesty and integrity of the academic work an identified student or students. Faculty, students and staff have the responsibility to uphold the standards of the community and to take action when others violate them. Faculty members have an obligation to educate students to the standards of academic integrity, and to report violations of these standards to the appropriate authorities of the college. If a community member is proved with academic dishonesty, the college will impose sanctions. The three most common forms of academic dishonesty are cheating, plagiarism, and bribery. It must be understood that any student who knowingly aids in plagiarism or other cheating, e.g., allowing another student to copy a paper or examination question, is as guilty as the cheating student

Cheating:

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:

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.

Bribery:

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.