

HONOURS BSC HUMAN KINETICS - APPLIED STUDIES IN KINESIOLOGY

Coming Soon

Co-operative education will be available with this program. Anticipated date to receive its first cohort is September 1, 2023.

Students will acquire knowledge and have opportunities to apply what they learn in the various capacities of a kinesiologist. Kinesiology involves the application of principles from biomechanics, physiology, and motor behaviour to improve peoples' functional movement, motor performance, and to manage and prevent injury and disease. Students will be offered courses oriented towards the core competencies required by the College of Kinesiologists of Ontario to pursue a professional career as a Registered Kinesiologist (R Kin). Students will gain theoretical and practical training, and will acquire skills to critically examine literature in the biophysical sciences of human movement.

Students will acquire knowledge, competencies and techniques for assessing and promoting performance and functional capacity, and for preventing and managing injury and chronic disease. They will obtain practical skills in exercise prescription to enhance performance and health, and for the treatment of individuals with compromised function. Students will have opportunities to gain training in how to use exercise in the management of injury, chronic disease, and in rehabilitation. They will have opportunities to gain training in ergonomics to critically assess and design equipment and workplaces to optimize performance and minimize musculoskeletal injury risk. They will gain applied counselling skills in principles of behaviour change to help individuals become more physically active and to help them enhance their health and well-being. Students will acquire knowledge in class settings and in laboratory-based and field practicum. In these rich practical experiences, they will learn to interact with different populations, from either different age groups (preschoolers, youth, young adults, the aged) or from groups of varying functional levels (e.g., athletes, sedentary people, persons with chronic disease, people in rehabilitation). Our students will gain practical experiences that better prepare them to pursue a career as a kinesiologist.

Our graduates are eligible to challenge the professional licensing examination for the College of Kinesiologists of Ontario, the external regulatory body for the profession of kinesiology and the R Kin designation. Applied Studies in Kinesiology enable graduates to pursue various career-paths in different occupational roles. For example, our graduates can become strength and conditioning coaches in high-performance training facilities and professional sport organizations. They can work among allied health professionals in community health centres and outpatient hospital programs, prescribing exercise treatments to help people manage chronic conditions. Our graduates can also find roles in rehabilitation clinics prescribing exercise and mobility protocol to facilitate injured persons' return to work. They can work for occupational health and safety companies, conducting ergonomic assessments and re-designing spaces to enhance how people move in the workplace. They can become physical activity counsellors in family health teams or community health centres. Our graduates can initiate start-up enterprises in private kinesiology services. They can also work toward employment as certified ergonomists and pursue post-graduate certification in advanced ergonomics studies. Many of our graduates receive certification as Certified Exercise Physiologists from the Canadian Society for Exercise

Physiology (CSEP-CEP) and others pursue accredited membership with La Fédération des Kinésiologues du Québec. Our graduates can also pursue advanced degrees in allied health and rehabilitation fields (e.g., physiotherapy, occupational therapy).

Program Requirements

Requirements for this program have been modified. Please consult the 2021-2022 calendars (<http://catalogue.uottawa.ca/en/archives/>) for the previous requirements.

The French immersion stream is available with this program.

The passing grade for all nutrition (NUT) courses is C+.

Compulsory Courses at the 1000 level

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| ANP 1105 | Human Anatomy and Physiology I | 3 Units |
| APA 1313 | Musculoskeletal Anatomy | 3 Units |
| BIO 1130 | Introduction to Organismal Biology | 3 Units |
| BIO 1140 | Introduction to Cell and Molecular Biology | 3 Units |
| CHM 1311 | Principles of Chemistry | 3 Units |
| CHM 1321 | Organic Chemistry I | 3 Units |
| MAT 1330 | Calculus for the Life Sciences I | 3 Units |
| NUT 1304 | Introduction to Nutrition | 3 Units |
| PHY 1321 | Principles of Physics I | 3 Units |

Compulsory Courses at the 2000 level

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| APA 2111 | Intervention Theories | 3 Units |
| APA 2114 | Biomechanical Analysis of Human Movement | 3 Units |
| APA 2120 | Motor Control and Learning | 3 Units |
| APA 2140 | Introduction to Sport and Exercise Psychology | 3 Units |
| APA 2180 | Research Methods in Human Kinetics | 3 Units |
| APA 2301 | Exercise Physiology I | 3 Units |
| APA 2314 | Laboratory Techniques in Exercise Physiology and Biomechanics | 3 Units |

Compulsory Courses at the 3000 level

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| APA 3114 | Exercise Physiology II | 3 Units |
| APA 3120 | Psychomotor Behavior Laboratory | 3 Units |
| APA 3121 | Human Motor Skill Development | 3 Units |
| APA 3122 | Physical Activity and Health | 3 Units |
| APA 3125 | Prevention and Care of Athletic Injuries | 3 Units |
| APA 3131 | Physical Ergonomics | 3 Units |
| APA 3150 | Neural Control of Human Movement | 3 Units |
| APA 3311 | Musculoskeletal Biomechanics | 3 Units |
| APA 3325 | Fitness Training Principles | 3 Units |
| APA 3381 | Measurement and Data Analysis in Human Kinetics | 3 Units |

Compulsory Courses at the 4000 level

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| APA 4118 | Biomechanical Basis of Injury | 3 Units |
| APA 4123 | Physical Activity Counselling | 3 Units |
| APA 4124 | Interdisciplinary Cases and Professional Practice in Kinesiology | 3 Units |
| APA 4160 | Fitness Testing and Exercise Prescription | 3 Units |
| APA 4211 | Internship/Clinical Experience | 6 Units |
| APA 4313 | Exercise and Disease Prevention | 3 Units |

Optional courses

This is a copy of the 2022-2023 catalog.

3 course units from: 3 Units

ENG 1100 Workshop in Essay Writing

ENG 1112 Technical Report Writing

6 course units from: 6 Units

APA 1122 Physical Activity in a Global Health
Perspective

APA 1302 Sociology of Sport and Physical Activity in
Canada

LSR 1100 Introduction to Leisure Studies

APA 2134 Administration of Leisure, Sport and Physical
Activity Services

APA 2302 History of Sport and Physical Activity in
Canada

3 course units from: 3 Units

ANP 1107 Human Anatomy and Physiology III

BIO 2110 Environmental Physiology

BIO 2133 Genetics

CHM 2120 Organic Chemistry II

3 course units from: 3 Units

APA 3130 Motor Performance and Aging

APA 4120 Sport and Physical Activity in Aging
Populations

Elective courses

6 elective course units 6 Units

Total: 120 Units