

**NATURAL SCIENCES DEPARTMENT  
HOSTOS COMMUNITY COLLEGE**

**Course: BIO 120, ORGANISMIC BIOLOGY. Prerequisites: BIO 110**

**Sections: .... Lecture – code .....**

**3-hrs/3 credits**

**Professor: .....**

**Course description:**

Lecture topics include the theory of evolution by natural selection, the evolution and diversity of organisms and their classification into the five kingdoms. Students will learn the main morphological features of each group as well as animal digestion, endocrine system, circulation, immunity, nervous system I and basic concepts of ecology. This course is for non-science major students.

**Course objectives:**

**General education Objectives and assessment instruments**

**Course-specific objectives**

By the end of the course, students will be able to:

1. Describe biodiversity of organisms on planet Earth and classification of organisms on the five kingdoms, explain differences between major groups of organisms and explain evolutionary relations in these groups.
2. Describe the basic principles of the theory of evolution by natural selection, explained major evidence of the evolution of organisms, understand the influence of Ch. Darwin on development of evolution theory.
3. Describe the main morphological and anatomical features of each group of organisms as well as the function of the systems in different animals, such as circulatory, digestive, endocrine system, immunity, nervous system, and also basic concepts of ecology.

*Objectives 1-3 will be demonstrated by student performance on exams, quizzes, and essay writing*

4. Apply standard dissecting anatomical, morphological methods, and microscopic tools to study different organisms and their functional body systems.

*Objective 4 will be demonstrated by student lab work, completed lab reports, and individual research projects.*

5. Develop critical thinking skills, interpret scientific observations and define conclusions through the application of theoretical knowledge gained in the course, materials collected in the primary literature, in the library and the internet, and implementation of laboratory experience

*Objective 5 will be demonstrated by exam performance, lab performance, completed lab reports, writing critical analysis essays, and individual research projects.*

6. Develop writing and oral communication skills as well as skills in comprehending graphs/charts and in major computer programs.

*Writing critical analysis essays, writing lab reports, class participation, participation in research projects, and relevant department activities, will demonstrate objective 6.*

**Pathways Learning Outcomes (PLOs) for the *Scientific World* bucket, Organismic Biology course.**

**PLO-1**

Gather, interpret, and assess information from a variety of sources and points of view.

**Assessments:**

Students will gather information for the laboratory report, research project and the term paper from the literature, the internet resources, the laboratory experience, and the personal experience.

**PLO-2**

Evaluate evidence and arguments critically or analytically.

**Assessments:**

Students will evaluate information gathered during laboratory experience in light of the theoretical knowledge they learned in the lecture part of the course.

**PLO-3**

Produce well-reasoned written or oral arguments using evidence to support conclusions.

**Assessments:**

In the conclusion section of the laboratory report, a student will explain their reasoning for a particular conclusion they have produced in the lab report.

**PLO-4**

Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to analyze problems and develop solutions.

**Assessments:**

Students will use mathematic reasoning to conduct some of the laboratory exercises and draw conclusions from them, acquire and demonstrate skills in using the microscope, dissecting tools, and other techniques commonly used in Organismic Biology.

**PLO-5**

Articulate and evaluate the empirical evidence supporting a scientific or formal theory.

**Assessments:**

Students will evaluate and articulate empirical evidence supporting the theory of Natural selection through short exam essays and quizzes (as example Lecture quiz 1).

**PLO-6**

Articulate and evaluate the impact of technologies and scientific discoveries on the contemporary world, such as issues of personal privacy, security, or ethical responsibilities.

**Assessments:**

Students will evaluate and articulate their current understanding of how scientific information is disseminated and how this information reaches citizens in the country on an example of COVID-19 tracing during a pandemic. The assessment will include short exam essays (as example Lecture exam 2), research projects and class presentations.

**PLO-7**

Understand the scientific principles underlying matters of policy or public concern in which science plays a role.

**Assessments:**

Students will explain the scientific principles that lead to the institution of vaccination mandate for school attendance, including the current requirements for COVID-19 vaccination for businesses and schools. The assessment will include short exam essays (as example of Lecture exam 3), research projects, and class presentations.

**Textbooks:**

**Lecture:** Campbell Essential Biology with Physiology, Books a la Carte Plus MasteringBiology with eText by Erik J. Simon, Jean L. Dickey, Jane B. Reece, and Kelly A. Hogan,-- Access Card Package, 7-th Edition (2019): ISBN-13: 978-0-134-780702; ISBN-10: 0134780701

**Course Particulars.****Graded assignments:**

The Final grade will be determined by the grades on lecture exams, Mastering Biology assignments and Writing Assignments combined as follows:

**GRADE COMPONENTS****CUNY LETER GRADES****Graded assignments:**

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

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

<b>Lecture</b>	<b>90%</b>
4 -5 Exams (average, including the final exam)	85%
Writing Assignments	5%
<b>Mastering Biology</b>	<b>10%</b>
<b>Total Grade Course</b>	<b>100%</b>

**Incomplete Grade (INC)**- The grade of Incomplete (INC) 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 work 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, **the faculty member may give an F grade 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. There is no R grade in this course. Additional information on the college grade policy can be obtained at <http://www.hostos.cuny.edu/Administrative-Offices/Office-of-the-Registrar/Academic-Info/Grades-Policy>.

**WU Grade** – Given for non-attendance. This grade is included in the computation of the GPA and counts as a failure (F). It is a punitive grade, you may be responsible for a part or a whole of your tuition fee.

In an on-line environment, “non-attendance” means failure to submit Mastering reports or assignments late or not at all.

**Attendance** In an on-line environment, participation is considered an evidence of attendance (see below). Students are expected to attend both lectures and laboratory meeting in the course. Classes begin at the times indicated in the official schedule of classes. Arrival in class after the scheduled starting time constitutes lateness. Absences due to late registration, change of program, or other extenuating circumstances will be considered on an individual basis. The maximum number of absences is limited to three (3) class meetings in either a lecture or laboratory class. Any students missing four (4) classes of either lecture or laboratory will receive an F grade. Any student who stopped attending classes without officially withdrawing from the course will receive a WU grade.

**Evidence of participation:** submission of Mastering Biology assignments, laboratory assignments and laboratory reports on time.

**Cell Phone/Electronic devices Policy** - This policy does not apply to on-line class.

No cell phone calls are allowed in the class. If you expect an important call, place your cell phone on vibrate. Use of electronic devices in classroom is not allowed unless specifically requested by the instructor. Your cell phone, tablet, smart watch or any other electronic device should be stored in your book bag during examination. Presence of any of these devices out of the book bag during an exam will be considered cheating and treated accordingly.

**Contact Policy**- Students are strongly encouraged to use their Hostos e-mail addresses. I will not respond to e-mails sent from non-Hostos address.

### **Examinations**

Examination schedule is given in the *Class Schedule* section of this syllabus and will be followed as closely as circumstances allow. If you missed distribution of the graded exam/paper, you may see results of your test in the instructor's office during the office hours. Office hour information is on the first page of this

syllabus. All examinations are administered through Blackboard You will have a 12 hours period to take the exam. The exam itself will be around one hour depending on a number of questions per exam.

### **Make-up exams**

Make-up exams are administered to students who have missed a scheduled examination and have a valid excuse for their absence. All make-up exams will be given on an out-of class time, by appointment only, and only in the period preceding the next scheduled examination.

### **Extra credits.**

You may receive up to 5 points of extra credits for the course. No other extra credits will be available. Details of extra credits must be discussed with instructor.

### **Assignments.**

Lecture writing assignments and laboratory report are submitted through Blackboard sites. All assignments must be submitted on time. All assignments are posted on the Blackboard.

### **Conflict resolution**

If you have any issues with the course, your classmates, or your instructor, talk to your instructor first. Do not wait till the issue escalates to the size of a problem preventing you from successfully completing the course.

### **General College Policies/Excerpts from Hosts College catalog:**

#### **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.***

#### **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.

This class uses Turnitin.com to verify assignment originality. The minimum penalty in this class for plagiarism or cheating is a failing grade for the assignment in question. Students cannot rewrite papers failed for plagiarism or cheating.

**College attendance policy:** *(Reproduced from pages 158-162 of the 2006/2007 Catalogue).*

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, the instructor will consider change of program, or extenuating circumstances on an individual basis. 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.

In this class, exceeding 5 unexcused absences will result in failure of the course.

**Students with disabilities:**

If any student has a disability that requires course accommodations, please contact me by phone or email as soon as possible to discuss your situation. I will be pleased to meet with you to discuss the matter as well. If you have not already done so, you should register with the college's office of Services for Students with Disabilities located in the Savoy building in Room D101P; telephone: 718-518-4454. The office will assess your eligibility for services and / or accommodations and will work with you to plan and implement appropriate accommodations to assist you to complete requirements for this and other courses. SSWD website is <http://www.hostos.cuny.edu/sswd/>

**Students with disabilities:**

(Excerpt from the Hostos Community College Catalog)

The Americans with Disabilities Act prohibits discrimination based on disability and requires the College to be physically and programmatically accessible. Beyond the basic requirements of the ADA, Section 504 of the Rehabilitation Act and New York State and New York City statutes, the College has created an office that provides services intended to help each student with a disability maximize his or her potential for success. Based on an intake interview and documentation provided by a student, a variety of accommodations may be provided to assist qualified students to attain their academic objectives. Intake and counseling are provided in English and Spanish.

**NEED HELP?**

**Services for Students with Disabilities**

Location: 120 E. 149th Street (Walton Avenue), Rm. D-101L

Contact info: (718) 518-4454 (voice/TTY); e-mail: [sswd@hostos.cuny.edu](mailto:sswd@hostos.cuny.edu).

**For more information go to** <http://www.hostos.cuny.edu/>

**Hostos Academic Learning Center (HALC):** <http://www.hostos.cuny.edu/asc/>

Current schedule of tutorials and workshops is found on HALC website.

### **Counseling Center.**

Counseling center is a great resource for ALL students: time saving techniques, stress reduction, study skills, personal problems, and much, much more The Counseling Center provides ongoing personal and academic counseling for students on an individual and group basis.

Location: 450 Grand Concourse, Rm. C330

tel. (718) 518-4319 [infocounseling@hostos.cuny.edu](mailto:infocounseling@hostos.cuny.edu)

**Mentoring program:** <http://www.hostos.cuny.edu/oaa/mentoring.html>

### **Course schedule:**

This is a tentative schedule of classes. Any changes in class schedule will be announced in advance. Students are encouraged to read the assigned chapter of the textbook before the scheduled lecture. Not all assigned texts will be discussed in class or covered in the class lectures, but a student is responsible for studying all the assigned material.

<b><u>CHAPTERS</u></b>	<b><u>SUBJECT AREAS</u></b>	<b><u>WEEKS</u></b>
Chapter 13	How Populations Evolve	Week 1
Chapter 14	How Biological Diversity Evolves	Week 2
Chapter 15	The Evolution of Microbial Life	Week 3
Chapter 16	The Evolution of Plants and Fungi	Weeks 4, 5
Chapter 17	The Evolution of Animals	Weeks 6, 7
Chapter 22	Nutrition and Digestion	Weeks 8, 9
Chapter 23	Circulation and Respiration	Weeks 10,11
Chapter 25	Hormones	Week 11
Chapter 27	Nervous, Sensory, and Locomotor Systems	Weeks 12,13
Chapter 19	Population Ecology	Week 14