**FUNDAMENTALS OF ECOLOGY (BIOL-UA 63/ENVST-UA 325)**

**PROFESSOR KATIE SCHNEIDER PAOLANTONIO**

**TUES AND THURS 11:00 – 12:15**

**SYLLABUS FALL 2019**

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**MY CONTACT INFORMATION:**

- **Email:** ks146@nyu.edu
- **Phone:** 212-992-9669 (x29669 from a campus phone)
- **Office hours:** Tues/Thurs 12:15 – 1:15 and by appointment. Please let me know if you plan to attend.

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**TA CONTACT INFORMATION:** Posted on NYU Classes.

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**TEXT:**

- *Ecology: Global Insights and Investigations.* P. Stiling, 2nd Edition, 2014. Copies (new and used) available at the bookstore and on sites such as Amazon.com (also on reserve at the library).

  - SimBio for assignments (cost ~$16). I will explain how to download this software later on in course.

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**PREREQUISITES:** Principles of Biology I (BIOL-UA 0011, 9011 or 0013) or Foundations of Science 6: Biology (SCIEN-AD 113) & Principles of Biology II (BIOL-UA 0012), or Principles of Biology II (BIOL-UA 0014 or 9012), or Environmental Systems Science (ENVST-UA 100) or Foundations of Science 6: Physics (SCIEN-AD 114).

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**COURSE DESCRIPTION:** Ecology is the study of the interaction between organisms and the environment. In this course we will investigate the relationship between abiotic (nonliving) and biotic (living) components of an ecosystem. Building upon an introduction to environmental factors, we will examine the interplay between these components at the organismal, population, community and ecosystem levels. Throughout the course, we will discuss current ecological applications and issues, such as habitat destruction, sustainability, disease, invasive species, and global climate change. This is a lecture course designed primarily for students majoring in biology (ecology track) and environmental studies. This course is not intended for college freshman. In addition to the prerequisites, it is strongly encouraged that you have also completed college level math prior to enrolling in this course. If you have not taken the course prerequisites, you are very likely to have a difficult time doing well in this course.

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**GRADING:**

The final grade for this course will be based on:

- Three lecture exams 300 pts
- Three take home assignments 150 pts
- In-class assignments (NO MAKEUPS, 1 dropped) 50 pts
- Extra credit (described in class and in more detail below) 50 pts

**Total** 500 pts

Letter grades will be determined as follows. If you earn the following points, your grade will be at least as indicated; instructor reserves the right to “curve” the lowest grade upwards as appropriate: Above 470 = A,
450 – 470 = A+, 435 - 450 = B+, 415 - 435 = B, 400 - 415 = B-, 385 - 400 = C+, 365 - 385 = C, 350 – 365 = C-, 335 – 350 = D+, 315 – 335 = D, Below 315 = F, INC = Incomplete, W = Withdrawal. This scale is subject to change based on overall course performance. If you receive an INC, you must resolve the INC before the end of the next semester or it will become an F. It is your responsibility to request an INC in writing before the end of the course.

1. Exams:
   - Exams are based upon lectures and readings, but lectures are emphasized. Lecture notes will be posted, but will not cover all of the material presented in lecture. It is important to attend the lectures, come on time and stay for the entire lecture.
   - Attendance for exams is mandatory. The possibility for a makeup exam will be considered if you have a serious medical or family emergency. I need to be notified by phone or email before the exam time and there will only be one such opportunity for a makeup exam. Makeup exams will not be provided in the event of transportation problems, etc. You will receive a zero for a missed, unexcused exam. I will determine the format of the makeup exam, which will likely be essay based.
   - If you feel you were not given adequate points for a question you must hand in a one paragraph printed explanation of why you think you deserve more credit and your argument will be considered. Your request must be submitted within one week of receiving your grade.

2. Take-home assignments:
   - Take-home assignments and due dates will be announced in class and available through NYU Classes. All assignments must be turned in by 5pm on the day that they are due. Emailed late assignments will NOT be accepted without penalty. If an assignment is late, five percent will be deducted each 24 hour period after the assignment is due (e.g. every day after 5 pm).
   - Any questions about assignment grades must be turned in (in writing) within one week after the grades are posted. The questions should be first directed to your TA, and then to me if there are additional questions.

3. In-class assignments:
   - These assignments are in-class ONLY and will not be announced in advance. Your lowest grade will be dropped, so if you miss one assignment that one is dropped. There are NO make-ups. This is for 10% of your grade so your course grade is affected by your presence (or absence) in the classroom.

Extra Credit:
   If you opt to do an extra credit assignment, you may choose ONE of the following three opportunities.
   A. Attend a scientific talk on ecology. Hand in a single printed page within one week of attending the seminar. Late hand-ins will not be accepted. Your assignment must include: Your name, the date and title of the seminar, the name of the seminar speaker and where they are from, a paragraph summarizing the main points, the single thing that most surprised or interested you in the seminar, AND how the talk relates to something that we’ve discussed or will discuss in class. Please email me the title of the seminar before you attend. Some examples of local seminars that may want to attend can be found at:
      NYU Environmental Studies http://environment.as.nyu.edu/page/newevents
      NYU Center for Atmospheric Ocean Science http://caos.cims.nyu.edu/page/events_colloquium
      NYU Biology http://biology.as.nyu.edu/page/events
      Or outside of NYU at other universities (e.g. Queens College):
B. Visit a museum, botanical garden, aquarium or zoo. Take advantage of what NY has to offer! There are SO many local opportunities to do this assignment! After your visit, hand in a single printed page with the following: Your name, the date that you went, proof that you went, and a typed page summarizing what you observed, including what you found to be most interesting, least interesting, something that you learned, AND how your experience relates to something that we’ve discussed or will discuss in class. **Hand in the assignment within one week of your visit.** Late hand-ins will not be accepted.

C. Participate in an organized volunteer event with ecological goals. This can be a restoration project, a day spent removing invasive species or planting trees, participating in ecological research, or other ecological volunteer events. There are lots of volunteer events advertised online, such as on NYC parks ([http://www.nyegovparks.org/events/c29/p4](http://www.nyegovparks.org/events/c29/p4)) or occasionally posted on the NYU DUGS blog (a good resource to check out overall: [blogs.nyu.edu/as/biology/dugs](http://blogs.nyu.edu/as/biology/dugs)). Please email me the description of the event before you attend. After you attend, please hand in a single printed page with the following: Your name, the date that you went, proof that you went, and a typed page summarizing the goals of the event, the ecological history of the area in which you worked, the future plans for the site/project, and why this event was important. In addition, please include how your experience relates to something that we’ve discussed or will discuss in class. **Hand in the assignment within one week of your visit.** Late hand-ins will not be accepted.

**POLICIES:**

1. All students must adhere to the academic integrity policies of NYU (more on this below).

2. Come to lecture prepared and plan to stay the entire time. This means you must read the assigned chapter from your textbook prior to class. Expect to spend a substantial amount of time (roughly about 5 hours per week outside of class, on average) with assigned reading in this course if you hope to do well. Additional readings or other homework assignments may be assigned to complement the textbook material. If you can not come to class, you will not gain participation points for that day (no make ups).

3. Plan to stay in lecture for the duration of the class. If you must leave for an emergency, please sit by the door and exit quietly.

4. Do not disrupt the course. Do not use your cell phone and do not record lectures. Please keep eating during class to a minimum and clean up all trash. Please don’t spend class time surfing the internet. It is distracting to you and to the people behind you. Respect me and your classmates. Disruptive conduct during lecture can result in disciplinary action as per academic policy.

**DISABILITY DISCLOSURE STATEMENT:**

Academic accommodations are available to any student with a chronic, psychological, visual, mobility, learning disability, or who is deaf or hard of hearing. Students should please register with the Moses Center for Students with Disabilities at 212-998-4980.

NYU’s Henry and Lucy Moses Center for Students with Disabilities
726 Broadway, 2nd Floor, New York, NY 10003-6675
Telephone: 212-998-4980, Voice/TTY Fax: 212-995-4114
Web site: [http://www.nyu.edu/csd](http://www.nyu.edu/csd).
**ACADEMIC INTEGRITY STATEMENT:**
CAS Academic Policies (Copied from https://cas.nyu.edu/content/nyu-as/cas/academic-integrity.html):

I. A COMMUNITY OF THE MIND

New York University is a community of scholars who value free and open inquiry. Our work depends on honest assessment of ideas and their sources; and we expect all members of our community to maintain the highest integrity in their academic work. As scholars committed to the critical evaluation of ideas, free of personal prejudice, we also have an obligation to one other to create an educational atmosphere of mutual trust and respect in which differences of opinion can be subjected to deliberate and reasonable examination without animus. Because of the central importance of these values to our intellectual life together, students who fail to maintain them will be subject to disciplinary sanction, which may include dismissal from the University.

II. SOME GUIDELINES

Academic honesty means that the work you submit — in whatever form — is original. Obviously, bringing answers into an examination or copying all or part of a paper straight from a book, the Internet, or a fellow student is a violation of this principle. But there are other forms of cheating or plagiarizing which are just as serious — for example, presenting an oral report drawn without attribution from other sources (oral or written), writing a paragraph which, despite being in different words, expresses someone else’s idea without a reference to the source of the idea, or submitting essentially the same paper in two different courses (unless both instructors have given their permission in advance). Receiving help on a take-home examination or quiz is also cheating — and so is giving that help — unless expressly permitted by the instructor (as in collaborative projects). While all this looks like a lot to remember, all you need to do is to give credit where it is due, take credit only for your original ideas, and ask your instructor or advisor when in doubt.

Disciplinary offenses include but are not limited to:

- cheating, plagiarism, falsification of data or sources, forgery of academic documents in attempt to defraud;
- destruction, theft, or unauthorized use of laboratory data, library or research materials, computer resources, or university property;
- disruption of academic events or interference with access to classrooms, laboratories, or academic offices;
- actual or threatened violence against, or assault or harassment of a student, instructor, staff member, or administrator.

The following penalties may be imposed by the faculty for disciplinary infractions:

- Warning
- Disciplinary Probation
- Suspension
- Dismissal

Complete statements of the policies and procedures for adjudicating disciplinary complaints concerning students in the College are available from the Office of the Associate Dean for Students and on the website of the College of Arts and Science.
III. PROCEDURES AND SANCTIONS

1. General Principles
   a. Student conduct that violates the College of Arts and Science Honor Code, University-wide student conduct policies, and/or student conduct policies established by portal campuses, global academic sites, or administrative offices of the University may be subject to disciplinary action in accordance with established CAS and University procedures.
   b. Student misconduct includes academic misconduct, such as plagiarism, cheating, and possession of or use of any prohibited notes, reference resources, or data processing or other devices in any class or examination, and behavioral misconduct, such as forgery of academic documents in attempt to defraud; destruction, misuse, or theft of University resources; disruption of classes or other academic events, or University administrative operations; acts of violence; and sexual assault and harassment.
   c. In cases of academic misconduct, evaluation of the student’s academic performance is distinguished from disciplinary adjudication of the offense. The question of what grade the student’s work should earn is distinct from that about whether a disciplinary sanction should also be imposed. When a student is found to have engaged in academic misconduct, the instructor may reduce the student’s grade for the assignment or for the course as a whole; however, such a determination is an academic judgment made by the instructor in accord with the expectations of the department or program offering the course and is not a form of disciplinary sanction. The question of whether a disciplinary sanction should also be imposed is separate from this academic determination, as specified in the procedures described herein.

2. Academic Misconduct—Academic Review
   a. When it is believed that violations of academic integrity may have occurred it is within the discretion of the faculty member to address the matter informally with the student should the infraction be judged insubstantial or should the evidence be inconclusive. In such cases the faculty member may determine that no grade reduction is warranted.
   b. Should the faculty member judge the violation substantial and well supported by the evidence, he or she may, with the assent of the Director of Undergraduate Studies (or, if the Director of Undergraduate Studies is the instructor, with the chair or another academic director in the department or program, or if the department or program should be too small, in an ad hoc consultation with a chair or academic director of another department or program from the same academic division) reduce the student’s grade or assign the student a failing grade for the assignment in question or for the course as a whole. This grade reduction only reflects the student’s failure creditably to complete the academic requirements in question and is not a disciplinary sanction. The grade reduction should be proportional to the size and weight of the incident of academic misconduct among all requirements for the course and appropriate to the level at which the course is offered.
   c. In order to better educate the student about the CAS standards for academic integrity, the faculty member and/or the Director of Undergraduate Studies should meet with the student to discuss the nature of the offense and the action taken. This responsibility of the faculty should not be delegated to recitation or laboratory instructors or other course assistants.
   d. For incidents of academic misconduct, the student’s appeal of the grade reduction is limited to departmental review conducted by the Director of Undergraduate Studies and/or the Department Chair, as specified in the CAS policy for grade appeals. The review will be limited to the question of whether the reduction in grade was made fairly and in keeping with the expectations of the department or program.
   e. The decision of the department or program on the student’s appeal is final.
3. Academic Misconduct—Reporting and Disciplinary Referral
   a. In all instances in which there has been a finding that a CAS student committed a substantial violation of academic integrity standards of CAS or of any of its departments or programs, the Director of Undergraduate Studies will inform the student within seven (7) calendar days in writing and/or via email of any action taken and send copies of this letter to the CAS Associate Dean for Students, the faculty member, and the Department Chair or Program Director. The letter will include the nature of the violation, any resulting reduction in grade, and notice of the student’s right to appeal. A copy of the correspondence and the evidence of the violation shall be kept in a confidential file maintained by the Director of Undergraduate Studies.
   b. The Director of Undergraduate Studies will also within seven (7) calendar days inform the CAS Associate Dean for Students in writing and/or via email of the student’s violation, forward to the dean the evidence of the violation, and send a copy of the correspondence to the faculty member and to the Department Chair or Program Director.
   c. If this is the student’s first incident of academic misconduct, the Associate Dean for Students will send the student a warning letter indicating that a suspension or a more severe penalty may result from a second academic integrity offense of any kind.
   d. If this is the student’s second or further incident of academic misconduct, the Associate Dean for Students will meet with the student, discuss the evidence of academic misconduct, and provide the student an opportunity to respond. The student will be informed of his or her right to accept or reject a resolution by the Associate Dean. After considering all relevant information, the Associate Dean may offer the student terms upon which CAS is willing to resolve the matter, which may include imposition of a disciplinary sanction. Where the student and the Associate Dean agree to terms in writing, a binding consensual resolution will exist between the student and CAS. Where the Associate Dean is unable to resolve the complaint by consensual resolution, the matter will be referred to the Committee on Student Discipline.
   e. In all instances in which there has been a finding that a non-CAS student committed a substantial violation of academic integrity standards of CAS or of any of its departments or programs, the Director of Undergraduate Studies will proceed in accord with the procedures under (a) and (b), except that notice will be made instead to the Dean of Students of the student’s school.

4. Behavioral Misconduct
   a. Complaints of student behavioral misconduct should be made in writing to the CAS Associate Dean for Students. When such a complaint is received, the Associate Dean will notify the student of the complaint and investigate the matter. In cases of students who have transferred internally among divisions of the University, the dean will query the student’s prior school(s) concerning their disciplinary records for the student, if any.
   b. The Associate Dean of Students will meet with the student against whom the complaint has been filed, describe the complaint, and offer the student an opportunity to respond. The student will be informed of his or her right to accept or reject a resolution by the Associate Dean. After considering all relevant information, the Associate Dean may offer the student terms upon which CAS is willing to resolve the matter, which may include imposition of a disciplinary sanction. Where the student and the Associate Dean agree to terms in writing, a binding consensual resolution will exist between the student and CAS. Where the Associate Dean is unable to resolve the complaint by consensual resolution, the matter will be referred to the Committee on Student Discipline.
   c. Ordinarily, if the misconduct is a student’s first offense at the University and does not warrant further disciplinary sanction, the student will be offered the opportunity to continue in CAS under written warning that a one-semester suspension or a more severe penalty may result from a second disciplinary offense of any kind.
## Course Schedule

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<th>Assignments</th>
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