**ANT 480: Advanced Evolutionary Studies & Big Questions**

Spring 2014

3 Credit Hours

Primary Instructor: Dr. Christopher Lynn

Syllabus subject to change.

**Prerequisites**

ANT 150; BSC 220; and ANT 270, GEO 102, or PHL 380

**Course Description**

This course is the capstone to the Evolutionary Studies minor and should be taken in the final semester of the program. This course meets in conjunction with "Evolution for Everyone," the minor introductory course to the minor, to revisit the basic principles and application of evolutionary theory. These courses are team-taught by faculty from around the University and integrate the Alabama Lectures on Life's Evolution series, so they are likely to be different for you in both iterations. The course will review applications of evolutionary theory in the natural, social, and applied sciences and in the humanities. Additionally, you will complete a culminating project during the first half of the semester. During the second half of the semester, you will present this to the class and submit your finished project for publication or recognition in a forum appropriate to your discipline (e.g., peer-reviewed science journal).

**Student Learning Outcomes**

By the end of this term, you should be able to:

􀁺 Produce a project that integrates evolutionary principles with another discipline

􀁺 Describe the key differences between evolutionary models and the Standard Social Science Model

􀁺 Explain how evolutionary theory applies across academic disciplines

􀁺 Critically evaluate different scholarly and lay approaches to evolution

􀁺 Provide examples of how evolutionary principles can be used to better understand life.

**Attendance Policy**

Attendance is mandatory. Attendance will be monitored through participation assessments and exams.

**Required Texts**

David N. Stamos 2008 *Evolution and Big Questions: Sex, Race, Religion, & Other Matters.* Malden, MA: Blackwell.

**Other Course Materials**

This course will use Blackboard to distribute additional readings. Access Blackboard via myBama. There is a box called Blackboard on the Academics tab that should list your courses that are currently let up with Blackboard.

**Exams and Assignments**

**Quizzes and Speaker Questions (10 points):** There will be a participation assessment for each class meeting, except on exam dates. These assessments will cover the assigned reading for the date.

**Research or Creative Project (50 points):** A research project or research paper (which will have been determined through previous arrangement with your research adviser) is to be completed by spring break. This project or paper should be based on original research or creative activities you have conducted in conjunction with your adviser on a topic I have approved. Your product should be composed in a style appropriate to your discipline. For instance, articles should follow the style guidelines of the journal to which you plan to submit. This composition will be worth 40 points. You will also give a presentation of your work to the class after spring break and use their feedback to improve your work before it is approved for submission to a scholarly journal or other forum. NOTE: The goal is train you to engage with the broader scholarly and creative community, but passing the course is not contingent on publication or recognition of your work or even that it is submitted for such. Your work must be “A”-quality to be approved by the faculty sponsor before being submitted for publication or other recognition, but this is the goal.

**Exams (40 points):** Midterm and final exams will be essay exams based on readings, lectures, and class discussions.

**Grading Policy**

10 points = PARTICIPATION

50 points = RESEARCH or CREATIVE PROJECT

20 points = MIDTERM EXAM

20 points = FINAL EXAM

100 points

**Dates Topic Activity/Assignment Readings**

Thurs, Jan 10 Introduction, EvoS program, ALLELE series, research proposal

Tues, Jan 15 Scientific method Stamos 1

Thurs, Jan 17 *Dr. Laura Reed (Biology)*

Tues, Jan 22 Cell biology

Thurs, Jan 24 *Dr. Fred Andrus (Geology)* Myers reading

Tues, Jan 29 ***ALLELE guest: Rick Myers*** Questions for speaker Stamos 2

Thurs, Jan 31 *Dr. Patrick Frantom* *(Biochemistry):* Chemical Structure of DNA

Tues Feb 5 Mechanisms of evolution

Thurs, Feb 7 *Dr. John Yoder (Biology):* Evolution of Novel Morphology Stamos 3

Tues, Feb 12 Hypotheses Hypothesis development

Thurs, Feb 14 Research methods Bring in original research article from your discipline to discuss

Tues, Feb 19 *Dr. Amy Lang (Aerospace Engineering)* Stamos 4

Thurs, Feb 21

Tues, Feb 26 Bingham/Souza reading

Thurs, Feb 28 **ALLELE guests: Paul Bingham & Joanne Souza** Questions for speakers Stamos 5

Tues, Mar 5 **Midterm Exam**

Thurs, Mar 7 Behavioral ecology in humans

Tues, Mar 12 *Dr. Ryan Earley (Biology):* Behavioral ecology in fish Stamos 6

Thurs, Mar 14 MacFadden reading

Tues, Mar 19 **ALLELE guest: Bruce MacFadden** Questions for speaker

Thurs, Mar 21 *Dr. Jason DeCaro (Anthropology)*

Tues, Mar 26 Thurs, Mar 28 **SPRING BREAK**

Tues, Apr 2 *Dr. Keith Jacobi (Paleopathology)* Stamos 7

Thurs, Apr 4 How to write a book review for publication

Tues, Apr 9 *Dr. David Boles (Cognitive Psychology)*

Thurs, Apr 11 *Dr. Richard Richards (Philosophy)* Stamos 8

Tues, Apr 16 Research paper draft due (bring to class) Carroll reading

Thurs, Apr 18 **ALLELE guest: Joseph Carroll** Questions for speaker

Tues, Apr 23 ***Research Paper Due*** Stamos 9

Thurs, Apr 25 Review

Wed, May, 8-

10:30 AM **FINAL EXAM**

**Outline of Topics Policy on Missed Exams & Coursework**

**Attendance:** If you miss a class, it is your responsibility to utilize Tegrity to view lectures or contact a classmate to get notes. However, I cannot guarantee that every lecture will be posted to Tegrity.

Furthermore, discussions will be an important aspect of this course, which is difficult to re-experience via Tegrity.

**Exams:** If you miss an exam for any reason whatsoever, whether excused or unexcused, you will be able to make it up by completing a 15- page research paper.

The topic will be chosen by Dr. Lynn and format instructions will be provided. If you miss the midterm, the research paper will be due on the day of the final exam. If you miss the final exam, you will be given two weeks to complete and turn in the research paper make-up.

**Research/Creative Project:** Late submissions will only be accepted by prior arrangement and/or with a very good reason. Otherwise, I will begin deducting 1 point from the research proposal score or the book review for each day or portion thereof that it is late. If it is received more than 15 days late, you will receive a 0 for the assignment.

Do not blame your partner if something isn't done. Part of the grade will be based on your collaborative ethic, which

I will evaluate independently. If it is late, both of you will be penalized, so it behooves you to make sure it is not, no matter what. Many assignments being due at the same time is *never* a good reason, and extensions will never be authorized on that basis, so please don’t ask. No extensions will be authorized during the 3 days immediately prior to the due date except in the case of a legitimate medical emergency.

**Extra Credit Opportunities**

There are at least 3 ways to earn extra credit. You may do any or all of these things, earning a possible 15 total extra credit points:

􀁺 You can receive extra credit by attending ALLELE lectures. There are 4 lectures. You will receive 2 course points per lecture. You will be required to sign in to verify your attendance.

􀁺 Perfect attendance will earn you 4 extra course points. No exceptions. This means you cannot miss ANY class sessions, even if they are excused or reasonable absences.

􀁺 You may have the opportunity to participate in miscellaneous studies conducted by students or faculty at UA. Participating in research is a great way of learning how studies are designed and conducted. Extra credit will be granted for such participation. The number of points will be determined by the extent of your participation, not to exceed 3 points. Proof of your participation must be submitted by the researcher(s) conducting the study with an indication of the extent (e.g., time, activities) of your participation.

􀁺 Other opportunities may arise and be announced during the course of the semester. Points will be assigned based on the extent of your participation, not to exceed 15 course points in total.

**Policy on Academic Misconduct**

All students in attendance at the University of Alabama are expected to be honorable and to observe standards of conduct appropriate to a community of scholars. The University expects from its students a higher standard of conduct than the minimum required to avoid discipline. Academic misconduct includes all acts of dishonesty in any academically related matter and any knowing or intentional help or attempt to help, or conspiracy to help, another student. The Academic Misconduct Disciplinary Policy will be followed in the event of academic misconduct.

**Disability Statement**

If you are registered with the Office of Disability Services, please make an appointment with me as soon as possible to discuss any course accommodations that may be necessary. If you have a disability, but have not contacted the Office of Disability Services, please call 348-4285 or visit 133-B Martha Parham Hall East to register for services. Students who may need course adaptations because of a disability are welcome to make an appointment to see me during office hours. Students with disabilities must be registered with the Office of Disability Services, 133-B Martha Parham Hall East, before receiving academic adjustments.

**Severe Weather Protocol**

In the case of a tornado warning (tornado has been sighted or detected by radar, sirens activated), all university activities are automatically suspended, including all classes and laboratories. If you are in a building, please move immediately to the lowest level and toward the center of the building away from windows (interior classrooms, offices, or corridors) and remain there until the tornado warning has expired. Classes in session when the tornado warning is issued can resume immediately after the warning has expired at the discretion of the instructor. Classes that have not yet begun will resume 30 minutes after the tornado warning has expired provided at least half of the class period remains. UA is a residential campus with many students living on or near campus. In general classes will remain in session until the National Weather Service issues safety warnings for the city of Tuscaloosa. Clearly, some students and faculty commute from adjacent counties. These counties may experience weather related problems not encountered in Tuscaloosa. Individuals should follow the advice of the National Weather Service for that area taking the necessary precautions to ensure personal safety. Whenever the National Weather Service and the Emergency Management Agency issue a warning, people in the path of the storm (tornado or severe thunderstorm) should take immediate life saving actions.

**When West Alabama is under a severe weather advisory, conditions can change rapidly. It is imperative to get to where you can receive information from the National Weather Service and to follow the instructions provided. Personal safety should dictate the actions that faculty, staff and students take. The Office of Public Relations will disseminate the latest information regarding conditions on campus in the following ways:**

􀁺 Weather advisory posted on the UA homepage

􀁺 Weather advisory sent out through Connect-ED--faculty, staff and students (sign up at myBama)

􀁺 Weather advisory broadcast over WVUA at 90.7 FM

􀁺 Weather advisory broadcast over Alabama Public Radio (WUAL) at 91.5 FM

􀁺 Weather advisories are broadcast via WUOA/WVUA-TV, which can be viewed across Central Alabama. Also, visit

wvuatv.com for up-to-the-minute weather information. A mobile Web site is also available for your convenience.

**Classroom Decorum**

The Code of Student Conduct requires that students behave in a manner that is conducive to a teaching/learning environment. Students who engage in behavior that is disruptive or obstructive to the teaching/learning environment will be subject to disciplinary sanctions outlined by the Code of Student Conduct. Disruptive/obstructive behavior is not limited to but may include the following: physical abuse, verbal abuse, threats, stalking, intimidation, harassment, hazing, possession of controlled substances, possession of alcoholic beverages, use of cell phones and beepers in class, reading of newspapers, talking to fellow students during faculty or student presentations.