



THE UNIVERSITY OF WINNIPEG

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 Course Calendar and this fact sheet differ, the current Calendar takes precedence.

Biopsychology

Biopsychology is a new 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.

This program 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. If you earn a 4-year Honours degree, you may choose to pursue graduate studies in psychology or biology.

Biopsychology is an **interdisciplinary** program. You may take courses from a number of different disciplines or areas, allowing you to customize your university studies to fit your educational and career goals. This program is founded primarily on courses from the departments of Psychology, Biology, and Chemistry.

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

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.

Comparative Chordate Zoology is a second-year Biology course that deals with the functional anatomy, adaptations, and evolution of the Protochordata, Agnatha, Chondrichthyes, Osteichthyes, Amphibia, Reptilia, Aves, and Mammalia.

Introduction to the Chemical Properties of Matter is a first year Chemistry course that introduces the basic structure of atoms and molecules, and introduces students to the basics of chemistry laboratory practice and techniques.

MORE SAMPLE COURSES

Introductory Psychology
Comparative Animal Physiology
Genetics
Attention and Memory
Fundamentals of Animal Learning
Molecular Genetics
Organic Chemistry I & II

SAMPLE FIRST YEAR

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.

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

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 – Domestic Student

Apply online at uwinnipeg.ca or pick up an Application for Admission from your high school counsellor's office or the Admissions Office at The University of Winnipeg. To meet Scholarship deadline submit your application and \$80 application fee by **March 1st**

HOW TO APPLY – International Student

Apply online at uwinnipeg.ca/index/intl-apply and submit all official documents by mail. To meet Scholarship deadline submit application, fee, and documents by **March 1st**. International application fee is \$100, which includes a one-time courier fee.

CONTACT US

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