2018

Zero Textbook Cost Syllabus for ENV 1004 (Fundamentals of Ecology-lab and recitation)

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CUNY Bernard M Baruch College

ENV 1003/1004: Fundamentals of Ecological Research (9022)
Summer II 2018
Recitation Mondays, 7:00 PM-9:30 PM
Tuesday, Wednesdays, Thursdays, 7:00 PM – 9:30 PM

Office hours: I do not have set hours.
Speak with me and we can set up an appointment in the library
via Blackboard Collaborate or Skype

Lecture Instructor**:**
Lab/ Recitation: Wendy Castillo
E-mail:

Course Description:

FROM REGISTRAR: Fundamentals of Ecological Research is a hands-on course designed to teach students the basic concepts and methodologies used in the field of ecology. The significance of ecological research to current environmental issues, both local and global, will be stressed throughout the course.

From me: This course introduces students to basic concepts and tools used in ecological research through hands-on activities, complementing and expanding materials from ENV 1003. Field trips to local ecosystems and educational sites are required.

Course Objectives (Learning Goals)

1) Students will be able to use mathematical and conceptual models to **predict** impacts of change on behavior, populations, communities, and ecosystems.
2) Students will be able to properly **utilize** basic experimental tools (e.g. microscopes, reagents) and techniques (e.g., mark-recapture method).
3) Students will be able to **describe** the scientific process, **develop** and **test** hypotheses, and **differentiate** between dependent and independent variables.

All of the above concepts will be considered in relationship to the management and restoration of natural resources in the New York area and beyond. By the end of this course, you should be able **discuss** the complex linkages among biotic and abiotic factors that impact natural communities, **explain** how these factors may be measured, and **predict** impacts of change.

Course Structure: The course will consist of a mixture of lecture and lab activities.

Lectures: Lab introductions will parallel and supplement the material in the required readings. That is, some parts of the introductions will elaborate on material presented on the course website, whereas other parts will consist of novel material that is not covered on the site.

Lab and field activities will consist of activities that expose you to tools and issues faced by ecologists. These will range from handling and analyzing existing data sets to collecting information on biodiversity. You will also be responsible for visiting three off-campus locations related to ecology.

Lab Report: 1 properly formatted lab report will be due. Reports must include an introduction, materials and methods, results, and discussion. Other details regarding format will be discussed in class.

Readings: You will have readings assigned from the course website and possibly other material. **Material from these assignments may appear on the exams even though it may NOT be covered in lecture.**

Course Materials and Tools Note: This is a zero-textbook course and part of the new zero-textbook initiative at CUNY. All resources are freely available from CUNY or other sources. Please let me know if you need help finding these resources. You should not have to purchase any resources.

All material (text links, lecture slides) is available @ https://sites.google.com/view/env10031004. Material is viewable from desktop, laptop, or mobile devices.

Assignments will be posted and submitted via Blackboard. It is the student's responsibility to check the course website on a regular basis for new assignments. **All assignments will be submitted or facilitated (e.g., discussions) via Blackboard; assignments will not be accepted via email**.

Additional Course Materials: A laptop (or suitable internet device) will be needed for homework and classwork activities.

Lab Assignments

Exams (2): Exams will cover the assigned readings up to the day of the exam (i.e, the exams will be cumulative). **The second exam grade will replace the grade from the first exam if that benefits the student.**

Homework and Classwork: Classwork will take place in class; homework may include specific activities assigned through Blackboard or assignments related to class labs. These may include short quizzes on required readings, short responses to papers, lab follow-up or preview questions, etc. **Attempts will be made to announce homework in class, but assignments and due dates announced via Blackboard are considered final and override any other information unless otherwise noted in writing**. It is the student's responsibility to check Blackboard for new assignments. At least **2** days will be given to submit any homework assignments (note: these may be focused on upcoming labs). **I will drop the lowest grade from this area.**

Writing Assignment: 1 properly formatted lab report will be due. Details will be posted on Blackboard and announced in class.

Oral Presentation: 1 group presentation will be made. Details will be posted on Blackboard and announced in class.

Required Field Exercise: You will be required to complete three field exercises (Bronx Zoo; American Museum of Natural History; New York Botanical Garden) on your own time once during the semester in lieu of classroom laboratory activities (see schedule).

Evaluation and Workload: These determine the grade you earn for the course.

Laboratory Exam I:	200 (20%)
Laboratory Exam II:	300 (30%)
Laboratory Homework and Classwork	320 (32%)
Field Activity Reports	120 (12%)
Laboratory Report	30 (3%)
Laboratory Presentation	30 (3%)

Course Total: 1000 pts (100%)

Grading Scale (%):

A	93-100	A-	90-92.9		
B+	87.1-89.9	B	83-87	B-	80-82.9
C+	77.1-79.9	C	73-77	C-	70-72.9
D+	65-69.9	D	60-64.9		
F	0-59.9				

Course Policies: These policies are based on ideas of fairness and respect.

***Grading Policies*:** Final course grades are non-negotiable and will **NOT** be curved or rounded in any way. Grades for individual assignments may or may not be curved depending on the class results. If a curve is instituted, I will determine a fair and reasonable curve which will be applied to each individual's grade.

Grade changes will be made only to correct clerical errors. **Complaints about grades on individual assignments must be submitted in writing within a week following the return of the relevant assignment. Only reasonable and well-justified complaints will be considered**.

Attendance policy: Lab courses are designed as hands-on experiences that cannot be replicated via other learning methods. For this reason, attendance will be taken for each lab section, and attendance is a pre-requisite for turning in lab-related activities.

If you are ill, please do not come to class. I will need a doctor's note in order to hand-in the lab-related activities.

Make up exams and late assignments:

Exams: Make up exams will not be given; instead, the grade earned on the final exam will replace the missed exam. Because of this, the second exam grade may also replace the first exam grade if that benefits a student. **Attendance at the second exam is required to pass the course**.

Lab report: Late papers will receive a 20% reduction in grade per day.

Homework and Classwork: Late homework and classwork **will not** be accepted. Since it will not be graded, you will be unable to access answers via Blackboard and will have to come to office hours to discuss any questions.

Disability or crisis issues: Accommodations for the class (extended exam time, reader, etc.) will be handled by the Office of Services for Students with Disabilities. Please contact them directly (Newman Vertical Campus, Room 2-271, 646-312-4590, Disability.Services@Baruch.Cuny.edu) or speak to me regarding contacting them. If a major issue arises during the semester (family death, accident, etc.) please let me, the Departmental office, (506, 17 Lexington Avenue Building) or the Student Affairs office (deanofstudents@baruch.cuny.edu, 646-312-4570) know so efforts can be made to aid you during this time.

Academic Integrity: I fully support Baruch College's policy on Academic Honesty, which states, in part:

"Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the college's educational mission and the students' personal and intellectual growth. Baruch students are expected to bear individual responsibility for their work, to learn the rules and definitions that underlie the practice of academic integrity, and to uphold its ideals. Ignorance of the rules is not an acceptable excuse for disobeying them. Any student who attempts to compromise or devalue the academic process will be sanctioned. "

Academic sanctions in this class will range from a D or F on the section or assignment to a D or F in this course and are at my discretion. A report of suspected academic dishonesty will be sent to the Office of the Dean of Students. Additional information and definitions can be found at http://www.baruch.cuny.edu/academic/academic_honesty.html

Personal responsibilities and class etiquette: I understand everyone's time is valuable and that you (or someone) are (is) paying for you to pursue a higher education degree, which marks you as having achieved a goal. In light of this:

- My responsibility and goal is ***to guide students, as active learners, in becoming critical thinkers who can evaluate and assimilate material from across the spectrum of biology and connect it to other disciplines and their everyday life.*** We will accomplish this through class activities, and I will **fairly** evaluate your progress in this area through the methods noted above. I will **respect** your time and effort by attempting to start on time, promptly respond to emails and grade assignments (less than 1 week from receipt), being available for help, and attempting to make class as engaging and relevant as possible. I will regularly seek feedback in these areas through short surveys.
- Your responsibility is to be an active, engaged student who does not detract from class activities. **We will utilize an inverted classroom or discussion-based approach as much as possible, so I expect you to arrive prepared for class.** Please arrive on time and plan to stay ***engaged*** for the entire class. Take part in discussions, ask questions as needed, and stay off personal devices (phones, facebook, etc). **Distracting activities will be noted and, if continued, will lead to a dismissal from class. All work you submit in any form must be your own or properly attributed.**

Additional Information: Environmental Sciences at Baruch College

Biological Sciences Major: The Department of Natural Sciences offers a major in biological sciences that allow students to choose from a diversity of courses. Following an introductory series of courses focused on building a firm foundation in the natural sciences (biology, chemistry, physics, genetics) and math, students can choose from a range of elective courses and may focus on courses related to environmental science, ecology, and conservation and sustainability.

Tier III minor in Environmental Sustainability: The Department of Natural Sciences offers a minor in environmental sustainability for students that wish to pursue general intellectual interests or specific career objectives. For example, business students may improve their marketability with knowledge of current issues in environmental sustainability, and public affairs or pre-law students may gain knowledge for future specialization in environmental law or policy. For the environmental sustainability Tier III minor, students take two environmentally-themed, interdisciplinary courses at the 3000 level or above followed by the capstone course, ENV 4900—Topics in Environmental Science.

The Arts and Sciences Ad Hoc Major in Natural Science Areas: It is also possible to design an ad hoc major that combines ENV courses with additional sciences and courses in other fields. Please inquire for more information.

More information on getting involved in research and classes is available @ https://blogs.baruch.cuny.edu/environmentalscience/join_us/