Faculty of Health Sciences

Program

Major Program Modification

Date

September 9th 2016

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1. INTRODUCTION

The Faculty of Health Sciences proposes the creation of a Kinesiology Major without specialization within the Bachelor of Health Science.

The Kinesiology Programme has existed at UOIT since 2008, first as a specialization within the BHSc. It became a major in 2014, when the options within kinesiology became specializations: Health and Wellness, Exercise Science, and Rehabilitation. There are 42 credits of core kinesiology courses for the programs plus at least one unique kinesiology course for each specialization, for a total minimum of 45 specified credits.

Currently the Kinesiology Major does not exist as a program without specializations. Some kinesiology students have been asking for more flexibility within their program so that they can pursue minors in other faculties such as Science, Business and Information Technology and Social Science and Humanities. For example, students interested in becoming teachers, may want a minor in science as a second teachable, whereas other students want to pursue management courses to prepare for a career in Sport Management. A recent review of College to University Pathways in Kinesiology also found that a number of students wanted more room for electives, which they see as an important part of the university experience. The creation of a "generalist" program, in addition to the three current specializations would address these issues.

The program would retain the "core" group of kinesiology courses currently common to the specializations, so that all Kinesiology programs continue to meet accreditation requirements. This includes a new course being introduced to the specializations in a Minor Program Adjustment, that is replacing another core course. The new program essentially deletes the courses that are specialization-specific, thus creating room for general electives in other faculties and enabling students to choose which upper year kinesiology courses they wish to pursue. There are no resource implications for the Comprehensive program because there are no new courses being created.

2. DEGREE REQUIREMENTS

a) Program learning outcomes

- The program level learning outcomes remain unchanged

b) Admission Requirements

- The program admission requirements remain unchanged

c) Program Structure

Below, please find the program map for the new unspecialized program.

Bachelor Of Health Science - Kinesiology - 2017-2018 (NEW)

YEAR ONE (2017-18)	
Year One Semester 1	**Semester 2**
HLSC 1200U - Anatomy & Physiology I	HLSC 1201U - Anatomy & Physiology II
BIOL 1010U – Biology I	HLSC 1812U - Socio-cultural Perspectives on Physical Activity & Health
HLSC 1701U - Information Literacy and Written Communications for the Health Sciences	PSYC 1000U - Introductory Psychology

HLSC 1810U - Health Promotion & Healthy Active Living	Open Elective (2000 level or higher)
Open Elective	Open Elective
YEAR TWO (2018-19)	
Semester 1	**Semester 2**
HLSC 2400U - Intro to Movement Neuroscience	HLSC 2110U - Foundations in Clinical and Exercise Biochemistry
HLSC 2462U - Altered Physiology: Mechanisms of Disease I	HLSC 3800U - Critical Appraisal of Statistics in Health Sciences
HLSC 2401U - Human Growth and Motor Development	HLSC 3475U - Intro to Injury Management
HLSC 3470U - Kinesiology I: Anatomy of Human Movement	HLSC 3481U - Exercise Physiology
HLSC xxxxU - Quantitative Reasoning for Kinesiology	Open Elective
YEAR THREE (2019-20)	
Semester 1	**Semester 2**
HLSC 3020U - Health & Exercise Psychology	HLSC 3410U - Human Motor Control and Learning
HLSC 3480U - Principles of Fitness Assessment & Exercise Prescription	HLSC 3711U - Professional Ethics & Communication in Kinesiology
HLSC 3910U - Research Methods for Health Care Professionals: Theory and Application	HLSC 4412U - Exercise Rehabilitation I: Cardiac, Respiratory and Metabolic Conditions
HLSC 4471U - Kinesiology II: Musculoskeletal Biomechanics	HLSC 4475U - Occupational Ergonomics
Open Elective	Open Elective
YEAR FOUR (2020-21)	
Semester 1	**Semester 2**
HLSC 4413U - Exercise Rehabilitation II: Integrated Case Studies	Kinesiology Elective (3000 - or 4000 Level)
HLSC 4994U - Research Applications for Kinesiology **OR** HLSC 4998U - Research Practicum I	HLSC 4995U - Kinesiology Research to Practice **OR** HLSC 4999U - Research Practicum II
HLSC 4482U - Advanced Exercise Assessment and Prescription	Kinesiology Elective (3000 - or 4000 Level)
HLSC 2825U - Nutrition and Health	Open Elective (2000 level or higher)
Open Elective	Open Elective (2000 level or higher)

d) Program Content

NEW COURSE TEMPLATE

For changes to existing courses see Course Change Template

Faculty: Faculty of Health Sciences		
Course title: Quantitative Reasoning for Kinesiology		
Course number: HLSC XXXXU	**Cross-listings:**	**__X__ Core __ Elective**
Credit weight: 3 credits	**Contact hours:** _3__ Hybrid Lecture _1.5__+ online material Tutorial 1.5 (alternate weeks)__ Tutorial __ Other	

CALENDAR DESCRIPTION

The purpose of this course is to provide students foundational knowledge in kinesiology and concepts from physics and mathematics that they need to succeed in the kinesiology program. The course covers foundational mathematics concepts including: manipulation of algebraic equations needed to solve problems in biomechanics, ergonomics, and exercise physiology, conversion of SI measurement units and the use of trigonometry to add biomechanical force vectors. The course includes an overview of basic functional anatomy of movement (types of contractions, roles of different tissues, muscles as lever systems, etc). Foundational knowledge of biomechanics such a how to solve one and two dimensional kinematics problems and analyze free body diagrams are covered. Finally students are taught how to use software such as Excel to manipulate large data sets, analyze, interpret and present different types of kinesiology data sets. Prerequisite: HLSC 1201U

Prerequisites	HLSC 1200U Anatomy & Physiology I
Co-requisites	
Credit restrictions	PHY 1810U Physics for Health Sciences
Credit exemptions	*students enrolled in physics 1010 can apply for exemption

LEARNING OUTCOMES

Upon completion of this course, students will have reliably demonstrated an ability to:

- Manipulate algebraic expressions that are relevant to biomechanics and exercise physiology
- Convert between units of measurement that are relevant to the body
- Solve one- and two-dimensional kinematics problems
- Draw and analyze free body diagrams of various parts of the body
- use trigonometry to add biomechanical force vectors
- Evaluate muscle structure and types of muscle contractions (e.g. concentric, eccentric, isometric, isotonic)
- Understand the concept of origins and insertions and relate this to how muscles cross joints and generate motion
- Use technology to analyse and interpret kinesiology data

DELIVERY MODE

The course uses a combination of classroom lectures and tutorials, and will utilize posted lecture notes, online content (self-directed learning).

TEACHING AND ASSESSMENT METHODS

Midterm and Final written examinations Bi-weekly tutorial problems On-line self-directed quizzes

CONSULTATION AND FINANCIAL IMPLICATIONS, WHERE APPROPRIATE

APPROVAL DATES

Date of submission	April 28, 2016
Program Committee approval	May 2, 2016
Curriculum Committee approval	June 24, 2106
Executive Committee approval	Sept 1, 2016
Faculty Council approval	Sept 14, 2016

3. RESOURCE REQUIREMENTS

- **Please note, there are no additional resource requirements as we are taking the existing KIN major and creating a program without any of the specialization courses.**

a) Faculty members
No additional resource requirements.

b) Additional academic and non-academic human resources
No additional resource requirements.

c) Physical resource requirements
No additional resource requirements.

4. BUSINESS PLAN

- **Please note, there are no additional resource requirements as we are taking the existing KIN major and creating a program without any of the specialization courses.**

a) Statement of funding requirements
No additional resource requirements.

b) Statements of resource availability
No additional resource requirements.

5. TIMELINE/DATE OF IMPLEMENTATION

Fall 2017 – Current first year students as well as incoming first year students will be able to select the major without specialization and will follow the course map provided in this document.

APPROVAL DATES

Date of Submission to CPRC	September 9, 2016
Faculty Council Approval	September 14, 2016
CPRC or GSC Approval	September 16, 2016
Academic Council Approval	