

energies. Chemistry is the essential science to the buil ding blocks of our lives, from health and nutrition to scientific discoveries and ntally sustainable world.

Chemists are at the forefront of unravelling the mysteries of the most complex chemical systems. If you are i, andoint (Applied) programs receive a formal accreditation certificate

Updated October 2023 1 UWINNIPEG.CA

## SAMPLE COURSES

Introduction to the Chemical Properties of Matter and Basic Principles of Chemical Reactivity are first-year courses that examine the principles of the four core areas of chemistry: organic, inorganic, analytical, and physical. Laboratory work introduces basic techniques.

Organic Chemistry I and II are second-year courses that introduce the chemistry of carbon and describe the nature of organic compounds and their behaviours. Nomenclature and stereochemistry are described, as well as methods for the synthesis and characterization of these compounds.

Intermediate Biochemistry I and II are two third- year courses that describe the structures of biologically important compounds and deal with chemical processes of living materials such as digestion, absorption, respiration, and metabolism.

## SAMPLE FIRST YEAR

CHEM-1111(3) Introduction to the Chemical Properties of Matter

CHEM-1112(3) Basic Principles of Chemical Reactivity

BIOL-1115(3) Cells and Cellular Processes

BIOL-1116(3) Evolution, Ecology, and Biodiversity

MATH-1101(6) Introduction to Calculus <u>OR</u> Math 1103-(3) Introduction to Calculus I <u>and</u> Math-1104 (3) Introduction to Calculus II

RHET-1103(3) Academic Writing: Science or any other section of Academic Writing (if required) 9 credit hours Humanities or Electives

NOTE: This sample first year is representative of the courses you may take. For many of our programs, you may c hoose 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.

"The small size of the Chemistry department allowed me to gain access to the pr ofessors, get valuable hands -on experience in the labs as both a student and a lab teaching assistant, and participate in the organization of an undergraduate chemistry conference."

-Angele Maki (BSc Chemistry), who completed her PhD in Chemistry at Stanford University.

## REQUIRED HIGH SCHOOL COURSES

In addition to meeting The University of Winnipeg's general admission requirements, you must have Chemistry 40S and eit7 (v)10.7 (er)17 41W (m92.2 (sieU57 Td (er)17 4-1.1 (st)-6.318 rg /TT)-11.54 C)6ener Tw 1.4 a6.