**Applied Human Nutrition-应用人体营养学**

欢迎大家来到人体营养学的介绍板块。以下这篇文章将系统介绍人体营养学的专业概况及就业前景。

**专业概况：**

Applied Human Nutrition, 简称AHN（B.A.Sc.），隶属于CSAHS Applied Science College，是圭尔夫大学Macdonald学院的主要专业之一。众所周知，营养学专业人才及营养师在中国极度短缺，仅仅在中国的大型医院和少数的公众机构才会有营养师对民众进行膳食指导。作为圭尔夫大学的王牌专业之一，人体营养学提供给中国留学生一个宝贵的系统学习国外先进营养理念的机会。 因此本专业每年都会吸引大量学生申请。相对于其他社会学科，人体营养学的录取条件较高，中国的留学生的数量也较少，主要以本地学生为主。此专业融合了交流技巧，生物，化学，微生物，心理学，统计学等多项实用科目,将社会实践及生化知识融为一体。通过系统的学习，学生能了解怎样预防由摄取营养不当所引起的疾病，如何保持健康的身心及通过膳食调理身体和治疗各种相关疾病。另一方面，学生同样能获得优秀的公众交流技巧，为未来工作做好准备。**AHN专业及其研究生项目获得加拿大营养师协会（the Dietitians of Canada）的认可**，对于想成为加拿大营养师的同学，圭尔夫大学的营养学专业提供了一个优秀的学习平台。

**毕业要求：**

应用人体营养学要求学生至少完成20个学分以毕业。其中必须包括专业必修课程的14个学分，专业要求的选修课1.5个学分。余下的学分学生可自由选择感兴趣的或是专业发展相关课程。同时，学生的学期平均成绩必须超过60%才有资格进入下一学期的学习。

**能力要求：**

* **英语沟通能力：**在加拿大学习和工作的首要条件就是要有卓越的英语沟通能力。人体营养学不仅仅要求学生听懂课堂知识，更看重的是将所学知识运用到真实情景中。不能只追求上课能听懂，还要善于发现问题，并不时与当地学生和教授交流学习。为提高交流水平，人体营养学提供了相关课程来传授交流技巧。拿临床营养师的工作为例，帮助病患制定营养计划的前提是需要卓越的沟通能力，让患者信任，并有能力从患者的表达中得到真实的信息。由于营养膳食不同于药剂，不拥有使用量的硬性规定，营养师必须要有能力根据实际情况向病人详细解释每种食物所提供的营养素，对疾病治疗的辅助作用和搭配方法。
* **经验的积累：**国外的公司与机构在招录工作人员时极其看中毕业生平时的社会经验。相对于成绩优异却没有社会经验的应聘者，他们更看重成绩过关并拥有大量实践经验的应聘者。对于中国留学生来说，兼职或者参加志愿者活动都是极好的积累个人经验的机会。如果可能的话，最好能在合法的情况下选择与自己专业对口的兼职。如果没有兼职机会提供，可在空闲时间积极参加志愿者活动。学生要学会运用来自学校邮箱的信息，里面提供了大量关于相关专业兼职以及志愿者活动的信息。多数志愿者活动要求的门槛低，几乎是人人都可以参加，时间安排也非常灵活。在以后的工作简历上，可请求以前的雇主或志愿者活动组织者写上一封推荐信，对成功申请到工作职位非常有帮助。

**学习技巧：**

营养学的课程平时看起来容易，但由于记忆量大，必须养成及时复习的好习惯。不懂的问题及时向教授当面提出或者课后在discussion板块提出问题。有些课程进度非常快，要求学生到场听课，做好笔记，并在课余时间消化内容 。学生最好能参照每节课的outline提前定制时间表，以免发生来不及复习和错过截止日期的情况。

**申请加拿大营养师考试资格：**

要想取得加拿大的营养师资格认证并非易事。第一步是以优异的成绩完成本科学业。为取得营养师考试资格，有两条道路可以选择。一是进入当地医院或者被加拿大营养师协会认可的相关机构实习一年，二是继续完成研究生课程。只有在完成以上两者之一后，学生才有资格申请报考营养师。

**就业前景：**

无论是医院的临床营养师还是公众机构的营养师，都能带来不错的就业机会和薪酬。但是，营养学专业不仅仅限于培养营养师，此专业毕业的学生同样能成为各种机构（如学校，餐馆，食品行业，福利机构，政府机关及企业）的健康顾问，营养学教师及食品营养文化的传播者；或者受雇于科学研究所进行对食品营养的分析，或是深入研究人体营养机制等。

**课程：**

**semster1**

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| [CHEM\*1040](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12chem.shtml#CHEM1040) | [0.50] | General Chemistry I |
| [FRHD\*1100](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12frhd.shtml#FRHD1100) | [0.50] | Life: Health and Well-Being |
| [PSYC\*1000](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12psyc.shtml#PSYC1000) | [0.50] | Introduction to Psychology |
| One of: | | |
| |  |  |  | | --- | --- | --- | | [HTM\*2700](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM2700) | [0.50] | Introductory Foods | | [NUTR\*1010](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR1010) | [0.50] | Introduction to Nutrition | | | |
| 0.50 electives | | |
| **Note**: [HTM\*2700](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM2700) is recommended for Semester 1 if capacity allows, but may also be taken in Semester 2 by choosing [NUTR\*1010](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR1010) in Semester 1 | | |

**SEMESTER 2**

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| [CHEM\*1050](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12chem.shtml#CHEM1050) | [0.50] | General Chemistry II |
| [HROB\*2100](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12hrob.shtml#HROB2100) | [1.00] | Managing People in Organizations |
| One of: | | |
| |  |  |  | | --- | --- | --- | | [HTM\*2700](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM2700) | [0.50] | Introductory Foods | | [NUTR\*1010](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR1010) | [0.50] | Introduction to Nutrition | | | |
| One of: | | |
| |  |  |  | | --- | --- | --- | | [FRHD\*1020](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12frhd.shtml#FRHD1020) | [0.50] | Couple and Family Relationships | | [SOC\*1100](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12soc.shtml#SOC1100) | [0.50] | Sociology | | | |
| **\***See note in Semester 1 | | |

**SEMESTER 3**

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| [BIOC\*2580](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12bioc.shtml#BIOC2580) | [0.50] | Introduction to Biochemistry |
| [HTM\*2030](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM2030) | [0.50] | Control Systems in the Hospitality Industry |
| [NUTR\*2050](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR2050) | [0.50] | Nutrition Through the Life Cycle |
| [STAT\*2080](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12stat.shtml#STAT2080) | [0.50] | Introductory Applied Statistics I |
| One of: | | |
| |  |  |  | | --- | --- | --- | | [CIS\*1200](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12cis.shtml#CIS1200) | [0.50] | Introduction to Computing | | [MCS\*2020](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12cost.shtml#MCS2020) | [0.50] | Marketing Information Management | | | |
| Note: [HTM\*2030](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM2030) may be taken in Semester 4. | | |

**SEMESTER 4**

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| [MICR\*2420](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12micr.shtml#MICR2420) | [0.50] | Introduction to Microbiology |
| [NUTR\*3210](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR3210) | [0.50] | Fundamentals of Nutrition |
| [STAT\*2090](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12stat.shtml#STAT2090) | [0.50] | Introductory Applied Statistics II |
| 1.00 electives or restricted electives | | |

**SEMESTER 5\***

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| [BIOM\*3200](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12biom.shtml#BIOM3200) | [1.00] | Biomedical Physiology |
| [FRHD\*3070](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12frhd.shtml#FRHD3070) | [0.50] | Research Methods: Family Studies |
| 1.00 electives or restricted electives | | |
| \* **students planning to apply for a dietetic internship must take**[**HTM\*3090**](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM3090)**.** [HTM\*3090](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM3090)is recommended in Semester 5 in place of elective or restricted elective if capacity allows, but it may also be taken in Semester 6. If taken in Semester 6 take [FRHD\*3400](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12frhd.shtml#FRHD3400)in Semester 5. | | |

**SEMESTER 6**

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| [FRHD\*3400](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12frhd.shtml#FRHD3400) | [0.50] | Communication and Counselling Skills |
| [NUTR\*3070](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR3070) | [0.50] | Nutrition and Physical Activity Interventions |
| [NUTR\*3090](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR3090) | [1.00] | Clinical Nutrition I |
| 0.50 electives or restricted electives | | |

**SEMESTER 7**

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| [NUTR\*4010](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4010) | [0.50] | Nutritional Assessment |
| [NUTR\*4040](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4040) | [0.50] | Clinical Nutrition II |
| [NUTR\*4070](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4070) | [0.50] | Nutrition Education |
| 1.00 electives or restricted electives | | |

**SEMESTER 8**

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| [NUTR\*4900](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4900) | [0.50] | Selected Topics in Human Nutrition |
| 2.00 electives or restricted electives | | |
| Note: With approval from the instructor, students may substitute [NUTR\*4810](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4810) and [NUTR\*4910](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4910) for [NUTR\*4900](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR4900). | | |

**RESTRICTED ELECTIVES**

In addition to the 14.00 required credits listed above, students must take 1.50 restricted electives, including one 3000 level course, from the following list:

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| [FOOD\*2010](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD2010) | [0.50] | Principles of Food Science |
| One of | | |
| |  |  |  | | --- | --- | --- | | [FOOD\*2400](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD2400) | [0.50] | Introduction to Food Chemistry | | [FOOD\*3030](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3030) | [0.50] | Food Chemistry I | | [FOOD\*3050](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3050) | [0.50] | Food Chemistry I | | | |
| One of | | |
| |  |  |  | | --- | --- | --- | | [FOOD\*2410](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD2410) | [0.50] | Introduction to Food Processing | | [FOOD\*3160](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3160) | [0.75] | Food Processing I | | | |
| One of | | |
| |  |  |  | | --- | --- | --- | | [FOOD\*2420](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD2420) | [0.50] | Introduction to Food Microbiology | | [FOOD\*3230](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3230) | [0.75] | Food Microbiology | | [FOOD\*3240](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3240) | [0.50] | Food Microbiology | | | |
| [FOOD\*3430](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3430) | [0.50] | Introduction to Food Analysis |
| [FOOD\*3700](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12food.shtml#FOOD3700) | [0.50] | Sensory Evaluation of Foods |
| [HTM\*2740](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM2740) | [0.50] | Cultural Aspects of Food |
| [HTM\*3780](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12htm.shtml#HTM3780) | [0.50] | Economics of Food Usage |
| [NUTR\*3110](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR3110) | [0.50] | Food Security |
| [NUTR\*3150](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12nutr.shtml#NUTR3150) | [0.50] | Aging and Nutrition |

在完成必修课程的14学分及1.5个专业限制选修课学分后，剩下的4.5个学分可自由选择课程。但建议利用这4.5个学分学习与专业相关的课程。

**总结：**

人体营养学在加拿大是一个发展较久的学科，课程涵盖面广，难度较大，职业选择多，可在医院及福利设施，企业工作。无论是回国或者是留在加拿大发展，都有较好的求职空间。但由于营养师报考难度大，通过率低，学生需要做好多种工作准备和对策。值得一提的是，由于中国经济发展迅速，人们越来越认识到营养对预防和治疗疾病的重要性，对营养行业工作者的需求也越来越迫切。由于国内的营养专业和营养师资格认证还未真正的完善建立，圭尔夫大学闻名的营养学专业会给学生们一个更好的学习机会。

By 王怡然（Elva Wang）