

Human Adaptability and Resilience: Life at the Extremes

COURSE OUTLINE

Winter 2024

Version date: January 19, 2024

Instructor and course information:

Instructor: Dr. Jay Stock

Email: jstock@uwo.ca

Mode of delivery: In person.

0.5 credit.

Antirequisites: None.

Prerequisites: None.

Please note: Any of the following courses are recommended but not required:

*Anthropology intros; Geography 1100, 1300B, 1400G, 1500F; Biology 1225, 1290B;
Health Sciences 1001A/B, 1002A/B.*

Course Description:

The course considers the characteristics that make humans a unique and particularly adaptable species, the adaptive nature of cultural and biological variation, and the interactions between culture and biology that shape our relationship to the natural world. The course begins by considering broad approaches to understanding human diversity; the roles of migrations and environmental variation in shaping human variation; theories of biological and cultural change; and the roles of 'plasticity' and life history variation in human adaptability. Using specific ecological case studies, we will explore how humans have adapted to life in extreme environments, both those that exist in the natural world and those that are created by human activity. We will finish the course by considering how human activity pushes the limits of human biology through sport and space travel. The course will provide a broad overview of our understanding of human diversity, adaptability, and resilience in a dynamic and rapidly changing world. This course will be based around a two-hour lecture each week with some supplementary material and readings online.

A full course schedule including a week-by-week breakdown of topics and assigned readings will be available on the course's OWL site before the first day of class.

Learning Outcomes

By the end of this course, students will:

- critically evaluate historical perspectives on human diversity
- identify the mechanisms which led to the biological diversification of human populations
- understand how environmental stress has driven human variation and adaptation

- evaluate the role of culture in human accommodation of environmental stress
- characterize the prehistory of human migrations into novel environments, and the impact of these dispersals on human culture and biology
- Understand the impact of extreme natural and cultural environments on human biology

Course Materials:

There is no set textbook for this course. Weekly readings have been selected from the literature and will be available on OWL. Readings have been chosen to represent either landmark reviews of earlier work in the field, or recent perspectives of topical interest. None of the readings can be considered to provide exhaustive coverage of the topics but will need to be considered in combination with the lecture material.

Registered students will be able to access information about additional course readings through the course's on-line OWL site before the first day of class.

Evaluation:

Midterm 25%

The Midterm test will be held online during class time on February 15th, 2024. It will consist of multiple-choice questions.

Reflection Assignment 30%

The assignment will be a 1000-word (4 page) reflection paper to encourage you to explore the pattern of human adaptability to environmental stress. It will build upon the course readings with two related articles that you will find in refereed academic journals.

Final Exam 45%

The final exam will be written during the exam period in December. The format will be multiple choice and short answer.

Course Statements and Academic Policies:

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](#)

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.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the

service is subject to the licensing agreement, currently between The University of Western Ontario and [Turnitin.com](https://www.turnitin.com).

Academic Consideration for Student Absences

For students who have missed, or will miss, any course work, whether it be for medical related or non-medical related, please read the details and instructions on "[What is Academic Consideration](#)".

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences must be submitted to the Academic Counselling office of a student's Home Faculty.

Accessible Education

Students with disabilities work with [Accessible Education](#) (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

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