Course description: Examination of current research on the relationship between evolutionary biology and culture. Topics include animal culture studies, cultural transmission theory, gene-culture coevolution, and the application of signaling theory to human cultural phenomena.

Course objectives: After taking this course, students will be able to

- Understand the differences between pre-Darwinian and Darwinian approaches to biological and cultural evolution.
- Know what is meant by an “ideational” definition of culture and appreciate the reasons why evolutionary anthropologists favor such a definition.
- Understand and be able to recognize and apply the main types of cultural transmission.
- Understand and be able to provide some examples of gene-culture coevolution.
- Appreciate the important role that maladaptive behaviors play in research on cultural transmission.
- Apply basic principles of signaling theory, including honest signaling theory and receiver psychology, to both human and nonhuman signals.

Readings: Required readings are listed below in the weekly schedule. All required readings are all available online through this class’s Sakai site (http://sakai.rutgers.edu). You might also want to read two optional books:


Exams: There will be two exams. Both will be a mixture of short answer and essay questions. The first exam will cover the first half of the course and the second will cover the second half. Each one will be worth one third of your grade for the semester. Although the second exam will not be cumulative, your grade on it will certainly be improved if you remember material covered...
during the first half of the semester. Review sheets for the exams will be distributed through the class web site.

**Make-up exams:** You are required to take the exams at the regularly scheduled times. Make-up exams will be given only to those students who are able to provide well-documented written excuses that have been approved in writing by an appropriate college dean. Legitimate excuses are limited to your own serious illness, family emergencies, and religious observances. Arrangements for make-ups should be made as soon as possible after you have missed an exam.

**Exercises:** Over the course of the semester you are to complete five exercises. A list appears at the end of this syllabus. The five exercises taken together will make up one third of your grade for the semester.

**Evaluation:** Grades will be assigned according to the usual system of ten percentage points per passing grade (A = 90 - 100%, B+ = 88 - 89%, B = 80 - 87%, C+ = 78 - 79%, C = 70 - 77%, D = 60 - 69%, F = 0 - 59%).

**Course outline and reading assignments:**

**Week 1 (Thursday 1/21):** Introduction.

**Week 2 (Monday 1/25 and Thursday 1/28):** A brief history of thought on evolution and culture.


**Week 3 (Monday 2/1 and Thursday 2/4):** What is culture?


**Week 4 (Monday 2/8 and Thursday 2/11):** The relationship between culture and behavior


**Week 5 (Monday 2/15 and Thursday 2/18):** Cultural evolution and cultural transmission


**Week 6 (Monday 2/22 and Thursday 2/25):** Cultural transmission, continued.

**Week 7 (Monday 3/1 and Thursday 3/4):** Cultural adaptations and maladaptations; gene-culture coevolution


**Week 8 (Monday 3/8 and Thursday 3/11):** Cultural phylogenies (Monday) and first exam (Thursday).


**Week 9 (Monday 3/22 and Thursday 3/25):** Signaling theory.


**Week 10 (Monday 3/29 and Thursday 4/1):** Applications of signaling theory.

**Week 11 (Monday 4/5 and Thursday 4/8):** Applications of signaling theory, continued. Monday: Guest lecture by Dr. Montserrat Soler on costly signaling and cooperation in Candomble, an Afro-Brazilian religion. The guest lecture may be given in a room different from our usual classroom. Listen in class for details.

**Week 12 (Monday 4/12 and Thursday 4/15):** Evolutionary perspectives on morality, religion, and aesthetics.
Week 13 (Monday 4/19 and Thursday 4/22): Evolutionary perspectives on morality, religion, and aesthetics, continued.

Week 14 (Monday 4/26 and Thursday 4/29): Evolutionary perspectives on morality, religion, and aesthetics, continued; review for second exam.


Week 15 (Monday 5/3): Second exam (may also be taken at the regular final exam time for this class: Tuesday, May 11, 2010, at 8pm).

**Exercises:**

All exercises are due at the beginning of class on the second day of class in the week indicated. The final exercise is due on the last day of class. Essays should be about three typed, double-spaced pages long, with one inch margins, page numbers, and a font no smaller than 11 and no larger than 12 points. Hard copies only are accepted, and they may be turned in only in class.

Ten exercises are listed below; you should select five of them to do. Note that not all weeks are associated with exercises. Plan ahead which exercises you will do in order to complete this part of the course. Waiting until the last five weeks is a poor strategy since many of those weeks have no exercises. Turning in papers late is also inadvisable because a full letter grade will be taken off for every business day that a paper is late. Rather than turn in a late paper, try to do another exercise from the list and turn it in on time.

**Week 4:** Find an example of someone using the word “culture” in popular discourse (e.g., a newspaper or magazine article; online resources like LexisNexis may be helpful in finding one). Compare the ways in which the writer is using the term with the ways in which anthropologists have defined it, as discussed in class and described in your readings.

**Week 5:** Observe an individual squirrel or other wild animal for between fifteen and thirty minutes. Take notes on what it does during that time, and identify a single specific behavior of interest. Pretend that all you know about squirrels comes from this brief period of observation and consider the behaviors you have identified. Are those behaviors products of culture? On what do you base your answer? If you cannot provide a confident answer, what more information you would need in order to do so?

**Week 6:** Go to a public place, identify a single individual, and observe his or her behavior for between fifteen and thirty minutes. Take notes on what the person does and identify a single specific behavior of interest. Pretend that all you know about humans comes from this brief period of observation and consider the behaviors you have identified. Are those behaviors products of culture? On what do you base your answer? If you cannot provide a confident answer, what more information you would need in order to do so?

**Week 7:** Identify a skill, belief, or other cultural trait that you have and that you acquired from one of your parents. Write an essay describing how you acquired that trait, what if anything you have done to make it spread beyond yourself, and what you know about its pattern of...
transmission before it reached you. Relate your description of the trait and its pattern of transmission to cultural transmission theory as described in class and in the readings.

**Week 8:** Identify a skill, belief, or other cultural trait that you acquired from a peer rather than from a parent or other relative. Write an essay describing how you acquired that trait, what if anything you have done to make it spread beyond yourself, and what you know about its pattern of transmission before it reached you. Relate your description of the trait and its pattern of transmission to cultural transmission theory as described in class and in the readings.

**Week 10:** Identify and observe a publicly broadcast signal (e.g., an advertisement, a speech given by a politician, a sign or other sort of public announcement). Consider the signaler, the intended receiver, and the intended effect of the signal on the receiver’s behavior. Compare the signal to the theories of signaling discussed in class and in the readings. Does the signal appear to have been designed with the receiver’s psychology in mind? Is there a potential for a conflict of interest between the signaler and the receiver, and, if so, does the signal design reflect that potential? Is the signal costly in any way? Is the honesty or accuracy of the signal assured in any way?

**Week 11:** First, identify two classes of individuals that routinely send signals to one another (males and females, parents and children, teachers and students, merchants and shoppers, etc.). Second, consider the potential for conflicts and confluences of interests between those classes of signaler and receiver. Third, go to a public place and observe interactions and signaling between individuals belonging to the two classes (e.g., parents and children on a public playground). Finally, relate your observations back to the theories of signaling discussed in class and in the readings.

**Week 12:** As discussed in class, one way to get a handle on the strategies and tactics of signalers is to look for audience effects. To explore this, go to a bookstore and buy two magazines, one aimed primarily at men and another aimed primarily at women. Select magazines that contain advertisements for the exact same product or very similar products (e.g., two different brands of antiperspirant or toothpaste). Compare and contrast the advertisements in the two magazines. Do their similarities or differences reflect something about their intended audiences? Do they provide different or similar sorts of information about the product?

**Week 13:** Choose a particular example of expressive culture (e.g., a book, a movie, a TV show, a song, a type of music, or a piece or type of visual art). Write an essay that examines it in light of the evolutionary theories of aesthetics and cultural production discussed in class and described in the readings. Who produces it? Who is the intended audience? Who is the actual audience? What does the audience find appealing or attractive about it? Does it affect different types of people, such as males and females, differently?

**Week 14:** Attend a service, ceremony, or other event sponsored by a religious group. It must be an event that is open to the public, not only to members or believers, and that can be described to outsiders without violating the rules of the religious group in question. You may attend the event in question at any time during the semester. Write an essay comparing it and contrasting it to the evolutionary theories of religion discussed in class and in the readings, focusing in particular on the idea that religious rituals are hard-to-fake signals of commitment to a group. You may attend an event conducted by practitioners of any religion, including one with which you are familiar,
though the most impressive essays are likely to be written by students who chose to attend events sponsored by religions with which they are relatively unfamiliar.