NATURAL SCIENCES DEPARTMENT HOSTOS COMMUNITY COLLEGE

Course: BIO 121, ORGANISMIC BIOLOGY. Prerequisites: BIO 111

Sections: Laboratory -

3-hrs/1 credit Professor:

Course description:

Laboratory 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 and basic concepts of ecology. The laboratory illustrates the concepts discussed in the lecture. 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.

Laboratory Manual:

LABORATORY MANUAL: <u>Exploring Biology in the Laboratory</u> By Murray P. Pendarvis and John L. Crawley (Third Edition, 2018); ISBN 10: 1-61731-755-1; ISBN 13: 978-1-61731-755-2, Morton Publishing Company.

Course Particulars.

Graded assignments:

The Final grade will be determined by the grades on laboratory exams and laboratory reports (assignments) combined as follows:

GRADE COMPONENTS

CUNY LETER GRADES

Graded assignments:

The Final grade will be determined by the grades on laboratory exams and laboratory reports (assignments) combined as follows:

Laboratory

4 -5 Exams (average, including the final exam) 80%

Laboratory

8-11 Lab Reports, assignments (average) 20%

Total Grade Course 100%

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

No student under any circumstances will be given a passing grade in this Biology course without passing the laboratory reports or assignments.

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 and laboratory reports 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 a12 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 <u>have a valid</u> <u>excuse for their absence</u>. 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.

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

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

Course schedule:

This is a <u>tentative</u> 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.

Lab Topic No.

- 1. **Mystery of Mysteries: Understanding Evolution**. Chapter 16, Week 1.
- 2. Making Sense of Diversity: Understanding Classification. Viruses, Bacteria, Protista and Fungi. Chapter 17, Making Sense of Diversity: Understanding Classification; Chapter 18, On the Edge of Life: Understanding Viruses; Chapter 19, The Good, the Bad, and the Ugly: Understanding Bacteria; Chapter 20, This Fine Mess: Understanding the Protists; Chapter 26, There's a Fungus among Us: Understanding Fungi. Week 2.
- Plants without Seeds: Mosses and Ferns. Chapter 21, The Green Machine:
 Understanding the Nonvascular Plants; Chapter 22, The Green Machine:
 Understanding the Seedless Vascular Plants. Week 3.
- 4. Plant with Seeds: Gymnosperms and Angiosperms. Chapter 23. The Green Machine: Understanding the Seed Plants (Gymnosperms); Chapter 24. The

- Green Machine: Understanding the Seed Plants (Angiosperms). Week 4.
- Animal Kingdom Part I: Simple Animals. Chapter 28, Animal Planet.
 Understanding Creatures from the Sea. Week 5.
- 6. **Animal Kingdom Part II.** Chapter 29, Animal Planet. Understanding the Lophotrochozoans; Chapter 30, Animal Planet. Understanding the Ecdysozoans, Chapter 31, Animal Planet. Understanding the Deuterostomes. Week 6.
- 7. Dissection of the Fetal Pig (virtual): Circulatory System- Blood. Chapter 31, Animal Planet. Understanding the Deuterostomes; Chapter 35, Homo sapiens. Understanding the Cardiovascular and Respiratory Systems (Cardiovascular System). Week 7.
- 8. **Gas Exchange.** Chapter 35, *Homo sapiens*: Understanding the Cardiovascular and Respiratory Systems (Respiratory System). Week 8.
- Digestive System. Chapter 36, Homo sapiens: Understanding Other Systems of the Body (Digestive System). Week 9.
- Endocrine System. Chapter 36, Homo sapiens: Understanding Other Systems
 of the Body (Endocrine System). Week 10.
- Nervous System. Chapter 34, *Homo sapiens*: Understanding the Nervous System and Special Senses (Nervous System). Week 11.
- 12. **The Senses.** Chapter 34, *Homo sapiens*: Understanding the Nervous System and Special Senses (Special senses). Week 12.
- 13 **Ecology.** Chapter 39, But One Earth: Understanding Basic Ecology, Week 13.
- 14 **Field trip, virtual:** American Museum of Natural History, Central Park West at 79th Street. Week 14.
- 15 Final Exam