



FACULTY OF SCIENCE

BIOPSYCHOLOGY

Biopsychology is an interdisciplinary program that combines aspects of psychology with the biological and physical sciences. It is the branch of neuroscience concerned with how the brain and the nervous system control behaviour.

Biopsychology is firmly based in the natural sciences, with intense study of molecular, biochemical, anatomical, physiological, behavioural, and developmental approaches. The core program has required elements in Biology, Chemistry, and Psychology. As a student of Biopsychology, you will gain an understanding of comparative anatomy, cellular biology, and human behaviour. Throughout your studies, you will obtain experience in up-to-date laboratory techniques and procedures.

The Biopsychology program offers you the option of combining two exciting disciplines to create a skill set that is interesting and unique. It is designed to appeal to people interested in careers in neuroscience, psychology, medicine, speech pathology, communication disorders, and related fields.

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

NOTE: The Biopsychology program is currently in transition. More information will be available in 2019.

SAMPLE CAREERS

Employment opportunities for Biopsychology graduates exist in government laboratories, university research laboratories, scientific consulting organizations, pharmaceutical companies, and the scientific publishing industry. This program also provides a basis for entry into graduate programs in psychology, biology, and neuroscience for students who take the four-year Honours degree option.

SAMPLE COURSES

Evolution, Ecology, and Biodiversity is a first-year Biology course. This 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.

Physiological Psychology I is a second-year Psychology course that considers the theoretical framework of the physiological determinants of behaviour. This course examines the development, structure, and function of the nervous and endocrine systems. Topics to be discussed include the brain bases of sensory, motor, and cognitive processes.

Perception is a second-year course that studies the relationship between sensory input and perceived reality, focusing on the structure and function of brain and sensory organs.

MORE SAMPLE COURSES

- **Introductory Psychology**
- **Comparative Animal Physiology**
- **Genetics**
- **Attention and Memory**
- **Fundamentals of Animal Learning**
- **Molecular Genetics**

SAMPLE FIRST YEAR

PSYC-1000(6) Introductory Psychology
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

***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.*

“My experience studying in The University of Winnipeg Psychology Department has been amazing. The professors take a sincere interest in their students and want them not only to succeed at the undergraduate level, but also to teach them skills that carry through to their future careers.”

- Tiffany Kolesar (BSc Honours Biopsychology)

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 visit www.uwinnipeg.ca or 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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