HUMAN KINETICS (HK)

Department of Human Health and Nutritional 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, spreadsheet use and data management, the student should select CIS*1200 Introduction to Computing as early in the program as possible.

Major (Honours Program)
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 and Nutritional Science 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/

Credit Summary
(20.00 Total Credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL*1080</td>
<td>Biological Concepts of Health</td>
<td>0.50</td>
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<tr>
<td>CHEM*1040</td>
<td>General Chemistry I</td>
<td>0.50</td>
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<tr>
<td>MATH*1080</td>
<td>Elements of Calculus I</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1080</td>
<td>Physics for Life Sciences</td>
<td>0.50</td>
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<tr>
<td></td>
<td>0.50 Liberal Education electives</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*1070</td>
<td>Discovering Biodiversity</td>
<td>0.50</td>
</tr>
<tr>
<td>BIOL*1090</td>
<td>Introduction to Molecular and Cellular Biology</td>
<td>0.50</td>
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<tr>
<td>CHEM*1050</td>
<td>General Chemistry II</td>
<td>0.50</td>
</tr>
<tr>
<td>PHYS*1070</td>
<td>Physics for Life Sciences II</td>
<td>0.50</td>
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<tr>
<td></td>
<td>0.50 Liberal Education electives</td>
<td>0.50</td>
</tr>
<tr>
<td>BILOC*2580</td>
<td>Introduction to Biochemistry</td>
<td>0.50</td>
</tr>
<tr>
<td>HK*2270</td>
<td>Principles of Human Biomechanics</td>
<td>0.50</td>
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**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
- HK*3501 Human Anatomy: Prosection 0.75

**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 0.75
- HK*3502 Human Anatomy 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 HK*4XXX, NUTR*4XXX (must be an approved B.Sc. Science Elective).

Credit Summary
A minimum of 20.00 credits 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 HK*4XXX, NUTR*4XXX (must be an approved B.Sc. Science Elective).
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.