



GUPTA FACULTY OF KINESIOLOGY AND APPLIED HEALTH

# BACHELOR OF SCIENCE - EXERCISE SCIENCE

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The University of Winnipeg offers a curriculum in exercise science with the opportunity for certifications at a nationally recognized level, both during and post-graduation. This program leads to a **4-year Bachelor of Science degree**.

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The exercise science stream includes the understanding of the integration of structure and function of the human systems (e.g. musculoskeletal, cardiovascular, respiratory, endocrine, etc.), and the changes or adaptations caused by physical activity/exercise.

Exercise science involves the study of; human anatomy, biomechanics, exercise psychology, exercise physiology and motor development. These core foundations are integrated with the study of aging, behaviour modification, growth and development, nutrition, physical activity/exercise, and chronic disease.

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## SAMPLE CAREERS

The 4-year Exercise Science program covers all of the areas needed to become a certified personal trainer. Upon completion of the degree program, students are qualified to obtain certification as a CSEP-CEP (Certified Exercise Physiologist).

Job opportunities include providing general fitness assessment and training/exercise prescription in various public facilities, running a private practice, delivering corporate fitness/ergonomic programs.

A bachelor's degree in Exercise Science *may* qualify you to enter medicine, pharmacy, physiotherapy or provide the foundation for further research and study at the graduate level.

## SAMPLE COURSES

**Human Anatomy** involves the study of the human anatomical systems and their integration. Special emphasis will be placed on the skeletal, articular, and muscular systems. Students will also begin to undertake the analysis of movement.

**Physical Activity: Promotion and Adherence** examines theory and practices that promote the adoption of physical activity and health behaviour, as well as strategies to foster adherence.

**Biomechanics** involves the study of the methods and mechanics that are applied to the structure and function of the human body.

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## MORE SAMPLE COURSES

- Principles in Fitness & Conditioning
- Advanced Training Techniques
- Injury Prevention & Recovery
- Special Populations (e.g. aging)
- Nutrition, Health & Wellness
- Drugs & Ergogenic Aids

## SAMPLE FIRST YEAR

KIN-1101(3)	Introduction to Kinesiology
RHET-1103(3)	Academic Writing: Science section preferred (if required)
PSYC-1000(6)	Introductory Psychology
BIOL-1112(6)	Human Anatomy and Physiology
CHEM-1111(3)	Intro to Chemical Properties of Matter
CHEM-1112(3)	Basic Principles of Chemical Reactivity
6 credit hours of Humanities	

### Canadian Memorial Chiropractic College (CMCC) Academic Pathway

Students in this pathway must complete 3 years of specified courses at UWinnipeg before entering the Doctor of Chiropractic Program at CMCC. Students apply to CMCC after their second year of studies at UWinnipeg. Through transfer agreements, when the student graduates from CMCC, they can also receive their 4 year Bachelor of Science – Exercise Science degree; students would then have two degrees after 7 years of study. Please visit [www.uwinnipeg.ca/dept-kinesiology](http://www.uwinnipeg.ca/dept-kinesiology) for more details

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## REQUIRED HIGH SCHOOL COURSES

You must meet The University of Winnipeg's general admission requirements. You must have completed Chemistry 40S and either Applied Math 40S or Pre-Calculus 40S.

## HOW TO APPLY

For details on application requirements and deadlines, and to apply online, please visit: [uwinnipeg.ca/apply](http://uwinnipeg.ca/apply)

For more information contact a student recruitment officer at [welcome@uwinnipeg.ca](mailto:welcome@uwinnipeg.ca) or 204.786.9844. In any case where the University's Academic Calendar and this fact sheet differ, the current Calendar takes precedence.

## CONTACT US

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