HON 394
EVOLUTION AND THE MONOTHEISTIC TRADITIONS:
PERSPECTIVES, INTERPRETATIONS, INTERACTIONS

Dr. John M. Lynch
Office: Sage Hall (South) 167
Phone: (480) 727-7042
Email: john.lynch@asu.edu
Office Hours: TTh, 10:00 – 11:30 or by appointment.

Dr. Joel Hunter
Office: Sage Hall (South) 152
Phone: (480) 727-7039
Email: joel.hunter@asu.edu
Office Hours: TTh, 9:30 – 11:30 or by appointment.

Meeting Location: Sage 242

Meeting Time: Fri 10:30 am—1:30 pm

Course Description:

This interdisciplinary seminar will examine the science of evolution in its theory and practice. Topics will include common descent, natural selection and other evolutionary mechanisms, contingency, human evolution, and the evolution of the human world (culture, morality, religion). We will also investigate the various responses to each of these issues from the monotheistic traditions, with a particular emphasis on traditionalist Judaism. This course will be a unique exploration of these interchanges for we will be looking at the ways in which traditional religions as lived, concrete, experiential realities are understood from an evolutionary perspective as well as how the findings of evolutionary science are significant to concrete religious life. Throughout the course, emphasis will be placed on how evolutionary theories are constructed and how multiple forms of evidence (genetic, morphological, fossil, behavioral) are used to test evolutionary hypotheses. Students who are not science majors will get a solid grounding in how science is practiced and those that are science majors will get the opportunity to examine how non-scientific fields interact with scientific claims.

Students will:

♦ engage with evolutionary biology and related areas
♦ examine this literature within historical and philosophical context
♦ produce a substantial research paper and presentation

Skills/Outcomes:

♦ broadening of scientific knowledge and historical/philosophical awareness,
♦ cultivation of multi- and inter-disciplinary perspectives
♦ development of frameworks for self-directed learning and working within a pluralist
society
♦ improvement of skills in close reading, critical discussion and evaluation & construction of oral and written arguments
♦ development of academic paper from prospectus through literature review to final analytical paper
♦ presentation of research in verbal & visual form

The latter two outcomes are particular valuable for honors students as they will aid your development, completion and presentation of an honors thesis. Indeed, it may be that you can develop a thesis from the work done in this course. If this interests you, both instructors are happy to discuss this.

Texts:

Required to purchase:

Zimmer, Carl. The Tangled Bank: An Introduction to Evolution. Greenwood Village, CO: Roberts and Co, 2010. This is a textbook aimed at non-majors and will be used as the framework for our discussions of evolution. Material here will be supplemented with in-class lectures and additional readings.

Required—electronic copies provided

These readings will be available on BlackBoard and must be printed out (and read!) before the class period in which they will be discussed.

Recommended: additional readings are provided in the Bibliography at the end of this syllabus. Students will find these helpful resources for their research papers. In addition, extracts from these works will be assigned as weekly readings as needed.

Assignments:

Discussion and in-class participation (35%)

Participation in discussions 25
Engagement with peer presentation 5
Presentation of own research 5

Writing (65%)

Self-reflection 5
Research prospectus 10
Annotated bibliography 20
Abstract for presentation 0
Analytical research paper 30

Late assignments will only be accepted with 24 hours notice and a valid, documentable excuse. Otherwise you will receive a zero for the assignment. The late assignment will count as an
excused absence (see below).

The Barrett Writing Center will be available during the semester to assist students with their papers for all their classes. Directed by BHC faculty and staffed by writing tutors who themselves have completed writing-intensive honors courses, the Center offers individual tutoring on writing papers. See http://barretthonors.asu.edu/academics/barrett-writing-center/ for further details.

Letter grades (no plus/minus) will be posted following finals week. No extra credit assignments will be available.

Miscellaneous Policies and Procedures

Attendance: In accordance with Barrett policy, you are allowed one absence (excused or otherwise) without penalty. Two absences will result in loss of 10% from your final grade (i.e. a B will become a C); three absences will result in a zero for participation. Note that arriving late for class or not bringing your assigned reading to class both count as an absence.

Plagiarism: You are obviously expected not to engage in any form of plagiarism, which according to the ASU Student Code of Conduct, means representing the words or ideas of another as one’s own. Plagiarism is an act of fraud - it involves both stealing someone else’s work and lying about it afterward. Note, that for an act to count as plagiarism, the representation does not have to be intentional. See http://provost.asu.edu/academicintegrity for ASU policies regarding academic dishonesty. While we will not be enacting Dante’s punishment for fraud, as a minimum punishment, detection of plagiarism will result in failure of the course (with an XE grade) and thus expulsion from Barrett. An ‘XE’ grade on your transcript denotes failure due to academic dishonesty and will preclude you from entry into any reputable graduate or professional school. The bottom-line is, DON’T PLAGIARIZE!

Grade Appeals: Grades can only be contested in writing (not by e-mail). Please enclose all relevant material (i.e. the assignment as it was returned to you) with your appeal, which should engage the comments, and criticisms we have made. Avoid claiming that because you worked hard, you deserve an ‘A’ – it is assumed that you worked hard. In case of further action, you are directed to the “Procedure on Student Academic Grievances” that is available on the Barrett website.

Incomplete: The grade of “I” (Incomplete) can only be given when a student, who while doing otherwise acceptable work, is unable to complete a course (i.e. in this case the final paper) because of illness or another condition beyond their control. Documentation of this is required before the assignment is due. The course withdrawal deadline is November 7th while the complete session withdrawal deadline is December 11th.

Cell Phones: We switch our phones off when we come to class; you should do so as well. If you’d rather be texting or surfing the Internet while class is in session, please do so elsewhere.

Food: In accordance with ASU policy, eating will not be allowed in the classroom as it distracts others.
E-mail: Please ensure your ASU mailbox (or wherever it is being forwarded to) is not full. If an email gets returned, we will not attempt to resend the message. It is your responsibility to ensure that communication is possible.

If you have not received a reply to an email within two working days (i.e., excluding weekends), please resend the message. We generally do not deal with email outside of normal workday hours (i.e. outside M-F, 9 to 5).

Respect for Diversity: Barrett is committed to creating a diverse learning environment, which is broadly defined as a place where cultural diversity is valued and respected. We hope that you will contribute your unique perspectives to this effort by respecting others’ identities and personal life histories and by considering and raising issues as appropriate to course content.

Last Word: Please read this syllabus carefully. By attending the next class you declare that you have read and understood all the above and associated documents in the course reader. We, for our part, will attempt not to change any of the major policies or deadlines without sufficient due notice and discussion with the class as a whole.
Schedule:

Each class is three hours in duration, the latter portion of which will often be dedicated to setting up the scientific issues to be discussed the following. Thus, missing one week will greatly affect your ability to participate in the following week’s discussion (which will occupy us for the first half of the course).

Readings will be added on a weekly basis based on the direction our discussions are taking and will be announced at least a week before they must be completed.

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<th>Session</th>
<th>Date</th>
<th>Theme</th>
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| 1       | Aug 24 | Introduction to the Class  
Discussion of our goals and expectations. This and the next three classes will set the historical, philosophical and theological framework for our examination of the scientific evidence (starting in week 5)  
Viewing: Darwin and the Tree of Life  
A short (59min) BBC documentary from 2009 that examines some of Darwin’s ideas |
| 2       | Aug 31 | A Brief History of Evolutionary Thought (JML)  
Examination of the development of evolutionary theory from pre-Darwinian foundations through Darwinism and on to modern formulations. Emphasis will be placed on how theory formation and testing has been made more rigorous over this development.  
Self-reflection due |
| 3       | Sep 7  | The Major Monotheistic Traditions and Science (JBH)  
Examination of the tenets of the monotheistic traditions and how they have led to specific forms of engagement with scientific theory and practice. Emphasis will be placed on traditionalist Judaism. |
| 4       | Sep 14 | A Brief History of Philosophical and Theological Responses to Evolution (JBH)  
Examination of how major faiths have responded to evolutionary theory in general. Responses to specific claims will be examined in subsequent weeks – the goal here will be to develop a general framework for understanding. |
| 5       | Sep 21 | The Tree of Life and Common Descent  
Examination of the evidence for common descent. Paleontological, molecular and morphological evidence will be discussed as will the methods by which phylogenies are constructed and tested. Specific examples may include the evolution of whales |
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<td>6</td>
<td>Sep 28</td>
<td>Responses to Common Descent</td>
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<td>Discussion of the theological and philosophical responses to the previous week’s claims.</td>
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<td>Evolutionary Mechanisms</td>
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<td>Examination of major mechanisms (of which natural selection is only one) proposed for evolutionary change. Discussion of the implications of these mechanisms for teleology, purpose and contingency in the development of life on earth.</td>
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<td>Research Prospectus due</td>
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<td>7</td>
<td>Oct 5</td>
<td>Responses to Evolutionary Mechanisms</td>
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<td>Discussion of the theological and philosophical responses to the previous week’s claims.</td>
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<td>The Evidence for Human Evolution</td>
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<td>Examination of the paleontological, molecular and morphological evidence for human evolution.</td>
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<td>Oct 12</td>
<td><strong>No class – Fall break</strong></td>
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<td>Oct 19</td>
<td>Responses to Human Evolution</td>
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<td>Discussion of the theological and philosophical responses to the previous week’s claims.</td>
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<td>Cultural Evolution</td>
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<td>Examination of the proposed mechanisms for the evolution of culture and how these do – and do not – fit within a Darwinian paradigm.</td>
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<td>9</td>
<td>Oct 26</td>
<td>Responses to Cultural Evolution</td>
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<td>Discussion of the theological and philosophical responses to the previous week’s claims.</td>
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<td>Evolution of Morality</td>
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<td>Examination of the evidence for the evolution of human morality from non-human traits. Discussion of reciprocal altruism, kin selection, group selection, etc.</td>
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<td><strong>Annotated Bibliography due</strong></td>
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<td>10</td>
<td>Nov 2</td>
<td>Responses to Evolution of Morality</td>
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<td><em>Discussion of the theological and philosophical responses to the previous week’s claims.</em></td>
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<td>Evolution of Religion</td>
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<td><em>Examination of some current theories as to the evolution of religious beliefs and practices in general.</em></td>
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<td>11</td>
<td>Nov 9</td>
<td>Responses to Evolution of Religion</td>
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<td><em>Discussion of the theological and philosophical responses to the previous week’s claims.</em></td>
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<td>Workshop: Research Projects and Presentations</td>
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<td><em>Discussion of best practices as to the verbal and written presentation of original research.</em></td>
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<td>12</td>
<td>Nov 16</td>
<td>Judaism, Evolutionary Psychology &amp; Sociobiology</td>
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<td><em>Examination of recent scholarship that has used EP and sociobiology to explain specific Judaic practices and traditions.</em></td>
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<td>Nov 23</td>
<td><strong>No Class—Thanksgiving</strong></td>
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<td>Nov 28</td>
<td><strong>Abstract of research presentation due</strong></td>
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<td>13</td>
<td>Nov 30 &amp; Dec 1</td>
<td><strong>Research Presentations</strong></td>
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<td>14</td>
<td>Dec 7</td>
<td>Final Discussion</td>
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<td>Dec 14</td>
<td><strong>Research Paper due</strong></td>
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Bibliography:

Evolution (works marked * are particularly accessible to non-majors)


Science and Religion


History and Philosophy of Evolutionary Biology


