ANT 4586 Human Evolution

| Meets: | Tuesdays Period 7 (1:55 PM - 2:45 PM) in TUR 2336 | | | |
|-------------|--|--|--|--|
| | Thursdays Periods 7-8 (1:55 PM - 3:50 PM) in TUR 2333 or TUR B304 (Labs) | | | |
| Instructor: | David Daegling Office: B376 Turlington Hall | | | |

Office: B376 Turlington Hall Office Phone (352) 294-7603 Email: <u>daegling@ufl.edu</u> Office Hours: W 1:00 – 3:00 PM, R 4:00 – 5:00 PM

Course Description: prerequisite is ANT 3514C or the equivalent. This course is administered through Canvas (elearning.ufl.edu).

This course reviews the evidence for the evolution of humankind, including a survey of the hominin fossil and archaeological records and their interpretation. Basic principles of geology, systematics, evolutionary theory, functional morphology and genetics are introduced and used to aid in understanding and interpreting the fossil and material cultural evidence of human evolution.

The first part of the course reviews the theoretical and methodological foundations of paleoanthropology. Fossil evidence for the evolution of Primates follows, with emphasis on the evolution of the Hominoidea and the origin and diversification of bipedal hominins. Finally, the appearance, diversification and dispersal of the genus *Homo* is surveyed, concurrent with consideration of the archaeological record of material culture.

This course fulfills General Education (GenEd) requirement in Biological Sciences (B).GenEd B: Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments. A minimum grade of C is required for general education credit at UF.

Required Materials:

- <u>The Complete World of Human Evolution (The Complete Series)</u>, 2012, 2nd Edition. By Chris Stringer and Peter Andrews. Any format is fine for this class.
- <u>*Human Evolution: A Very Short Introduction*</u> by Bernard Wood (2006) is optional. There are no assigned readings from this source .
- Supplementary readings are provided on Canvas.

Materials and Supplies Fees: Students enrolled in this course will incur a \$17.16 M&S fee

Student Learning Outcomes (SLO)

Content

• Identify, describe, explain, and apply factual, conceptual, and procedural knowledge in biological anthropology as it pertains to the evidence for human evolution.

Critical Thinking

- Apply a scientific approach to investigate primate, specifically hominid, variation in its biological, social and cultural dimensions.
- Integrate different sources and types of knowledge into holistic perspectives about human variation and human evolution.
- Evaluate the significance, quality and veracity of information and apply it effectively to resolve conflicting interpretations of evidence.

Communication

• Develop public speaking skills and writing skills based on distilling information from peerreviewed literature.

Grading:

Letter grades for the course are assigned based on total percent of points according to the following grade scale system without exception:

A = 92.0 or above; A = 89-91.9 B + = 86-88.9; B = 82-85.9; B = 79-81.9 C + = 76-78.9; C = 72-75.9; C = 69-71.9 D + = 66-68.9; D = 62-65.9; D = 60-61.9E = < 60.

Weighting of Assignments

- 30% Exams (3 exams @ 10% each)
- 15% Online quizzes (3 quizzes @ 5% each)
- 25% Labs (5 labs @ 5% each
- 10% Reading assignments & discussion (4 papers @ 2.5% each)
- 20% Research Project & Presentation

A minimum grade of C is required for general education credit. See UF's Grading policy: <u>https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</u>

COURSE SCHEDULE

| | | | Suppl | Assignment |
|--------|-------------------------------------|-------------------------------|---------------|----------------------|
| Date | Торіс | Textbook | Reading | Notes |
| 9-Jan | Course introduction | 6-11 | | |
| 11-Jan | Principles of evolution | 12-14, 20-23, 34-37 | | |
| 16-Jan | Deep time | 26-33 | | |
| 18-Jan | LAB 1. Bones and teeth | 42-45, 88-89, 190-191 | | Lab worksheets |
| 23-Jan | Taxonomic practice | 16-19 | | |
| 25-Jan | Systematic philosophies | 24-25 | | Quiz 1 due |
| | Taphonomy & | | | Group |
| 30-Jan | paleoecology | 46-57 | Pisor 2019 | Discussion |
| 1-Feb | LAB 2. Geological context | | | Lab worksheets |
| 6-Feb | Early primate evolution | 82-87 | | |
| 8-Feb | Miocene apes | 90-110 | | |
| 13-Feb | EXAM 1 | | | |
| 15-Feb | LAB 3. Fossil apes | 111-115 | | Lab worksheets |
| | | | Harmand | Group |
| 20-Feb | Stem hominins | 114-118, 184-189 | 2015 | Discussion |
| 22-Feb | Australopiths 1 | 118-123 | | |
| 27-Feb | Australopiths 2 | 124-129 | | Quiz 2 due |
| 29-Feb | LAB 4. Early hominins | | | Lab worksheets |
| 5-Mar | early Homo | 132-135 | | Proposal due |
| 7-Mar | Out of Africa: first wave | 136-139 | | |
| | | | | Group |
| 19-Mar | Middle Pleistocene mess | 140-151 | Ni et al 2021 | Discussion |
| 21-Mar | EXAM 2 | | | |
| 26-Mar | Neanderthals | 152-157, 164-165, 180- 181 | | |
| 28-Mar | Out of Africa II: a.m. <i>H. s.</i> | 158-163, 170-175, 178- 179 | | |
| 2-Apr | Biogeography & Behavior | 200-227 | Spikins 2019 | Group Discussion |
| 4-Apr | LAB 5. Genus Homo | | | Lab worksheets |
| 9-Apr | Student Presentations | | | Quiz 3 due |
| 11-Apr | Student Presentations | | | |
| 16-Apr | Student Presentations | | | |
| 18-Apr | Student Presentations | | | Project paper due |
| 23-Apr | EXAM 3 | | | |

Other Course Policies:

Late Assignments

Due dates are provided on Canvas. Late submissions are subject to a 10% grade reduction each day that they are late. Any work submitted after the end of term (April 24th at 5PM) will not be graded and given a score of zero.

<u>Quizzes</u>

Quizzes are taken online and are open source. You can take the quiz up to three times. Your highest score is used in calculation of your final grade.

<u>Exams</u>

All exams are closed-book. Exams may not be retaken. Missed exams may be made up due to medical or family emergency. Documentation will be required.

Electronic Devices

Turn off or silence smart phones when you come to class. Laptops should only be used for taking notes or other immediate course-related activity.

Online Materials and Communication

You are responsible for all materials posted on E-Learning (Canvas) at <u>https://elearning.ufl.edu/</u>, including required readings, announcements, assignment instructions, other supplementary material, or any communication transmitted through the mail function in Canvas. Canvas technical support is available at <u>https://elearning.ufl.edu/e-learning-basics/uf-e-learning-faqs/</u>.

Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <u>https://disability.ufl.edu/students/get-started/</u>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. Student accommodation requests should be communicated to the instructor before the end of the first month of the term.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited, including publishing of recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Course Evaluations - GatorEvals

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <u>https://gatorevals.aa.ufl.edu/students/</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>https://ufl.bluera.com/ufl/</u>. Summaries of course evaluation results are available to students at <u>https://gatorevals.aa.ufl.edu/public-results/</u>.

Student Conduct and Academic Honesty and Integrity

Cheating, copying other's work, plagiarism, and other acts of academic misconduct are unethical. UF and the instructor consider these to be serious offenses.

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://sccr.dso.ufl.edu/students/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Harassment and Discrimination

"Harassment" is defined as conduct that (1) is of any type (written, oral, graphic, or physical), (2) is directed towards or against a person because of their personal status (i.e., race, religion, sex,

sexual orientation, political affiliation, national origin, age, disability, marital status, pregnancy or others), and that (3) unreasonably interferes with the individual's work, education, or participation in activities or programs at UF or creates a working or learning environment that a reasonable person would find threatening. "Discrimination" is defined as a conduct that (1) adversely affects any aspect of an individual's employment, education, or participation in activities or programs at UF, and (2) is based on one or more personal characteristics listed above. Any student who feels that his/her rights have been violated may speak to the instructor who will direct the complaint through the proper university channels, or the student may directly file a complaint with UF Department of Human Resources.

Campus Resources:

Students experiencing personal problems that are interfering with their academic performance are encouraged to contact Student Affairs, DRC, and/or the Counseling and Wellness Center

- UF Student Affairs: https://ufsa.ufl.edu/ or https://care.dso.ufl.edu/
- Disability Resource Center (DRC): <u>https://disability.ufl.edu/</u>
- Counseling and Wellness Center: https://counseling.ufl.edu/, 392-1575
- Health and Wellness U Matter, We Care: If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or (352) 392-1575 so that a team member can reach out to the student.

Academic Resources:

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learningsupport@ufl.edu.
- Library Support, <u>http://cms.uflib.ufl.edu/ask</u>. Various ways to receive assistance with respect to using the libraries or finding resources.
 - ANTHROPOLOGY'S Library Page:
 - o <u>https://guides.uflib.ufl.edu/anthroUF/undergrad</u>
 - **Ginessa Maha**r (anthropology Librarian): <u>gjmahar@ufl.edu</u>, office: Library West rm.500
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers or presentations. <u>http://writing.ufl.edu/writing-studio/</u>