Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. This request is submitted by the Department of ____________

2. Course prefix, number and complete title of course: ____________

3. Course description (not to exceed 50 words): Examination of core concepts and theories in evolutionary biology and paleoanthropology, including human evolution, the species concept, and the role of the human fossil record.

4. Prerequisite(s): ____________

Cross-listed with:

Cross-listed courses require the signature of both department heads.

5. Is this a variable credit course? □ Yes □ No If yes, from _______ to _______

6. Is this a repeatable course? □ Yes □ No If yes, this course may be taken _______ times.
Will this course be repeated within the same semester? □ Yes □ No

7. Has this course been taught as a 489/689? □ Yes □ No If yes, how many times? 1
Indicate the number of students enrolled for each academic period it was taught. 5 students, Spring 2006

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

M.A. and Ph.D. in Anthropology or related disciplines

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix Course # Title (excluding punctuation)

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<thead>
<tr>
<th>Lec.</th>
<th>Lab</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
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Approval recommended by:

Head of Department ____________ Date ____________

Chair, College Review Committee ____________ Date ____________

Head of Department (if cross-listed course) ____________ Date ____________

Dean of College ____________ Date ____________

Submitted to Coordinating Board by:

Dean of College ____________ Date ____________

Associate Director, Curricular Services ____________ Date ____________

Effective Date ____________

Questions regarding this form should be directed to Sandra Williams at 845-8201.
Curricular Services – 11/07
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. This request is submitted by the Department of
   Anthropology

2. Course prefix, number and complete title of course:
   ANTH 648 Issues in Human Evolutionary Theory

3. Course description (not to exceed 50 words):
   This course examines concepts in evolutionary biology that are essential for understanding the interpretive framework in which paleoanthropology occurs. Issues such as the species concept are studied in the context of the human fossil record. The goal is to provide a graduate-level understanding of issues in evolutionary and paleoanthropological theory.

4. Prerequisite(s):
   Graduate standing.

5. Is this a variable credit course? □ Yes □ No
   If yes, from ________ to ________

6. Is this a repeatable course? □ Yes □ No
   Will this course be repeated within the same semester? □ Yes □ No
   If yes, this course may be taken ________ times.

7. Has this course been taught as 489/689? □ Yes □ No
   Indicate the number of students enrolled for each academic period it was taught. __ students, Spring 2006
   If yes, how many times? ________

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g.; B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g.; M.S., Ph.D. in geography)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix Course # Title (excluding punctuation):
    ANTH 648 Issues in Human Evolutionary Theory

    Lect. Lab SUIH CIP and Fund Code Admin. Unit Acad. Year EUC Code
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    Approval recommended by:
    Head of Department: [Signature] 9-25-08
    [Signature] 10-7-08
    Chair, College Review Committee
    Date
    Dean of College
    Date
    Dean of College
    Date
    Submitted to Coordinating Board by:
    Associate Director, Curricular Services
    Date
    Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201.
Curricular Services – 11/07
ANTH 648 Issues in Human Evolutionary Theory  
Spring 2008  
Tuesday 12:45-3:35 ANTH 2446

Instructor: Dr. Sheela Athreya  
Email: athreya@tamu.edu  
Office: Anthropology Building Room 316E  
Office Hours: Th 1-3 or by appointment

COURSE DESCRIPTION  
This course provides an in-depth background to the concepts in evolutionary biology and human evolution theory that are essential for an understanding of the interpretive framework in which paleoanthropology occurs. It takes subjects that have been introduced in other physical anthropology or biology courses, and discusses them from a theoretical perspective as they are applied to the study of human evolution. These include considerations of the species concept and the evolution of “intelligence” in the context of the human fossil and archaeological record. The goal is to provide students with a graduate-level course intersecting issues in evolutionary and paleoanthropological theory.

PREREQUISITE: Graduate Standing

LEARNING OUTCOMES  
By the end of the course, students will be able to:  
1. Understand the principles of evolutionary theory and its implications for research in paleoanthropology.  
2. Apply evolutionary theory to interpreting critical developments in hominin evolution.

COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>January 7</td>
<td>The history of evolutionary thought</td>
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<tr>
<td>Week 2</td>
<td>January 24</td>
<td>The species concept</td>
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<tr>
<td>Week 3</td>
<td>January 31</td>
<td>Processes of speciation: tempo and mode in evolution</td>
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<tr>
<td>Week 4</td>
<td>February 7</td>
<td>Critique of the adaptationist paradigm</td>
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<tr>
<td>Week 5</td>
<td>February 14</td>
<td>Units of selection—what is a character?</td>
</tr>
<tr>
<td>Week 6</td>
<td>February 21</td>
<td>Systematics: principles and practice (cladistics, phenetics)</td>
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ESSAY 1 DUE: Applying phylogenetic methods to early hominin evolution

| Week 7 | February 28 | Shapers of morphology                                                |
| Week 8 | TBA          | Interpreting the significance of morphological variation            |

ESSAY 2 DUE: How many species?  
March 14  
Spring Break

| Week 9 | March 21   | Primate behavior and modern day hunter-gatherers: models of early hominin adaptations |
| Week 10| March 28   | Narratives of human evolution: bipedalism, gender and subsistence in evolutionary models |
| Week 11| April 4    | Genes, population history, and population structure                 |

ESSAY 3 DUE: Reconstructing population history: gene trees vs paleodemography

| Week 12| April 11   | Population dispersals, migrations, and range expansions              |
| Week 13| April 18   | Hybridization models and their applicability to the Modern Human Origins question |
| Week 14| April 25   | From brain to behavior: inferring intelligence and symbolism from the paleoanthropological record |

FINAL PAPERS DUE AT 12:00 NOON ON FRIDAY MAY 5TH


**Requirements and Grading:**

Grades for this class will be based on class participation, three short (5-page) essays and a final term paper. Grades will be calculated as follows:

- Participation and discussion: 25%
- Essays: 10% each; 30% total
- Final paper: 45%

**Grading Scale:**

Letter grades for the course will be assigned as follows:

- A = 100-90%
- B = 89-80%
- C = 79-70%
- D = 69-60%
- F = <60%

**Participation and discussion:** This class will be conducted as a seminar. There will be little to no formal lecture. The three hours will be spent on discussing your questions about and responses to the readings. Therefore, attendance, preparation of weekly reading assignments, and active participation in classroom discussion are essential for success in this course. Articles are available in two locations: the e-reserves service of the library (http://ereserves.tamu.edu) or the WebCT site: (https://webctvista.tamu.edu). Your grades will also be available on WebCT.

i. **Weekly Reaction Papers**—Each week you will be expected to prepare and submit a reaction paper. This is a 2-3 page response to the week’s readings incorporating your questions, application to your own background/research interests, and demonstrating that you were able to link, compare, and contrast ideas in the readings to each other. You will be given a handout with more information on the specifics of this weekly assignment in class. The point is to assist you in developing critical thinking skills. At the beginning of each class we will go around the room and you will highlight the main points in your reaction paper and get your classmates’ responses and thoughts on them. The week that an essay is due, you will not have to turn in a reaction paper. Your essays will take its place those weeks.

ii. **Leading class discussion**—Each of you will be responsible for leading the class discussion one time this semester. You will meet with me beforehand and we will go over the relevance and application of the readings as well as guidelines on how to lead a productive class discussion in order to help you prepare for your role as discussion leader. Your reaction paper will be used as a jumping off point to tie the readings in to each other and the lecture topic and prepare questions for your classmates to stimulate discussion.

iii. **Participation**—Each week in class you will be expected to show that you are 1) thinking critically about the topic and the position presented in the readings; 2) evaluating competing views of the relevant issues and formulating your own understanding of these topics, and 3) considering the literature in the context of other questions that are relevant to your particular research interests. I will be taking into consideration not only on your comprehension of this material, but also on your ability to critically evaluate the literature.

There is no formal numerical breakdown of each of these components, but the degree to which these goals are met will contribute to your 25% participation grade.

**Short Essay:** Three 5-page papers will be assigned during the semester on topics related to class material. The topics are listed in the Course Schedule and more specific guidelines will be given in class prior to the due date. The papers are due in place of idea sheets that week. They are to be more formal idea sheets where you incorporate the week’s readings as well as some outside sources to formulate an academic paper that presents a thoughtful consideration of the question/topic, and takes a position on the arguments associated with that question.

**Final Paper:** Your grade will also be determined by one final paper to be turned in by noon on Friday, May 5th. The paper should be a minimum of 15 double-spaced pages. It will present an in-depth review of one of the topics covered in class as applied to your own dissertation research topic. You should be able to use the paper in the “Background” section of your dissertation, so it should be written in proper academic format. Each of you will meet with me in March to discuss your paper topic. The essays and paper will be given to me in hard copy and also submitted to http://itsinfo.tamu.edu/turnitin/main.htm. You must register for this service by the first week of class. The class ID for your enrollment in the service is 1443804 and the password is “evolution.”
Americans with Disabilities Act
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Support Services for Students with Disabilities in Cain Hall B-118.

Copyright & Plagiarism
All materials generated for use in this class are copyrighted. These include syllabi, exams, review sheets and other materials. Because these materials are copyrighted you do not have the right to copy them, unless I expressly grant permission. As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”

Academic Dishonesty
Academic dishonesty is never tolerated at Texas A&M University, and should be actively discouraged by both the instructor and students (http://student-rules.tamu.edu/). Academic dishonesty comprises the unauthorized distribution of information and/or plagiarism. Any student caught cheating on an exam will receive a zero for that exam, and will be reported to the Department Head for further possible disciplinary proceedings at the discretion of the department of Anthropology and the College of Liberal Arts.

Academic Integrity
“An Aggie does not lie, cheat or steal or tolerate those who do.” Honor Council Rules and Procedures will be strictly followed and enforced in this class. If you have any questions about these rules, consult http://www.tamu.edu/aggiehonor.
READING LIST ANTH 648-600
Issues in Human Evolutionary Theory
SPRING 2006

READINGS SHOULD BE DONE IN THE ORDER IN WHICH THEY ARE LISTED

Articles are available in two locations: the e-reserves service of the library (http://ereserves.tamu.edu) or the WebCT site: (https://webctvista.tamu.edu).

Week 1 January 7  History of Evolutionary Thought

Darwin, C.  Natural Selection; or the Survival of the Fittest.  In The Origin of Species by Means of Natural Selection.  Chapter 4 (pp 78-123).


Week 2 January 24  The Species Concept


Week 3 January 31  Processes of speciation: tempo and mode in evolution


Week 4  February 7  A critique of the adaptationist paradigm


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Week 5  February 14  Units of selection; What is a character?


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Week 6  February 21  Systematics: principles and practice


Week 7  February 28  Biological shapers of morphology


Week 8  TBA  Interpreting morphological variation: population vs. species level significance


March 14  SPRING BREAK

Week 9  March 21  Primate Behavior & Modern Day Hunter-Gatherers: Models of Early Hominin Adaptations


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**Week 10 March 28 Narratives of Human Evolution: Bipedalism, Gender and Subsistence in Evolutionary Models**


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**Week 11 April 4 Genes, Population History, Population Structure**


Recommended:


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**Week 12  April 11   Population Dispersals, Migrations, and Range Expansions**


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**Recommended:**


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**Week 13  April 18   Hybridization Models and the Modern Human Origins Question**


Recommended:


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Week 14  April 25  From Brain to Behavior: Inferring Intelligence and Symbolic Expression from the Fossil and Archaeological Record


Recommended:


