HUMAN KINETICS (HK)

Department of Human Health Sciences, College of Biological Science

Human Kinetics is concerned with understanding capacities for, and limits of, human movement at different ages and with the role of physical activity in human health. Through the use of electives, students may structure a program emphasizing biomechanics and ergonomics, human population biology or nutrition, exercise and metabolism.

If lacking the fundamentals of word processing, spread sheet use and data management, the student should select CIS*1200 Introduction to Computing as early in the program as possible.

Major Requirements (Honours)

This is a major within the degree: Bachelor of Science.

B.Sc. students who were not admitted directly into the Human Kinetics major from high school and subsequently wish to transfer to the specialization must apply directly to the Department of Human Health Sciences by the last day of classes in the winter semester.

To be eligible after first year, applicants must have successfully completed 4.0 science credits in a B.Sc. specialization with an average of 70% or better in BIOL*1070 Discovering Biodiversity, BIOL*1080 Biological Concepts of Health and BIOL*1090 Introduction to Molecular and Cellular Biology. For students with a 65-69.9% average in these three courses, admission to the major will be competitive based on available spaces.

Students wishing to transfer after second year or third year must have an average of 70% or better in their last two semesters (total of best 4.00 science credits). For students with a 65-69.9%, admission to the major will be competitive based on available spaces.

All decisions regarding transfers will be made by the end of June.

To complete the major, a minimum of 20.00 credits are required.

Students lacking Grade 12 or 4U Biology, Chemistry or Physics should follow the revised schedule of study for this major found at https://www.uoguelph.ca/bsc/revised_SS/ (https://www.uoguelph.ca/bsc/revised_SS).

Code	Title	Credits
Semester 1		
BIOL*1080	Biological Concepts of Health	0.50
CHEM*1040	General Chemistry I	0.50
MATH*1080	Elements of Calculus I	0.50
PHYS*1080	Physics for Life Sciences	0.50
0.50 Liberal Education electives		0.50
Semester 2		
BIOL*1070	Discovering Biodiversity	0.50
BIOL*1090	Introduction to Molecular and Cellular Biology	0.50
CHEM*1050	General Chemistry II	0.50
PHYS*1070	Physics for Life Sciences II	0.50
0.50 Liberal Education electives		0.50
Semester 3		
BIOC*2580	Introduction to Biochemistry	0.50
HK*2270	Principles of Human Biomechanics	0.50
MBG*2040	Foundations in Molecular Biology and Genetics	0.50
STAT*2040	Statistics I	0.50
0.50 Liberal Education electives		0.50
Semester 4		
HK*2810	Human Physiology I - Concepts and Principles	0.50
MCB*2050	Molecular Biology of the Cell	0.50
NUTR*3210	Fundamentals of Nutrition	0.50
0.50 electives		0.50
0.50 Liberal Education electives		0.50
Semester 5		
HK*3600	Applied Human Kinetics I	0.75
HK*3810	Human Physiology II - Integrated Systems	0.75
NUTR*3360	Lifestyle Genomics	0.50
HK*3401	Human Anatomy: Dissection	0.75
or HK*3501	Human Anatomy: Prosection	
Semester 6		
BIOC*3560	Structure and Function in Biochemistry	0.50
HK*3100	Neuromuscular Physiology	0.50
HK*4600	Applied Human Kinetics II	0.75
Select one of the following:		
HK*3402	Human Anatomy: Dissection [1]	0.75
HK*3502	Human Anatomy [2]	0.75
Semester 7		
HK*4550	Human Cardio-respiratory Physiology	0.50
NUTR*4210	Nutrition, Exercise and Energy Metabolism	0.50
1.50 electives or restricted electives		1.50
Semester 8		
2.25 electives or restricted electives		2.25

[1] If registered in HK*3401 Human Anatomy: Dissection in semester 5
[2] If registered in HK*3501 Human Anatomy: Prosection in semester 5

Restricted Electives

A minimum of 2.00 credits of Liberal Education electives is required. The list of Liberal Education electives for B.Sc. students can be found at: https://www.uoguelph.ca/bsc/

A minimum of 1.00 credits of restricted electives are required which must be selected from HHNS*4XXX, HK*4XXX, NUTR*4XXX (must be an approved B.Sc. Science Elective).

Credit Summary

(20.00 Total Credits)

Code	Title	Credits
First year science core		4.00
Required science courses semesters 3 - 8		9.75
Restricted elective (# 2 in restricted elective list)		1.00
Approved Science Electives		1.25
Liberal Education Electives (# 1 in restricted electives list)		2.00
Free Electives - any approved electives for B.Sc. students		2.00
Total Credits		**20**

Of the total credits required, students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level and an additional 4.00 credits must be at the 3000 or 4000 level.