Description of Subject Matter & Methods of Instruction

Our views of nature and of ourselves have changed substantially in the last two hundred years. Ideas of the “Balance of Nature”, the “Pristine Wilderness”, a world built especially for humans, and the like, have become increasingly difficult to sustain in the light of modern biological science. How then should we conceive of our environment and our place in it? What is the point of “conserving” an environment in constant flux? Drawing upon ecology, evolutionary biology, ethics, and the philosophy of biology, we will address these questions in the context of a larger network of interconnected questions concerning the origins of biological diversity, genetic determinism, ecological equilibrium, the nature of value, and so on. The course will be, by necessity, interdisciplinary. Background in science and philosophy is a plus, but not strictly required — so long as you are willing to work at a certain level of depth and abstraction and to redress deficiencies in your background as the need arises.

Instructional Materials and Sources

We will read four books in the course of the term: Charles Darwin, The Origin of Species; John Kricher’s, The Balance of Nature; Richard Lewontin’s, The Triple Helix; and Dale Jamieson’s Ethics and the Environment. I will supplement these with readings distributed online in PDF format.1 As we shall be attending closely to the texts, you are required to bring the relevant text to our meetings.

Evaluation (the details)

Your final grade will be based on five components as described below. Please note that 40% of your grade will be determined by your regular effort. It will thus be quite important to stay current. Note as well what the different letter grades represent. According to the Course Catalog (http://www.bucknell.edu/x2902.xml), an ‘A’ means ‘Superior achievement’, a ‘B’ means ‘High pass’, a ‘C’ means ‘Pass’, a ‘D’ means ‘Low pass’, and an ‘F’, of course, stands for ‘Failing work’. Unless you’re some kind of savant, it’s highly unlikely that you can produce ‘superior work’ (or even B-level, good, but uninspired work) without putting time and effort into your studies.

Participation & Preparation (20%). Since I will be conducting this course as a (rather large) seminar-style discussion, it is absolutely essential to come to each meeting prepared. What does “coming prepared” mean? It means not only passing your eyes over the reading assigned for that day, but making a serious attempt to critically engage with it and coming to class ready to share the fruits of your labors (questions, reactions, remaining confusions, &c.). The short response papers (see below) are designed to help stimulate this preparation. During class, I expect you to be a willing participant. Break the ice. Ask questions. Respond to your peers. Offer your considered opinion. If necessary, I will operate in “Socratic Mode”, pestering you for your views. Earning an ‘A’ on this component of class will require being an involved and helpful participant (raising questions and engaging in the discussion without dominating it) in the vast majority of our meetings. Simply attending, looking attentive, and occasionally adding something will get you at most a ‘C’ for participation (don’t think I’m kidding about this!). Missing or coming late to class will drop this grade below a ‘C’, even if you are helpfully active when you’re around.

Short Response Papers (20%). For each class meeting in which we have a discussion (i.e., not in meetings devoted to project work or films), you should bring to class a typed response to the reading assigned for that meeting (or if there is none, to something from the most recently assigned reading). These responses should be around 200–500 words total and should span no more than one sheet. These will be graded on a simple 0-3 basis (0= “not done”/“insufficient”, 1= “needs improvement”, 2= “acceptable/good”, 3= “excellent”). These will not be returned and no extensions will be granted for any reason (save for extended illness or University-sanctioned activity when I receive a note from the Dean); however, Blackboard will drop your lowest four scores before averaging together your remaining scores. At the end of the term, I will curve these in such a way as to have a 67%-average come out as a B.

They needn’t be summaries (though insightful summaries are fine). They could discuss an issue or question you find interesting. Perhaps you disagree with something: explain why. Perhaps you’re not sure whether you understand something about the reading: your response paper could attempt to describe what confused you. Think about these as

---

1 The interests of trees and our learning sometimes conflict. Please do what you can to minimize paper waste (use recycled paper, reclaimed paper, &c.; printing the articles two-up, double-sided in Acrobat is usually possible), but bring copies of the relevant articles to our meetings (on a laptop is fine), as we will often need to look back at them in detail in class.
something that could potentially prompt a discussion. But in each case, you should stay close to the text. You will not get a ‘3’ unless it is quite clear to me that you did the reading carefully.

Take Home Exams (20%). There will be a take-home midterm and final. If I feel that the class as a whole is performing at a high level (i.e., reading carefully and participating helpfully in class), I will make the final exam optional.

Group Presentation (20%). Around the midway point of the term, I will ask you to form groups of four or five with whom you will collaborate to produce a final research presentation. We’ll talk about the details of the presentations as the time approaches, but they will be evaluated on the basis of a number of different criteria, including preparation, delivery, success/interest, and depth of research. Except in unusual cases, each member of the group will receive the same final grade, so I advise you to choose a group that can work effectively and collaboratively with each other and which possesses a diversity of talents and expertise.

Final Essay (20%). Your final essay will be on a topic of your choosing, though that topic should dovetail reasonably closely with that of your group presentation. You could think of it as an expansion of your contribution to this project if you wish, or perhaps a chance to explore your group’s topic from another angle. They should be between 3,500 and 5,000 words and involve a significant amount of independent research (which we will talk about shortly).

Other Course Policies  READ THIS!

Focus & Attention. Studies show that multitasking doesn’t work nearly as well as we all tend to think it does, especially when it comes to learning (see http://www.npr.org/templates/story/story.php?storyId=7700581). I kindly ask you to turn off your various communication devices while you are in class (lest you be tempted to check them). I strongly discourage the use of laptops in class, as they also present a temptation to distraction (at a minimum, please turn off your wireless connection). If I notice you texting, computing, or otherwise distracting yourself, me, or others (with technological wonders or more mundane means), I will mark you as absent for the day. Many of you seem to think that you can check these without being noticed. That’s silly: why would you think that your professors wouldn’t notice someone staring into their laps? In like fashion, I will count you as absent if I notice you dozing off in class. Aside from being rather rude, it’s distracting to me and other students. If you can’t stay awake, you might as well not be there.

Communication I have high expectations of you. You may have high expectations of me in return. I am happy to make myself available outside of class to discuss questions/issues, go over assignments, quizzes, exams, and generally help you master this material. If my regularly scheduled office hours won’t work, just get in touch to make an appointment. Nevertheless, as you are no doubt aware, my job at Bucknell is to be a teacher and a scholar — to have my research inform and enhance your experience in the classroom. As such, I will need to be protective of my research time. While I could, in principle, respond to emails and phone calls at odd hours, I make it a practice (or try, at least) to turn off my email by 7PM every night. Nor will I be available for appointments on Fridays or weekends (and rarely on Thursdays), as these days I reserve for working at my home office without distraction. I ask for your understanding of this dual role, as my successful research should ultimately improve my teaching.

Accommodations for the Disabled
If you have a disability that may affect your performance in this course, please talk to me (either by email or in person) at your earliest convenience and I will make every effort to accommodate your needs. If you have not yet spoken with the appropriate Associate Dean about your disability (see http://www.bucknell.edu/x7759.xml), please do so as soon as possible. Accommodations will need to be sanctioned by their office.

Sources and Academic Honesty
Students who plagiarize or commit any other form of academic dishonesty will receive at a minimum a zero on the work in question. Action may also be taken in the Student Judicial system. In terms of citing sources and using quotations, when in doubt, cite. Unless otherwise instructed, you must include a Works Consulted/Cited page even if your only source was the primary source upon which your essay focuses. Cite correctly all materials used including primary sources, textbooks, materials from the internet, and lectures. See: http://www.bucknell.edu/x11933.xml.

Schedule of Readings: available online
The course will be roughly divided in two major thematic sections: before Spring Break, we will focus on attaining a precise and detailed understanding of the origins of ecology and evolutionary biology and how changes in these sciences have affected our conception of ourselves and the environment. After break, we’ll switch gears from science to value theory, focusing on questions about whether nature has intrinsic value, what our duties we have to protect the environment and the interests of future generations.