

FACULTY OF SCIENCE

# **BIOANTHROPOLOGY**

Bioanthropology is a unique program that combines aspects of anthropology with the biological and physical sciences. It is designed to examine human biological systems of the past and present.

This degree combines the information and methodologies of Anatomy, Anthropology, Archaeology, Biochemistry, Biology, and Geography with the techniques of the physical sciences to examine human biological systems of the past and present. It is an Anthropology program which also draws on courses from the departments of Biology, Chemistry, Kinesiology, and Geography.

Students in the program will gain an understanding of comparative anatomy, cellular biology, methods in archaeology, and human evolution. They will also obtain experience in up-to-date laboratory techniques and procedures. The Bioanthropology program offers students the option of combining experience from different fields in the Sciences and Arts to create a skill set that is interesting and unique.

This program leads to a Bachelor of Science degree (3-year, 4-year, or Honours).

## SAMPLE CAREERS

Employment opportunities for Bioanthropology graduates exist in government and hospital laboratories, forensic laboratories, museums, and zoos. This program also provides a basis for entry into professional programs in dentistry and medicine, and to graduate programs in Anthropology and Biology for students who take the four-year degree option.

## **SAMPLE COURSES**

**Introduction to Forensic Anthropology,** a second-year course, introduces students to the use of human skeletal and dental evidence in legal contexts. The course provides students with knowledge of analytic methods that are used in identifying the age, sex and ancestry of unindentified human remains using skeletal markers, interpretation of DNA, and other related approaches.

**Human Osteology** is a third year course that covers basics of identification of different bones and teeth, and growth and development of the human skeleton. Emphasis is on the laboratory identification of complete and incomplete human skeletal material and how it is used in different analyses.

**Evolution, Ecology, and Biodiversity,** a first-year Biology course, emphasizes the evolutionary and ecological processes that underlie the relationship between an organism and its environment. Topics include natural selection and the origin of species, systematics and taxonomy, the origin of biological diversity, growth and reproductive strategies, and communities and ecosystems.

#### **MORE SAMPLE COURSES**

- International Field School
- Human Evolution
- Zooarchaeology
- Comparative Animal Physiology

#### SAMPLE FIRST YEAR

- Genetics
- Organic Chemistry
- Molecular Genetics

ANTH-1003(3) Introductory Biological Anthropology and Archaeology ANTH-1002(3) Introductory Cultural Anthropology and Linguistics BIOL-1115(3) Cells and Cellular Processes BIOL-1116(3) Evolution, Ecology, and Biodiversity CHEM-1111(3) Introduction to the Chemical Properties of Matter CHEM-1112(3) Basic Principles of Chemical Reactivity RHET-1103(3) Academic Writing: Science or any other section of Academic Writing (if required) STAT-1501(3) Elementary Biological Statistics I 6 credit hours Humanities, depending on interest

**NOTE:** This sample first year is representative of the courses you may take. For many of our programs, you may choose another set of courses and still be well on your way to a degree. Also, for most programs you do not have to take 30 credit hours (five full courses) in your first year.

## "Excavating in Cuba allowed me to expand my knowledge of Cuban culture, human osteology, archaeology, and the importance of my honours research. I will not forget this experience and feel grateful for the opportunity that I was given through the Bioanthropology program."

- Zenia Michno (BSc Bioanthropology) travelled to Cuba with her honours thesis supervisor and a fellow honours student. They spent two weeks with a local research team excavating ancient burials.

## **REQUIRED HIGH SCHOOL COURSES**

In addition to meeting The University of Winnipeg's general admission requirements, you must have **Chemistry 40S** and either **Pre-Calculus Mathematics 40S** or **Applied Mathematics 40S**.

## HOW TO APPLY

For details on application requirements and deadlines, and to apply online, please visit: **uwinnipeg.ca/apply** 

For more information contact a student recruitment officer at welcome@uwinnipeg.ca or 204.786.9844. In any case where The University of Winnipeg Academic Calendar and this fact sheet differ, the current Calendar takes precedence.

## **CONTACT US**

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