

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

**ENV 122-ENVIRONMENTAL SCIENCE II -2 HR. LAB**

**PREREQUISITE:** ENVIRONMENTAL SCIENCE 1 (ENV110)

**CO-REQUISITE:** ENVIRONMENTAL SCIENCE 120

**COURSE DESCRIPTION:** The student will learn how to classify and name organic compounds according to functional groups. The IUPAC system of naming organic compounds will also be introduced. 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:**

Laboratory Manual For Environmental Science II ( Env. 4016)

Textbook: Chemistry for Changing Times, last edition

By John W. Hill, Terry W. McCreary and Doris K. Kolb  
Pearson Prentice Hall, ISBN: 0-13-228084-1

**LAB: DAY TIME ROOM**

**PROFESSOR:**

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

- . write a simple laboratory report
- . record experimental observations
- . record and interpret experimental data
- . make inferences and draw conclusions from experimental data.
- classify organic compounds according to their functional groups
- name organic compounds using the IUPAC nomenclature
- understand how organic compounds may react with each other
- discuss the importance of good nutrition and the consequences associated with some nutrient deficiencies

**LABORATORY SCHEDULE ENVIRONMENTAL SCIENCE II**

<b>DATE</b>	<b>EXPERIMENT</b>	<b>EXPT.#</b>	<b>PAGE</b>
Wk1	<b>Alcohols, Aldehydes and Ketones</b> (Part 1 Ony)	1	1
Wk2	<b>Carboxylic Acids, Esters, etc.</b> (Part II)	2	5

Wk3	<b>Qualitative Analysis of carbohydrates</b>	7	30
Wk4	<b>Nutrient Density and Percentage Kilocalories from Protein, Fat and Carbohydrate</b>	16	79
Wk5	<b>Saturated and Nonsaturated Fats</b>	9	40
Wk6	<b>Separation of Casein from Milk</b> (Steps 1 to 9)	11	48
Wk7	<b>Separation of Casein from Milk</b> (Complete Steps 10 and 11)	11	49
	<b>Separation of Amino Acids by Paper Chromatography</b> (Step 1 only)	14	65
Wk8	<b>Separation of Amino Acids by Paper Chromatography</b> (Steps 2 to 10)	14	65
Wk9	<b>Protein Analysis</b>	13	57
Wk10	<b>Digestion of Proteins and Fats</b>	12	52
Wk11	<b>Distillation of a Solution of Copper Sulfate</b>	<b>HAND-OUT</b>	

The Student must complete the data sheets (ENV122HCCFALL2017(1).docx experimental observations and calculations, if any) and answer the questions at the end of the experiments. These will be submitted at the beginning of the following laboratory period.

The Laboratory grade will be based on the average obtained in the reports, laboratory attendance and performance according to the following distribution:

**Reports: 50%**  
**Attendance and Performance: 50%**  
**Laboratory: 25% of the final grade**

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.

Grade		GPA Value
A	93-100%	4
A <sup>-</sup>	90-92%	3.7
B <sup>+</sup>	87-89%	3.3
B	83-86%	3
B <sup>-</sup>	80-82%	2.7
C <sup>+</sup>	77-79%	2.3
C	70-76%	2
D	60-69%	1
F	below 60%	0

There is no R grade in this course.

### **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.