

## Course Information

Date Submitted: 2/2/2016

Current Prefix and Number: PHI - Philosophy , PHI 361 BIOLOGY AND SOCIETY

Other Course:

Proposed Prefix and Number: PHI 361

What type of change is being proposed?

Major Change

Should this course be a UK Core Course? Yes

U.S. Citizenship, Community, Diversity

## 1. General Information

a. Submitted by the College of: ARTS & SCIENCES

b. Department/Division: Philosophy

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead: Select...

e. Contact Person

Name: Eric Sanday

Email: [eric.sanday@uky.edu](mailto:eric.sanday@uky.edu)

Phone: 257-6540

Responsible Faculty ID (if different from Contact)

Name: Brandon Look

Email: [look@uky.edu](mailto:look@uky.edu)

Phone: 257-3071

f. Requested Effective Date

Semester Following Approval: Yes OR Effective Semester:

## 2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: N/A

b. Full Title: BIOLOGY AND SOCIETY

Proposed Title: Biology and Society: Subtitle Required

c. Current Transcript Title: BIOLOGY AND SOCIETY

Proposed Transcript Title:

d. Current Cross-listing: none

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 3

Proposed Meeting Patterns

LECTURE: 3

f. Current Grading System: ABC Letter Grade Scale

Proposed Grading System: *Letter (A, B, C, etc.)*

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? Yes

If Yes: Maximum number of credit hours: 6

If Yes: Will this course allow multiple registrations during the same semester? Yes

2i. Current Course Description for Bulletin: understanding and changing society. Emphasis is on sociobiology and the value of viewing social behavior as a product of adaptive evolution by natural selection. Representative philosophical issues include biological constraints on human nature and society, genetic engineering, reductionism, the scientific method, and bioethics.

Proposed Course Description for Bulletin: Humans, although undeniably unique, are as much a part of the natural world as any other species. This course surveys historical and contemporary approaches to the study of humans from a biological point of view. Against this backdrop, we examine a range of issues that loom large in modern society, for example, whether race and gender have a firm basis in biological science. This course is repeatable up to a total of 6 credit hours under different subtitles.

2j. Current Prerequisites, if any: A college course in biology or consent of instructor.

Proposed Prerequisites, if any: No prerequisites.

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component:

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed? Yes

If YES, explain and offer brief rationale: The existing course is being modified to conform to UK CORE specifications.

5a. Are there other depts. and/or pgms that could be affected by the proposed change? No

If YES, identify the depts. and/or pgms:

5b. Will modifying this course result in a new requirement of ANY program? No

If YES, list the program(s) here:

6. Check box if changed to 400G or 500: No

## Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10.Does the syllabus contain all the required components? NO

11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

**Course Review Form  
U.S. Citizenship/Diversity/Community**

**Reviewer Recommendation**

Accept  Revisions Needed

**Course:** PHI 361 Biology and Society

Using the course syllabus as a reference, identify when and how the following learning outcomes are addressed in the course. Since learning outcomes will likely be addressed multiple ways within the same syllabus, please identify a representative example (or examples) for each outcome.

Evidence that demonstrates student understanding of historical, societal, and cultural differences, such as those arising from race, ethnicity, gender, sexuality, language, nationality, religion, political and ethical perspectives, and socioeconomic class.

Date/location on syllabus of such evidence:  
See particularly Group Assignments: 3/24 - 4/9

Brief description or example:

Students will apply their understanding of the history and philosophy of biology to the particular problems of race and gender/sex attribution. The particular reading assignment for each group will emphasize the problem of distinguishing biological determinants from social constructs.

Materials and processes that foster student understanding of how these differences influence issues of social justice and/or civic responsibility.

Date/location on syllabus of such evidence:  
See especially Group Assignments: 4/14 - 4/21.

Brief description or example:

Students will study the patenting of life by large corporations and the effect this has on local and global food systems. Most particularly, this unit will examine the conflict between corporate interests and social good that has occurred around this issue

Readings, lectures, or presentations that encourage student s to demonstrate an understanding of historical, societal, and cultural contexts relevant to the subject matter of the course.

Date/location on syllabus of such evidence:  
See all material up to and including midterm exam, 3/10

Brief description or example:

The first half of the class presents the historical, social, and cultural context under which the major issues in biology developed and have been framed in the 20<sup>th</sup> century

Processes and assignments that engage students in understanding at least two of the following, as they pertain to the subject matter of the course:

- a. Societal, cultural, and institutional change over time
- b. Civic engagement
- c. Regional, national, or cross-national comparisons
- d. Power and resistance

Date/location on syllabus of such evidence:  
See material up to midterm exam (3/10) and group presentations on GMOs 4/14 - 4/21

Brief description or example:

The first half of the class concerns particularly the societal, cultural and institutional changes over time that have determined the course of biological thinking from its inception in ancient Greece to the modern synthesis in the early 20<sup>th</sup> century. The unit on GMOs in particular will study the concentration of economic power by corporate entities as they seek to patent highly desirable seed stocks. Also, the units on race theory and gender/sex determination will emphasize civic engagement, especially in regards to the overcoming of the biological conceptions of race and gender.

At least two assessable individual or group projects that focus on personal and/or collective decision-making. The projects should require students to identify and evaluate conflicts, compromises, and/or ethical dilemmas. These projects shall demonstrate a basic understanding of effective and responsible participation in a diverse society.

Date/location on syllabus of such evidence:

Second half of course: Group Presentations & Individual Writing Assignment of 6-8 page paper

Brief description or example:

The group presentations and individual writing assignments are specifically developed to apply the understanding of the history and philosophy of biology garnered in the first half of the class to specific social conflicts around issues of race, gender/sex, and the ownership of living organisms. The aim of these assignments is to: identify the fundamental problem, articulate the arguments presented, and explain the implicit and/or explicit ethical dilemmas surrounding these issues.

Evidence that students make effective use of library and other information sources, when applicable, in order to demonstrate information literacy in the exploration of the course's major thematic foci.

Date/location on syllabus of such an assignment:

See writing assignment, 3/12

Brief description or example:

Students will have to supplement the reading assignment for their particular group presentation by reference to a minimum of three scholarly sources relevant to the reading assigned by the professor.

Reviewer Comments:

# PHI 361: Biology and Society: (Subtitle Required)

Spring 2017

Contact Information	Required Texts
Ronald J. Planer, Ph.D ph. xxx- xxxx <a href="mailto:rjpl223@uky.edu">rjpl223@uky.edu</a>  Office Hours: Day xx:00 am - xx:00 am Day xx:00 pm – xx:00 pm  (or by appointment) Office: 14xx Patterson Office Tower	1. Laland K. & Brown G. <i>Sense and Nonsense: Evolutionary perspectives on human behavior</i> , Cambridge University Press (2 <sup>nd</sup> edition), 2011  2. Roughgarden J. <i>Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People</i> , University of California Press, 2009  All other reading will be made available via Blackboard Library

Class webpage: tba  
Blackboard page: tba

## Course Description

Humans, although undeniably unique, are as much a part of the natural world as any other species. This course surveys historical and contemporary approaches to the study of humans from a biological point of view. Against this backdrop, we examine a range of issues that loom large in modern society, for example, whether race and gender have a firm basis in biological science. This course is repeatable up to a total of 6 credit hours under different subtitles.

More specifically, we will begin the course by working through the text *Sense and Nonsense: Evolutionary perspectives on human behavior*, written by two leading evolutionary theorists. This will provide us with the foundation on which the rest of the semester will build. An important aim of this part of the course will be to demonstrate that an adaptationist approach to human cognition and behavior (i.e., one that attempts to explain the vast majority of human traits as adaptations fashioned by natural selection) is just one among many.

We will then transition, first to the topics of race, sex and gender, and then to aggression, norms, and organized punishment. As regards the former: our primary text will be *Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People*, by Joan Roughgarden. The course readings for the latter family of topics will be made up of a variety of journal articles and book chapters, all of which will be made available online. Throughout this part of the course, we will be concerned with the emergence of different

forms of social structure and power relations within groups and societies. Case studies will be drawn from a wide-variety of human cultures.

### **Learning Outcomes**

- Explain some of the different ways in which biological theory has been used throughout history to understand human behavior.
- Explain and critically assess the application of biological ideas to: (i) race; (ii) sex; (iii) gender; (iv) societal norms (e.g., norms of fairness); (v) aggression; and (vi) punishment.
- Explain and critically assess from a biological perspective the nature of social structure, including power relations and resistance.
- Articulate the extent of human cultural diversity and its sources.
- Carefully analyze and evaluate arguments.

### **Grading Structure**

A midterm exam: 25%

A final exam: 30%

One essay: 35%

In-class debate: 10%

Class participation: can positively influence grade (see below)

### **Grading Scale:**

A: 100 – 90

B: 89 – 80

C: 79 – 70

D: 69 – 60

F: 59 and below

### **Exams**

There will be two exams: a midterm and final. The midterm exam will test the student's understanding of the biological theories, ideas, and tools covered in the first half of the term. The final exam will be comprehensive. A review period will be held prior to each.

### **Analysis and Writing**

There will be one essay, 6-8 pages in length (double-spaced). The essay will be due on the final day of class (via email). Essay topics will be provided, but students are encouraged to develop their own topic. Students will turn in a brief outline (1 p.) several weeks prior the essay due date (again via email). The outline will include a list of academic resources the student plans to consult in writing the essay.

### **In-class Debate**

Students will be grouped into multiple teams for an in-class debate session. The debates will be organized around a controversial topic (e.g., the reality of race). Each team member will be expected to contribute, but one member (chosen by his or her peers) will serve as the "team leader". This individual will be tasked with summarizing the team's main points at the beginning of the debate.

### **Participation**

Students are strongly encouraged to participate in class discussion. Quality contribution will positively impact one's final grade (up to 3 percentage points). A failure to participate will not, however, lower one's final grade. Students will be expected to show respect to their peers at all times.



### Attendance

Attendance is mandatory, and will be tracked. It is expected that students will come to class having read the required material for that meeting in its entirety. Three or more unexcused absences will result in a lowering of the student's final grade by one letter grade. Excused absences will be ones resulting from serious personal or academic obligations, and documentation will be requested where appropriate. Should an excused absence coincide with one of the exams, or with the in-class debate, a make-up opportunity will be provided.

### Disability Issues

Accommodation will be provided to students with disabilities provided that they obtain a letter of accommodation from the Disability Resource Center (Rm 2, Alumni Gym, 25702754).

### Academic Integrity

Cheating, including plagiarism, will result in a failing grade for the course and may (depending on the severity of the offense) be reported to the relevant University Dean. For more details, please see:

[https://www.uky.edu/Ombud/ForStudents\\_AcademicIntegrity.php](https://www.uky.edu/Ombud/ForStudents_AcademicIntegrity.php).

### Tentative Schedule

Week	Day	Class Topic	Reading/Homework
	R	Syllabus & course overview	Syllabus
1	T	Review: Evolution by natural selection	Godfrey-Smith, "Evolution and Natural Selection"; <i>Recommended:</i> Dawkins, excerpt from <i>The Selfish Gene</i>
	R	Origins of sociobiology	Wilson, "From Sociobiology to Sociology".
2	T	Perception of Wilson's <i>Sociobiology</i>	Laland & Brown: Introduction & Ch. 1
	R	Evolutionary thinking about human behavior: past & present	Laland & Brown: Ch. 2
3	T	Natural selection and social theory	Laland & Brown: Ch. 3
	R	Natural selection and social theory	Trivers, "Reciprocal Altruism" <i>Recommended:</i> Trivers, "Parent-Offspring Conflict"
4	T	Human behavioral ecology	Laland & Brown: Ch. 4 <i>Recommended:</i> de Wall, excerpt from <i>Chimpanzee Politics</i>
	R	Evolutionary psychology	Cosmides & Tooby, "Evolutionary Psychology: A Primer"
5	T	Evolutionary psychology	Laland & Brown: Ch. 5
	R	Cultural evolution	Richerson & Boyd, excerpt <i>Not by Genes Alone</i> <i>Recommended:</i> Dawkins, excerpt from <i>The Selfish Gene</i>
6	T	Cultural evolution	Laland & Brown: Ch. 6
	R	Gene-culture co-evolution	Laland & Brown: Ch. 7 <i>Recommended:</i> Pereira et al. "lactase genes"
7	T	An integrated approach	Laland & Brown: Ch. 8

	R	An integrated approach	Sterelny, excerpt from <i>The Evolved Apprentice</i>
8	T	Midterm review	
	R	Midterm exam	
	T	Spring break	
	R	Spring break	
9	T	Race	Pigliucci & Kaplan “On the Concept of Biological Race and Its Applicability to Humans” <i>Recommended: James, “Race” (SEP Entry)</i>
	R	Race	Spencer, “A Radical Solution to the Race Problem” <i>Recommended: Hardimon, “Race Concepts in Medicine”</i>
10	T	Sex & Gender	Roughgarden, <i>Evolution’s Rainbow: Diversity, Gender, and Sexuality in Nature and People</i> (Part I) [Biological diversity]
	R	Sex & Gender	Roughgarden, <i>Evolution’s Rainbow: Diversity, Gender, and Sexuality in Nature and People</i> (Part II) [Human diversity]
11	T	Sex & Gender	Roughgarden, <i>Evolution’s Rainbow: Diversity, Gender, and Sexuality in Nature and People</i> (Part III) [Cultural diversity]
	R	In-class debate	
12	T	Aggression	Cashdan & Downes, “Evolutionary Perspectives on Human Aggression” <i>Recommended: Wilson, “Aggression”</i> Essay outline due
	R	Norms	Boehm, “The Origin of Morality as Social Control”
13	T	Norms	Nichols, “On the Genealogy of Norms” <i>Recommended: Seabright, “The Evolution of Fairness Norms”</i>
	R	Punishment	Boehm, “Costs and Benefits in Hunter-Gather Punishment” <i>Recommended: Boehm, excerpt from Hierarchy in the Forest</i>
14	T	Punishment	Nakao & Machery, “The Evolution of Punishment”
	R	Review for final exam	Essay due