

**HBIO 300: Evolution, Ecology, and Culture**  
Mondays 4:00 – 6:50 pm

**Note: This course will be held online in Fall 2020. The syllabus provides an overview of course content, but is subject to revision as it is adapted for online instruction.**

**Instructor:** Maureen McCarthy, PhD  
**Office Hours:** By appointment, via Zoom  
**Email:** [msmccart@usc.edu](mailto:msmccart@usc.edu)  
**Website:** <https://blackboard.usc.edu>

**Course Description:** This course provides a comprehensive overview of how biological, cultural, and environmental influences interact in making us human. It considers the extent to which we can use Darwinian theory in achieving a better understanding of human behavior. We begin with a fundamental premise: that human social behavior is the outcome of a complex interplay between our biology, molded by millennia of natural selection, mediated by the environment to which we have adapted at various stages during our evolution, and filtered through a complex web of cultural factors. We cannot truly separate the intricate braid of human biology and human culture. We can, however, ask what the causes and consequences of this interplay may be. This can be done not only for people living in traditional hunter-gatherer societies, but also for ourselves in contemporary western culture. We will examine several topics for background material: the evidence for human origins, fossils and the social behavior and culture in some of our closest relatives. Turning to human societies, we will consider the biological and cultural underpinnings of the human diet, our closest extinct relative, race, religion, and extinction.

A major goal of the course is to teach students how to create and present a professional PowerPoint lecture, a skill useful to any career, and how to write a paper synthesizing concepts, a skill that is particularly important for a research career. The time requirements for this course will be substantial because students will be reading and presenting on the class readings, and also will engage in producing a paper and PowerPoint. Because taking interest in other students' ideas and findings through discussion is felt to be an important aspect of learning in a class that is devoted to research, a very heavy weighting will be placed on online class attendance, participation in discussion, and efforts to make PowerPoint presentations interesting and clear.

**Learning Objectives:**

- to demonstrate an integrative understanding of the interactions between human biology, the human mind, social interactions, and the environment in defining the human experience
- to identify mechanisms by which human societies evolve and diverge, and the role of cultural variation in human diversity
- to describe the biological underpinnings of aspects of human societies, including human diet, aggression, cooperation, and religion, using a scientific approach
- to discuss these topics critically, make effective PowerPoint presentations, and write a paper that synthesizes key concepts

**Required Books:**

1. *Not by Genes Alone* by Peter Richerson and Robert Boyd (1st edition, 2006, ISBN: 978-0226712123)
2. *Hunting Apes* by Craig Stanford (1st edition, 2001, ISBN: 978-0691088884)
3. *Demonic Males* by Richard Wrangham and Dale Peterson (1st edition, 1997, ISBN: 978-0395877432)
4. *The Blank Slate* by Stephen Pinker (Reprint edition, 2003, ISBN: 978-0142003343)
5. *Guns, Germs, and Steel: The Fates of Human Societies* by Jared Diamond (20th anniversary edition, 2017, ISBN: 978-0393354324)

**Grading:***Book discussion*

|                         |     |
|-------------------------|-----|
| Book discussion handout | 10% |
| Presentation            | 15% |
| Discussion moderation   | 15% |

*Class participation* 20%

*Final project*

|                                    |     |
|------------------------------------|-----|
| Topic choice, outline, paper draft | 15% |
| Final paper                        | 25% |

**Book discussions:** Four books (#2-5 above) will be split among groups of 2-3 people, with each group tackling a section of the book. Your group will be responsible for summarizing and leading a discussion of the assigned book chapters. All students are expected to contribute to the book discussion by reading all assigned chapters. Book discussion sessions have three components:

(1) Each group should create a **book discussion handout** that will be provided to the class before discussions. This 1-2 page handout can include discussion questions, a brief overview of the assigned book chapters, summary bullet points, etc. These will be due 2 days before your scheduled discussion (to be posted on Blackboard).

(2) Each group should create a **PowerPoint presentation** to summarize key points and present the material related to their chapters. Group members can either co-present a single presentation together, or can split the material into smaller presentations, with each person presenting a portion of the material. (We will discuss presentation expectations in more detail at the beginning of the course.)

(3) During your scheduled book discussion, your group will review the content of the book chapters and **moderate a discussion** about the content. You should offer your critical evaluations of the reading. When applicable, your critique may include additional support, evidence-based rebuttal, alternative scholarly views and supporting evidence, etc. You are encouraged to come up with fun and creative ways to present and discuss the material – create an oral quiz or game, discuss how the book might relate to current world topics, etc.

In addition, everyone will be graded on their **participation** during discussions. All students are expected to attend each online class, read the assigned material, and participate meaningfully.

**Final project:** The final project will allow you to explore a topic in more depth. This topic can be related to the content of your book discussion moderation if you want, but should not be the same material. This project should also bring together major themes explored in the course. You should be able to coherently demonstrate how your particular topic ties into those major themes. Work on this final project should take place over the course of the semester. You will be instructed on choosing a topic, outlining the project, and turning in an initial draft of the final paper, and each of these assignments will be graded and reviewed. Final papers should be between 5 and 10 typed pages long (not including references), double-spaced, with 1-inch margins on all sides. You should include at least 4 primary references in addition to course materials.

**Grading:** Grades are based on the following traditional grading scale, and are not rounded up:

A ≥94%, A- ≥90%, B+ ≥87%, B ≥84%, B- ≥80%, C+ ≥77%, C ≥74%, C- ≥70%,  
D+ ≥67%, D ≥64%, D- ≥60%, F ≤59.9%

**Missed/late assignments:** Regular discussion participation by everyone is an essential component of the course; unexcused absences for presentations or book discussion moderation will result in a zero. A make-up assignment may be permitted in cases of excused absences. Final projects received up to one week late will receive a penalty of 10% per day applied to the final project grade. Students who submit the project more than one week late will receive a grade of 0 unless they have made prior arrangements with the instructor.

**Course Schedule** (*Subject to revision*)

| <b>Date</b>   | <b>Topic*</b>  | <b>Readings**/Assignments Due</b>   |
|---|--|---|
| Aug. 17   | Intro to the course and presentation resources   |   |
| <b>Part 1 - Principles of Evolution and Culture</b>           |  |   |
| Aug. 24   | Book discussion: <i>Not by Genes Alone</i> Chs. 1-3;<br>Human evolution and cultural evolution | <i>Not by Genes Alone</i> Chs. 1-3;<br><b>Topic and group choices due</b>       |
| Aug. 30   | Book discussion: <i>Not by Genes Alone</i> Chs. 4-7;<br>Human evolution and cultural evolution | <i>Not by Genes Alone</i> Chs. 4-7  |
| Sept. 7   | Labor Day - no class   |   |
| <b>Part 2 - Human Evolution and Great Ape Models</b>          |  |   |
| Sept. 14  | Book discussion: <i>Hunting Apes</i>   | <i>Hunting Apes</i>   |
|   | Hunting and diet   |   |
| Sept. 21  | Book discussion: <i>Demonic Males</i> Chs. 1-6   | <i>Demonic Males</i> Chs. 1-6   |
|   | Great ape behavioral diversity and culture;<br>Discussion about final projects                 |   |
| Sept. 28  | Book discussion: <i>Demonic Males</i> Chs. 7-13  | <i>Demonic Males</i> Chs. 7-13;<br><b>Final project outline due</b>             |
|   | Human aggression, warfare, and cooperation   |   |
| <b>Part 3 - Biocultural Approaches to the Human Condition</b> |  |   |
| Oct. 5  | Book discussion: <i>The Blank Slate</i> Chs. 1-7   | <i>The Blank Slate</i> Chs. 1-7   |
|   | Nature, nurture, and the human experience  |   |
| Oct. 12   | Book discussion: <i>The Blank Slate</i> Chs. 8-15  | <i>The Blank Slate</i> Chs. 8-15  |
|   | Insights in human behavior, ecology, and culture   |   |
| Oct. 19   | Book discussion: <i>The Blank Slate</i> Chs. 16-20 +<br>Final Chs.                             | <i>The Blank Slate</i> Chs. 16-20 +<br>Final Chs.                               |
|   | Insights in human behavior, ecology, and culture   |   |
| Oct. 26   | Book discussion: <i>Guns, Germs, &amp; Steel</i> Chs. 1-7                                      | <i>Guns, Germs, &amp; Steel</i> Chs. 1-7;<br><b>Final paper first draft due</b> |
|   | Geography and culture  |   |
| Nov. 2  | Book discussion: <i>Guns, Germs, &amp; Steel</i> Chs. 8-14                                     | <i>Guns, Germs, &amp; Steel</i> Chs. 8-14                                       |
|   | Religion and civilizations   |   |
| Nov. 9  | Book discussion: <i>Guns, Germs, &amp; Steel</i> Chs. 15-20<br>+ Final Chs.                    | <i>Guns, Germs, &amp; Steel</i> Chs. 15-<br>20 + Final Chs.                     |
|   | Course wrap-up   |   |
| Nov. 16   |  | <b>Final paper due</b>  |

\* Yellow-shaded topics indicate student-led discussions; blue-shaded topics will be presented by Dr. McCarthy.

\*\*Additional readings may be assigned occasionally for some classes. You will be notified about these and they will be posted on Blackboard at least one week in advance of the class for which they are assigned.

## USC's Statements on Academic Conduct and Support Systems

### Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" [policy.usc.edu/scampus-part-b](https://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, [policy.usc.edu/scientific-misconduct](https://policy.usc.edu/scientific-misconduct).

### Support Systems:

*Counseling and Mental Health - (213) 740-9355 – 24/7 on call*  
[studenthealth.usc.edu/counseling](https://studenthealth.usc.edu/counseling)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call*  
[suicidepreventionlifeline.org](https://suicidepreventionlifeline.org)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press "0" after hours – 24/7 on call*  
[studenthealth.usc.edu/sexual-assault](https://studenthealth.usc.edu/sexual-assault)

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

*Office of Equity and Diversity (OED) - (213) 740-5086 | Title IX – (213) 821-8298*  
[equity.usc.edu](https://equity.usc.edu), [titleix.usc.edu](https://titleix.usc.edu)

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

*Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298*  
[usc-advocate.symplicity.com/care\\_report](https://usc-advocate.symplicity.com/care_report)

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

*The Office of Disability Services and Programs - (213) 740-0776*  
[dsp.usc.edu](https://dsp.usc.edu)

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

*USC Campus Support and Intervention - (213) 821-4710*

[campussupport.usc.edu](http://campussupport.usc.edu)

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity at USC - (213) 740-2101*

[diversity.usc.edu](http://diversity.usc.edu)

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*

[dps.usc.edu](http://dps.usc.edu), [emergency.usc.edu](http://emergency.usc.edu)

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call*

[dps.usc.edu](http://dps.usc.edu)

Non-emergency assistance or information.

*Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)*

[ombuds.usc.edu](http://ombuds.usc.edu)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.