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CUNY School of Professional Studies

2021

EAS 201: Nature of New York

CUNY School of Professional Studies

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CUNY School of Professional Studies

EAS 201 Nature of New York

General Education

Required Core C Life and Physical Sciences

No pre- or co-requisites

COURSE DESCRIPTION

Provides an introduction to ecological reasoning through study of New York City's geologic origins and transformations over time: natural and man-made environments, cultural history, biological diversity, habitats, and invasive species. Lectures, discussion, virtual labs and field experiences show how various elements have combined over time to form the current urban metropolis. Students will formulate testable hypothesis, collect and analyze field data, create well-developed laboratory reports.

REQUIRED CORE LIFE AND PHYSICAL SCIENCES LEARNING OUTCOMES

Students will:

1. Identify and apply the fundamental concepts and methods of a life or physical science.
2. Apply the scientific method to explore natural phenomena, including hypothesis development, observation, experimentation, measurement, data analysis, and data presentation.
3. Use the tools of a scientific discipline to carry out collaborative laboratory investigations.
4. Gather, analyze, and interpret data and present it in an effective written laboratory or fieldwork report.
5. Identify and apply research ethics and unbiased assessment in gathering and reporting scientific data.

DISCIPLINE-SPECIFIC LEARNING OUTCOMES

Students will:

- Gain an understanding of key concepts in ecology, biology, and conservation through lectures, readings, and directed activities, including four virtual labs.
- Understand and recall the natural history of common local flora and fauna through species identification exercises and field visits.
- Describe the life cycle of common local organisms.
- Evaluate current conservation and sustainability issues, through student discussions and personal research.
- Discover and explore the organisms that flourish locally in natural settings natural settings and document these findings in a field report.

GRADING AND ASSIGNMENTS

ASSIGNMENTS	Percent
Field Trip and Fieldwork Assignment	20%
Lab Assignments (2 @ 15%)	30%
Species Identification (2)	5%
Discussions	15%
Ecological Issues Paper	15%
Exam	15%
Total	100%

GRADING DISTRIBUTION

A	93-100
A-	90-92.9
B+	87-89.9
B	83-86.9
B-	80-82.9
C+	77-79.9
C	73-76.9
C-	70-72.9
D	60-69.9
F	Below 60

ACTIVITIES

Field Trip Assignment (20%)

Habitat Disturbance Field Assignment: A required component of this course is a guided field trip to a natural area in the New York Metropolitan area. The location may be Jamaica Bay Wildlife Reserve, Pelham Park, or another area selected by your instructor. The Field Trip Assignment requires you to use the tools of Earth Science to collaboratively investigate habitat disturbance. Students work in teams in the field to collect, analyze, and graph field data and to prepare a summary report on their collective findings that tests a hypothesis about invasive species in disturbed areas. Please bring a camera or a phone with a camera to take pictures of the trees and shrubs you find and identify. Enter the information on your worksheet. After the field trip, information from each group's worksheet will be entered into a spreadsheet and used to create a graph of habitat disturbance and species diversity.

If your permanent address is not in the tri-state area (NY, NJ or CT), contact me with a list of comparable parks in your area. Remember to check National Parks, State Parks, County Parks as well as City Parks. There are hidden jewels everywhere. You will need my approval in park selection and will need to have the trip leader confirm your attendance.

See Appendix for Field Trip

LOs Required Core C1, C2, C3, C4, C5

Lab Assignments (30%)

Because this course is fully online, several virtual lab and fieldwork assignments are incorporated to allow you to use the tools of Earth Science to carry out simulated lab investigations, working both individually and in teams. For each Lab Assignment, working with a partner or sometimes on your own, you will gather, analyze, and interpret data and present it in effective well-written reports. Reports will include an introduction, methods, data, and conclusion, applying research ethics and unbiased assessment in the gathering and reporting of your data.

LOs Required Core C1, C2, C3, C4, and C5.

Species Identification (5%)

This assignment requires that you identify 20 plant and animal species by their common and Latin names. It is based on the information available to you within the course site and is formatted as a series of two untimed quizzes in the second week.

Species Identification Assignments assess LOs Required Core C1, C2

Discussions (15%)

You will address a weekly question or discussion topic in your own words, though it may be based on course readings, experiences on field trips, and other sources. The discussion board conversations should include the language learned from the reading where appropriate. I do not just want opinions, but opinions with substance. You are encouraged to post as often as you wish. This is the primary way I can get to know each of you so use it to your advantage.

Discussion Boards assess Required Core LOs C1, C2, C5

Water Use Project (part of DB Grade)

Fill out your spreadsheet with your water use over a three-day period, making sure to save the file onto your own computer so that you can enter your data.

Water use spreadsheet requires students to measure, analyze, and present data about water use and to compare and contrast findings with classmates.

Water Use Project assesses Required Core LOs C2, C3

Ecological Issues Paper(20%)

This assignment requires you to research a current environment issue facing the New York City area or the area in which you live. Your paper should consist of the following components: (1) an overview of the environmental problem/issue (why is this issue important?) (2) a review of the available literature from peer reviewed journals on the environmental issue (what has happened historically? why does this problem persist?) (3) a possible solution to this environmental issue. Your paper will be evaluated on completeness (does the paper have all three parts?); use of at least two secondary sources from refereed journals, cited properly using APA format; paragraph structure, grammar, punctuation, and spelling.

Ecological Issue Paper assesses Required Core LOs C1, C4

Exam (10%)

The exam will be administered during final week of the semester. It is a timed exam. While you

may have reference materials in front of you, the exam will require familiarity with the materials for successful completion. The exam is 30 multiple-choice questions. Most of these questions come directly from lectures.

Exam assesses all course learning objectives.

ACCESSIBILITY AND ACCOMMODATIONS

The CUNY School of Professional Studies is firmly committed to making higher education accessible to students with disabilities by removing architectural barriers and providing programs and support services necessary for them to benefit from the instruction and resources of the University. Early planning is essential for many of the resources and accommodations provided. For more information, please see: [Disability Services on the CUNY SPS Website](#).

ONLINE ETIQUETTE AND ANTI-HARASSMENT POLICY

The University strictly prohibits the use of University online resources or facilities, including Blackboard, for the purpose of harassment of any individual or for the posting of any material that is scandalous, libelous, offensive or otherwise against the University's policies. Please see: ["Netiquette in an Online Academic Setting: A Guide for CUNY School of Professional Studies Students."](#)

TUTORING

CUNY SPS offers all students a variety of tutoring services, free of charge, both online and in person. Please see: [Tutoring](#).

HELP DESK

For assistance with access to CUNY SPS and CUNY computing resources, please see the [Help Desk](#) website for contact details and semester hours.

ACADEMIC INTEGRITY

Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the educational mission of the City University of New York and the students' personal and intellectual growth. Please see: [Academic Integrity on the CUNY SPS Website](#).

STUDENT SUPPORT SERVICES

If you need any additional help, please visit [Student Support Services](#)

COURSE SCHEDULE

Week	Unit Topic	Assignments
1	Course Introduction	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week One Lecture Material <input type="checkbox"/> If you live out of the New York area, contact your instructor with suggestions for parks in your area and work out two agreeable alternate sites for field trips. <input type="checkbox"/> Post Welcome on Discussion Board <input type="checkbox"/> Complete Species Identification Exercise 1
2	Biodiversity in New York City	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Two Lecture Material <input type="checkbox"/> Take a walk in a local park and observe your surroundings. Be sure to take plenty of pictures and post them in Week Two Species identification Discussion Board <input type="checkbox"/> Begin Squirrel Lab
3	Habitats in New York City	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Three Lecture Material <input type="checkbox"/> (if necessary) Submit to your instructor your substitution for attending the first field trip (Jamaica Wild Life Reserve) via the submit assignment option in the Week Three module <input type="checkbox"/> Complete Species Identification Exercise 2 <input type="checkbox"/> Post in Week Three DB Forum <input type="checkbox"/> Submit a 1-paragraph précis of proposed topic for Ecological Issues Paper <input type="checkbox"/> Squirrel Lab Due
4	Ecology, an Introduction	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Four Lecture Material <input type="checkbox"/> Post in Week Four DB Forum
5	Weather/Climate	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Five Lecture Material <input type="checkbox"/> Field Trip <input type="checkbox"/> Complete Report for Field Trip and submit by Sunday at 11:59 pm.

Week	Unit Topic	Assignments
6	NYC's Geological Origins	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Six Lecture and PDF Material <input type="checkbox"/> Investigate this week's external resources <input type="checkbox"/> Post in Week Six DB forum <input type="checkbox"/> Continue work on Ecological Issues paper
7	NYC's Water	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Seven Lecture Material <input type="checkbox"/> Read "H2O—Highlands to Ocean" by T. Hiss and C. Meier <input type="checkbox"/> Listen to the audio by Dr. Dennis Suszkowski <input type="checkbox"/> Explore this week's media resources <input type="checkbox"/> Fill out your three-day water use spreadsheet and attach it to Week Seven DB forum. Be sure to discuss its results and significance and to answer the questions in the spreadsheet file. <input type="checkbox"/> Continue work on Ecological Issues paper
8	Ecological Issues Paper Due	<ul style="list-style-type: none"> <input type="checkbox"/> Submit paper by Sunday at 11:59 pm.
9	Urban Ecology and Economic Theory	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Nine Lecture and PDF Material <input type="checkbox"/> Listen to the audio by Dr. Paul Mankiewicz <input type="checkbox"/> Explore the external resources <input type="checkbox"/> Post in Week Nine DB forum <input type="checkbox"/> Begin work on the Greenhouse Effect Virtual Lab assignment
10	Humans in NYC: Part I	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Ten Lecture Material <input type="checkbox"/> Listen to the audio by Anne-Marie Cantwell <input type="checkbox"/> Explore the external resources <input type="checkbox"/> Post in Week Ten DB forum <input type="checkbox"/> Continue Greenhouse Effect Virtual Lab
11	Humans in NYC: Part II	<ul style="list-style-type: none"> <input type="checkbox"/> Read Week Eleven Lecture Material <input type="checkbox"/> Examine the external resources <input type="checkbox"/> Post in Week Eleven DB forum <input type="checkbox"/> Greenhouse Effect Virtual Lab Due

Week	Unit Topic	Assignments
12	Growth and Industrialization	<input type="checkbox"/> Read Week Twelve Lecture Material <input type="checkbox"/> Examine the external resources <input type="checkbox"/> Post in Week Twelve DB forum
13	Resurrection	<input type="checkbox"/> Read Week Thirteen Lecture Material <input type="checkbox"/> Examine the external resources <input type="checkbox"/> Browse the optional readings and video <input type="checkbox"/> Post in Week Thirteen DB forum
14	Whither Gotham: The Future of NYC	<input type="checkbox"/> Read Week Fourteen Lecture Material <input type="checkbox"/> View the “Urban Ecology” video by Science Forward <input type="checkbox"/> Listen to the audio by Dr. Paul Mankiewicz <input type="checkbox"/> Examine the external resources <input type="checkbox"/> Post in Week Fourteen DB forum
15	Final Exam	<input type="checkbox"/> Final Exam by 11:59PM Sunday night <input type="checkbox"/> Post any questions to the General Discussion Forum if you’d like