Western
UNIVERSITY · CANADA

Department of Anthropology

COURSE OUTLINE

Anthropology 2226A-001 - Biological Anthropology

Fall 2022

Version date: August 17, 2022

Lectures:

Asynchronous delivery via OWL. (Synchronous lab access, SSC 2257, Tues. 9:30am-12:30pm. Details to follow.)

Instructor:

Dr. Ian Colquhoun

Office hours: By appointment - email me (meetings via 'Zoom' can be scheduled).

Email: colquhou@uwo.ca

Teaching Assistant: TBA

Requisites:

Prerequisites**:** There are not any designated prerequisite courses to Anthro. 2226A/B. However, students who have taken Anthro. 1022A/B (or the former Anthro. 1020E, or the former Anthro 1026F/G) should find they have a solid conceptual basis for the work in Anthro. 2226A.

Antirequisites: None.

Course Description:

Biological (or, physical) anthropology is a very diverse anthropological subfield encompassing such research as: the study of human evolution (i.e., paleoanthropology), the study of living and fossil non-human primates (i.e., primatology and paleoprimatology), the study of the human skeleton (i.e., human osteology), and the study of adaptations in living human populations (i.e., human biology). As in other areas of evolutionary biology, the synthetic theory of evolution provides the conceptual framework for considering the biological processes and fossil evidence relevant to the evolution of the human species. This means our study of human evolution and adaptation

will also draw on aspects of numerous fields, including: genetics, population biology, primatology, conservation biology, ecology, and geology.

The course has a four-part structure, and will pursue an "issues-oriented" perspective that is based in a critical, comparative perspective:

i) We begin the course with a consideration of the philosophy of science and an examination of the history of evolutionary thought. In this first segment of the course, we will consider the genetic basis of short-term and long-term evolutionary change.
ii) The second segment of the course deals with the evolution of the Order Primates; this segment also includes an overview of the taxonomy, biogeography, and socioecology of those mammalian species most closely related to humans -- the living non-human primates.
iii) The third segment in the course focuses on the field of paleoanthropology -- the study of the fossil record of hominin evolution.
iv) The fourth, and concluding, segment of the course inspects the adaptations, biologic variation, and biocultural behaviour of contemporary human populations. Throughout the term, in keeping with an "issues-oriented" perspective, attention will also be given to any material relevant to the course that may appear in the academic literature and/or be reported in the media as the term unfolds.

This is also a lab course, which adds an "applied" aspect to the course. A significant portion of your course grade will be based on the work you complete during lab sessions. These will be comprised of practical exercises that will allow you to get some first-hand experience in the techniques of biological anthropology, to make quantitative analyses and conduct qualitative observations, and to interpret and report on those analyses and observations. That said, concerning the lecture portion of the course, questions that arise from the course readings or lab exercises are encouraged – this means you should endeavour to be aware of material in the course text and/or weekly slide-deck files that can be of use in completing the lab exercises! A full course schedule including a week-by-week breakdown of topics and assigned readings will be available on the course's OWL site.

Learning Outcomes:

Upon successful completion of this course, students will:
- be able to appreciate, recognize, and communicate the breadth of material that constitutes the field of biological anthropology (much of which is often reported in the popular media, but not explicitly identified as being "biological anthropology");
- develop the ability to identify and describe major theoretical issues in the various sub-areas of biological anthropology (i.e., evolutionary theory, primate biology and taxonomy, paleoanthropology, and human biology);

- also gain familiarity with basic quantitative methods employed in comparative osteology, paleoanthropology, and human skeletal biology.
- acquire recognition of active and promising research fronts in biological anthropology and gain some background for predicting the directions where future research is most promising for major advances in the field.

Course Materials:

Our course text is: Marks, Jonathan, 2017. *The Alternative Introduction to Biological Anthropology* (2nd Edition). New York and Oxford: Oxford University Press.

The following online Open-Access biological anthropology text may prove to be a useful supplementary source of information:

https://socialsci.libretexts.org/Bookshelves/Anthropology/Physical_Anthropology/EXPLORATIONS%3A__An_Open_Invitation_to_Biological__Anthropology

Evaluation:

Course requirements (aside from the expectation of keeping up with the weekly readings) will include:

- three lab assignments (10% each, for a total of 30% of final grade)

- a mid-term 'take-home' test (Oct. 18th-19th - 35% of final grade)

- a final 'take-home' test (date & time to be announced - 35% of final grade)

Lab Reports (3 x 10% each) – 30%

Each student is responsible for completing three required lab assignments during the course of the term. The lab assignment topics represent major elements of the material covered in the course. While the in-class lecture portion of the course has been moved to asynchronous delivery, there are still lab exercises that have been prepared regardless of the course's asynchronous delivery.

The class will be divided into three lab groups for purposes of completing the lab exercises -- each group's lab handouts are clearly labelled and available under the 'Resources' tab on the course OWL site. Switching lab groups will be not be allowed without documentation of medical or compassionate grounds. Lab groups will work in rotation. Each lab group’s assignments are to be handed in one week from the date the lab work was done (i.e., lab reports are due one week after the lab exercises were completed). Submission of late lab assignments must include documentation to account for the late submission --under such circumstances, there would be no late penalty assessed on late

lab reports. Without such documentation, late lab reports will be penalized 0.05% for each day the lab report is late, up to a maximum of 3 days. **There will be no make-up labs**.

Midterm Test – 35%

The mid-term test in the course will occur in the form of a 'take-home' test which will be administered October 18th-19th, 2022 (during Week 7 of the course). The mid-term test will cover material from Week 1 through Week 6 of the course.

Final Test – 35%

The final test in this course will take place during the designated December 10th-22nd, 2022 exam period. The date and time of the final test are scheduled by the Registrar's Office and will be distributed via an OWL 'Announcement', and posted on the course OWL site.

Answers on both the mid-term and final exams will follow a short essay format. Material covered on the exams will come from both the weekly video and slide-deck presentations as well as the weekly readings, but material highlighted in the weekly slide-decks will be emphasized. The slide decks also include material that is not covered in the course text (a good reason to appreciate *why* the differences between what Marks presents in his text and what gets presented in the slide-decks are worth paying attention to!).

Academic Statements and Policies:

Student Absences

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

Assessments worth 10% or more of the overall course grade:

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration (i.e., your "Home" Faculty) as soon as possible.

For further information, please consult the University's medical illness policy at:
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

The Student Medical Certificate is available at:
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Absences from Final Examinations:

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

Statement on Plagiarism:

Students must write their assignments in their own words. Whenever students take an idea from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing. It is also a scholastic offence to submit the same work for credit in more than one course. Plagiarism is a major scholastic offence.

Institutional Statements and Policies

All students should familiarize themselves with Western's current academic policies regarding accessibility, plagiarism and scholastic offences, and medical accommodation. These policies are outlined in Western's academic policies by clicking on this link: Western's academic policies.