

Area of Interest: Culinary, Hospitality and Tourism

# Bachelor of Culinary Arts and Food Science (Honours) (Co-op)

Honours Degree Program Code: 6180X03FWO

4 Years

Ottawa Campus

# **Our Program**

This four-year Bachelor of Culinary Arts and Food Science degree is designed for students seeking careers in the hospitality, culinary, food services and food science sectors through a unique combination of food science and culinary skills. Well suited for those with a passion for food and a love of science, this program produces skilled graduates with culinary and food science backgrounds equipped with the abilities to create innovative, high quality food products for existing and emerging markets.

Through combining the disciplines of food science and culinary arts, students develop the necessary skills and knowledge to become professionals within this innovative and emerging field. Students examine a broad range of topics including food chemistry, food microbiology, sensory evaluation, food processing, as well as culinary science and food service management, with a focus on food product development and enhancing the nutritional value of food products. These core science skills are complemented by advanced skills in food preparation, cooking, baking, safety and sanitation, management and leadership. Through applied research in product development, students have the opportunity to research, create and market their own products.

Students also gain real-world experience through a paid co-operative education (co-op) work term (s) (see Additional Information for more details). Please note that places in the co-op work term(s) are subject to availability and academic eligibility. Please note admission to a co-op program does not guarantee a co-op placement.

Major food companies and producers seek individuals who have the ability to design, develop and process quality food choices that are healthy, affordable, desirable and safe for consumers. Graduates are well positioned to find employment opportunities with major food manufacturers or small, private label companies, in the areas of food production management, food technology, product development, quality assurance management, food services and food research and development as well as in health-related industries or entrepreneurial endeavours. Algonquin College is working closely with the Research Chefs Association (RCA) in seeking RCA's accreditation as a Culinology(R)program. Graduates of this program could be positioned to challenge the RCAs Certified Research Chef examination.

#### **Employment**

Graduates are well positioned to find employment opportunities as food microbiologists, food products scientists, food research scientists, food processing quality control officers, food quality assurance officers, food products inspectors, food science educators, agriculture and food sector development consultants, agriculture and food sector marketing consultants, agri-food sector development consultants, agri-food sector marketing consultants, culinary chefs, food product developers, food research developers and restauranteurs/entrepreneurs.

#### **Learning Outcomes**

The graduate has reliably demonstrated the ability to:

- Apply scientific principles, methodologies and theories in the development of new and modification of existing food and beverage products to meet market demands.
- Create quality food and beverage products using interdisciplinary skills in the processing, manufacturing and packaging of food products.



- Solve problems, formulate strategies and customize innovative solutions using critical thinking and research skills for the food service and the food industry.
- Perform research to plan, design and develop food and beverage products.
- Perform duties in a professional, ethical, safe and legal manner to meet industry expectations and compliance.
- Produce food and beverage products using culinary, food science and technology knowledge and skills to address health, safety, and nutritional issues.
- Perform sensory evaluation of food and beverage products to create products that meet consumer demands.
- Use and evaluate quality control and quality assurance procedures to meet industry standards and requirements.
- Communicate in written and oral format to present clear and concise technical, research and scientific information for a variety of audiences.
- Promote and advance the food and food service industries in the area of evidence-based culinary and food science practices using leadership skills.
- Conduct culinary planning, preparation, and presentation to a variety of food service environments to meet client needs.
- Use principles of marketing and finance in food product development process and in the operations of food and beverage management.
- Develop personal and professional strategies to plan, manage and adapt to the industry ensuring currency and fostering inter-professionalism.
- Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship.

#### **Program of Study**

Level: 01	Courses	Hours
ENL1100	Communications and Academic Writing	42.0
FOD0031	Culinary Arts Fundamentals	42.0
FSC0031	Principles of Food Science and Nutrition	42.0
MAT0031	Mathematics for Food Science	42.0
SAF1300	Biosafety	14.0
SCI0008	Introduction to Chemistry and Physics	42.0
Level: 02	Courses	Hours
BIO0031	General Microbiology	56.0
CHE0031	General and Organic Chemistry	56.0
FOD0032	Culinary Arts	56.0
FSC0032	Introduction to Culinology	42.0
PHI1000	Logic and Critical Thinking	56.0



Level: 03	Courses	Hours
CHE0131	General Biochemistry	42.0
FOD0131	Advanced Culinary Arts	56.0
FSC0033	Food Production Fundamentals	42.0
GEP1001	Cooperative Education and Job Readiness	21.0
QUA2000	Statistics	42.0
Elective: choose	1 Courses	Hours
BIO2200	Botany	56.0
ECO2000	Environmental Economics	42.0
ENL2025	Interpersonal Communication	42.0
FLS3101	French as a Second Language-Beginner 1	42.0
FLS3102	French as a Second Language-Beginner 2	42.0
GED2300	Indigenous Self-Representation in Contemporary Canadian Culture	42.0
GEO2300	Principles of Urban Planning	56.0
LAN3101	Spanish-Beginner 1	42.0
LAN3102	Spanish-Beginner 2	42.0
LAW2014	Law	42.0
PHI2002	Ethical Decision Making	42.0
PSI2000	Navigating Canada's Political Landscape	56.0
PSY2100	Introductory Psychology	42.0
SCI2000	Environmental Science	42.0
SOC2000	Introduction to Sociology	56.0
SOC2001	Anti-Racism: Theory and Practice	42.0
Level: 04	Courses	Hours
BIO0131	Food Microbiology	70.0
FOD0040	Baking and Pastry Fundamentals	42.0
GEP2001	Co-Op Job Search 1	21.0
MGT0131	Management of Food and Beverage	42.0
PHI3000	Applied Research Methodology	56.0
Elective: choose	1 Courses	Hours
BIO2200	Botany	56.0
ECO2000	Environmental Economics	42.0



ENL2025	Interpersonal Communication	42.0
FLS3101	French as a Second Language-Beginner 1	42.0
FLS3102	French as a Second Language-Beginner 2	42.0
GED2300	Indigenous Self-Representation in Contemporary Canadian Culture	42.0
GEO2300	Principles of Urban Planning	56.0
LAN3101	Spanish-Beginner 1	42.0
LAN3102	Spanish-Beginner 2	42.0
LAW2014	Law	42.0
PHI2002	Ethical Decision Making	42.0
PSI2000	Navigating Canada's Political Landscape	56.0
PSY2100	Introductory Psychology	42.0
SCI2000	Environmental Science	42.0
SOC2000	Introduction to Sociology	56.0
SOC2001	Anti-Racism: Theory and Practice	42.0
Co-op: 01	Courses	Hours
WKT4000	Co-Op I: Culinary Arts	0.0
Level: 05	Courses	Hours
CHE0231	Food Chemistry	70.0
MGT0231	Restaurant and Food Operations	56.0
NTN0031	Human Nutrition	42.0
SAF0031	Food Safety and Sanitation	70.0
Level: 06	Courses	Hours
FSC0130	Food Analysis	70.0
FSC0132	Sensory Food Evaluation	70.0
FSC0133	Food Product Development	70.0
GEP2002	Co-Op Job Search 2	21.0
Elective: choose	e 1 Courses	Hours
BIO2200	Botany	56.0
ECO2000	Environmental Economics	42.0
ENL2025	Interpersonal Communication	42.0
FLS3101	Franch as a Casand Language Paginner 1	40.0
	French as a Second Language-Beginner 1	42.0
FLS3102	French as a Second Language-Beginner 2	42.0



GED2300	Indigenous Self-Representation in Contemporary Canadian Culture	42.0
GEO2300	Principles of Urban Planning	56.0
LAN3101	Spanish-Beginner 1	42.0
LAN3102	Spanish-Beginner 2	42.0
LAW2014	Law	42.0
PHI2002	Ethical Decision Making	42.0
PSI2000	Navigating Canada's Political Landscape	56.0
PSY2100	Introductory Psychology	42.0
SCI2000	Environmental Science	42.0
SOC2000	Introduction to Sociology	56.0
SOC2001	Anti-Racism: Theory and Practice	42.0
Co-op: 02	Courses	Hours
WKT6000	Co-Op 2: Food Science	0.0
Level: 07	Courses	Hours
FOD0231	Culinary Trends and Innovation	42.0
FSC0231	Food Quality Control Assurance	42.0
FSC0232	Food Process Engineering	42.0
MGT0331	Menu Design and Service	42.0
Elective: choose	2 Courses	Hours
CUL4000	Global Citizenship	42.0
ENL4016	World Literature	42.0
ENL4100	Creative Writing	42.0
ENL4200	New Worlds and Alternative Realities: Speculative Fiction	42.0
PHI4000	Philosophy and Popular Culture	42.0
PHI4002	The Philosophy of Drugs	42.0
PHI4003	The Philosophy of Love and Sex	42.0
PHI4004	Technology, Society and the Environment	42.0
PHI4100	Survival in the Information Age: Risk and the Media	42.0
PHY4000	Black Holes, Big Bangs and the Cosmos	42.0
SOC4000	Criminology	42.0
SOC4001	Global Perspectives	42.0
Level: 08	Courses	Hours

42.0



FOD0331	Regional and International Cuisine	42.0
FSC0233	Applied Research in Culinology	56.0
LAW0032	Food Laws and Regulation	42.0
Elective: choose 2 Courses Hours		
CUL4000	Global Citizenship	42.0
ENL4016	World Literature	42.0
ENL4100	Creative Writing	42.0
ENL4200	New Worlds and Alternative Realities: Speculative Fiction	42.0
PHI4000	Philosophy and Popular Culture	42.0
PHI4002	The Philosophy of Drugs	42.0
PHI4003	The Philosophy of Love and Sex	42.0
PHI4004	Technology, Society and the Environment	42.0
PHI4100	Survival in the Information Age: Risk and the Media	42.0
PHY4000	Black Holes, Big Bangs and the Cosmos	42.0
SOC4000	Criminology	42.0

# Fees for the 2025/2026 Academic Year

Global Perspectives

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at https://www.algonquincollege.com/ro/pay/fee-estimator/.

Further information on fees can be found by visiting the Registrar's Office website at http://file:///C:/Users/dowsete/AppData/Local/Apps/2.0/P9W99HW2.PH3/6AD6W4NH.1G5/test..tion e800ab5aa35904b3 0001.0000 00fb1777c0420787/www.algonquincollege.com/ro.

Fees are subject to change.

Additional program related expenses include: Students will need to purchase course textbooks where required.

# Admission Requirements for the 2026/2027 Academic Year

### **College Eligibility**

SOC4001

- Ontario Secondary School Diploma (OSSD) or equivalent
- Mature students are applicants who have not achieved the Ontario Secondary School Diploma (OSSD) or its equivalent and who are at least 19 years of age on or before the commencement of the program in which they intend to enroll. Mature students applying for Degree programs satisfy College Eligibility by having demonstrated academic abilities equivalent to those of Ontario high school graduates, verified by successful completion of at least one full-time term at the post-secondary level (minimum five courses taken concurrently in an academic program of study).



- Six Grade 12 university (U) or university/college (M) courses with a minimum 65% average including:
- One Grade 12 U English course, with a minimum of 60%
- One Grade 12 U Mathematics course, with a minimum of 60%
- One Grade 12 U Biology course or one Grade 12 U Chemistry course
- Please note that mature students must meet the following subject-specific Program Eligibility requirements, either directly or through equivalencies:

# Admission Requirements for 2025/2026 Academic Year

# **College Eligibility**

- Ontario Secondary School Diploma (OSSD) or equivalent.
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# **Program Eligibility**

- Six Grade 12 university (U) or university/college (M) courses with a minimum 65% average including:
- One Grade 12 U English course, with a minimum of 60%.
- One Grade 12 U Mathematics course, with a minimum of 60%.
- One Grade 12 U Biology course or one Grade 12 U Chemistry course.
- Please note that mature students must meet the following subject-specific Program Eligibility requirements, either directly or through equivalencies:

# **Application Information**

# BACHELOR OF CULINARY ARTS AND FOOD SCIENCE Program Code 6180X03FWO

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca 60 Corporate Court Guelph, Ontario N1G 5J3 1-888-892-2228

Students currently enrolled in an Ontario secondary school should notify their Guidance Office prior to their online application at <a href="http://www.ontariocolleges.ca/">http://www.ontariocolleges.ca/</a>.

Applications for Fall Term and Winter Term admission received by February 1 will be given equal consideration. Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants please visit this link for application process information: https://algonquincollege.my.site.com/myac360/s/self-registration-page.

For further information on the admissions process, contact:

Registrar's Office Algonquin College



1385 Woodroffe Ave Ottawa, ON K2G 1V8 Telephone: 613-727-0002 Toll-free: 1-800-565-4723

TTY: 613-727-7766 Fax: 613-727-7632

Contact: <a href="https://www.algonquincollege.com/ro/">https://www.algonquincollege.com/ro/</a>

#### **Additional Information**

Algonquin College has been granted consent by the Minister of Colleges and Universities to offer this applied degree for a seven-year term starting 2020. The College shall ensure that all students admitted to the above-named program during the period of consent have the opportunity to complete the program within a reasonable timeframe.

#### **CO-OP INFORMATION**

Co-operative education (Co-op) allows students to integrate their classroom learning with a real-world experience through paid work terms. Two academic terms prior to the cooperative education work term, students are required to actively participate in and successfully complete the self-directed co-op course, readiness activities and workshops.

Students must actively conduct a guided, self-directed job search and are responsible for securing approved program-related paid co-op employment. Students compete for co-op positions alongside students from Algonquin College and other Canadian and international colleges and universities. Algonquin College's Co-op Department provides assistance in developing co-op job opportunities and guides the overall process, but does not guarantee that a student will obtain employment in a co-op work term. Co-op students may be required to relocate to take part in the co-op employment opportunities available in their industry and must cover all associated expenses; e.g., travel, work permits, visa applications, accommodation and all other incurred expenses.

Co-op work terms are typically 14 weeks in duration and are completed during a term when students are not taking courses. For more information on your program's co-op level(s), visit the courses tab on your program's webpage.

International students enrolled in a co-op program are required by Immigration, Refugees and Citizenship Canada (IRCC) to have a valid Co-op/Internship Work Permit prior to commencing their work term. Without this document International students are not legally eligible to engage in work in Canada that is part of an academic program. The Co-op/Internship Work Permit does not authorize international students to work outside the requirements of their academic program.

For more information on co-op programs, the co-op work/study schedule, as well as general and program-specific co-op eligibility criteria, please visit <a href="https://www.algonquincollege.com/coop-career-centre/">https://www.algonquincollege.com/coop-career-centre/</a>.

Completion of the total number of co-op work terms listed under the courses section on the program page are mandatory for graduation. Co-op students must make every effort to remain on schedule and participate in co-op work terms as planned. Students who fail to complete co-op work terms as scheduled may be required to take an unscheduled break in their studies, resulting in a delay in graduation in order to complete their co-op at a later date. Taking an unscheduled break in studies can impact an international student's immigration status, including, in most cases, the ability to work. International students are advised to consult with the International Education Centre to understand the potential implications of unscheduled breaks at <a href="http://www.algonquincollege.com/international/student-handouts/scheduled-unscheduled-breaks/">http://www.algonquincollege.com/international/student-handouts/scheduled-unscheduled-breaks/</a>.

#### TRANSFER CREDIT RECOGNITION:

Algonquin College will award transfer of academic credit (external) to students for courses completed at other accredited postsecondary institutions, on the basis that the learning outcomes are equivalent and current to the courses within the program of study. A minimum grade of C or equivalent is required.

#### **ADVANCED STANDING:**

Formal advanced standing options exist for graduates of the following programs: Culinary Management Ontario College Diploma; Baking and Pastry Arts Ontario College Diploma; Biotechnology - Advanced Ontario College Advanced Diploma; Food Science Technology Ontario College Advanced Diploma; and Culinary Innovations and Food Technology Ontario College Advanced Diploma. Please contact the Program Coordinator for more details.



#### **Bachelor of Culinary Arts and Food Science Program Structure:**

# **Contact Information**

# **Program Coordinator(s)**

- David Fairbanks, mailto:fairbad@algonquincollege.com, 613-727-4723, ext. 5226

# **Course Descriptions**

#### **BIO0031 General Microbiology**

Microorganisms exist throughout our environment and possessing knowledge of microbiology provides an understanding of its effects on larger life-forms. Students explore the scope of general microbiology, the diversity of microorganisms, including bacteria, viruses, fungi, protozoa and micro-algae, as well as the impact of microbes on everyday life. Topics include microbial nutrition and types of microbial growth, metabolism and energy generation, microbial control by physical and chemical agents. Students further examine the origins of biological diversity, the structure of cells and their components, as well as the form and function of plants and animals. During the laboratory component, students perform microscopic examination of microorganism's culture from food and water specimens using basic microbiology laboratory techniques.

Prerequisite(s): none Corerequisite(s):none

#### **BIO0131 Food Microbiology**

Food is extremely susceptible to biological degradation due to the presence of microorganisms. Students analyze the most common microorganisms found in food, including bacteria, yeasts, moulds and viruses, as well as the most important groups of microorganisms associated with food spoilage: food fermentations, food infections and intoxications. Other considerations include intrinsic and extrinsic factors that affect microbial growth, sources of contamination during production, and the processing and storage of foods. In addition, the principles of culturing, isolation, identification, enumeration of microorganisms associated with food products are examined. Laboratory classes provide experience in microbiological techniques, sampling and standard techniques used for the microbiological examination of foods and water.

Prerequisite(s): BIO0031 Corerequisite(s):none

# **BIO2200 Botany**

Biologists with an interest in plant life may choose to specialize in botany. Beginning with the organic features of life, focusing on plants, students investigate the diversity of plant life and the basis for distinction amongst various species. With a deeper knowledge of plant structures and variability, students consider the impact of plants in the modern world, including human interactions such as food production, building materials and medicine.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### **CHE0031 General and Organic Chemistry**

Understanding how chemicals react to each other and the complexity of chemical components provides the foundation of chemistry, nutrition and the modern food industry. Students study the fundamental principles governing chemical reactions in aqueous solutions, chemical bonding, kinetics, chemical equilibria and thermodynamics, and apply these ideas to food, nutrition and food preparation. In addition, students study nomenclature and predict solubility, melting and boiling points based on chemical structure, and the interaction of these ideas to food items. Practical hands-on laboratory experiments are essential active learning environments for students. During lab time, students execute experiments related to the physical chemical properties of chemical reactions, phase transitions, structure and bonding in solids and solutions.

Prerequisite(s): SCI0008 Corerequisite(s):none

#### **CHE0131 General Biochemistry**

Understanding the biochemical compounds of cells and their biological roles is the foundation of biochemistry, and by extension, nutrition and food science. Students examine the structure of biologically important compounds and the biological roles of the major molecular components of the cell, including proteins, nucleic acids, lipids and carbohydrates. Focus is also on the roles of biological macromolecules, including enzymology and intermediary metabolism, with an emphasis on catabolic processes, and their application in industrial food preparation. In addition, students perform basic hands-on laboratory experiments on biomolecules including proteins, lipids and nucleic acids. The laboratory portion includes the isolation and study of biological properties of some biological compounds.

Prerequisite(s): CHE0031 Corerequisite(s):none

#### **CHE0231 Food Chemistry**

Students build on foundational chemistry knowledge in order to understand how different food compounds react to each other in different processing conditions. Students study the structural and functional properties of major and minor chemical compounds of food such as proteins, lipids, carbohydrates, water, enzymes, vitamins and their relationships to food stability and degradation. Students also explore the chemical changes in foods during processing and storage effecting texture, colour, flavour, stability and nutritive qualities.

Prerequisite(s): CHE0031 Corerequisite(s):none

# **CUL4000 Global Citizenship**

Informed citizens in today's world appreciate the meaning of civic life at the local, national and global level. Students reflect on and develop a personal awareness of the meaning of freedoms, rights and obligations in a diverse global community and consider the political, social and economic drivers that influence patterns of human behaviour and the health of the planet. Based on general principles of global citizenship, students look beyond national borders to assess personal responsibilities related to the health and well-being of the planet and inhabitants. Students critically evaluate information related to environmental and social health, equipped with attitudes and behaviours that foster global environmental and social responsibility.



Prerequisite(s): ENL1100 and PHI1000

Corerequisite(s):none

# **CUL4000 Global Citizenship**

Informed citizens in today's world appreciate the meaning of civic life at the local, national and global level. Students reflect on and develop a personal awareness of the meaning of freedoms, rights and obligations in a diverse global community and consider the political, social and economic drivers that influence patterns of human behaviour and the health of the planet. Based on general principles of global citizenship, students look beyond national borders to assess personal responsibilities related to the health and well-being of the planet and inhabitants. Students critically evaluate information related to environmental and social health, equipped with attitudes and behaviours that foster global environmental and social responsibility.

Prerequisite(s): ENL1100 and PHI1000

Corerequisite(s):none

#### **ECO2000 Environmental Economics**

Issues pertaining to the environment have a major financial impact on society and government. Environmental economics examines the way human decisions affect the quality of the environment, how human values and institutions shape our demands for improvements in the quality and about designing effective public policies to bring about these improvements. Students examine problems and solutions relating to environmental policy analysis in the Canadian context.

Prerequisite(s): none Corerequisite(s):none

#### **ECO2000 Environmental Economics**

Issues pertaining to the environment have a major financial impact on society and government. Environmental economics examines the way human decisions affect the quality of the environment, how human values and institutions shape our demands for improvements in the quality and about designing effective public policies to bring about these improvements. Students examine problems and solutions relating to environmental policy analysis in the Canadian context.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

# **ENL1100 Communications and Academic Writing**

Effective communication is an integral component of success in the workplace and in lifelong learning. Students review communication theory and its connection to expository writing. Frequent writing exercises encourage the development of content that is coherent, well organized and correct. Students consider and use strategies to generate ideas, to collect and organize information, to acknowledge sources, to identify and develop a thesis and to adapt format, style and tone for different purposes and audiences.



# **ENL2025 Interpersonal Communication**

Effectively communicating with others, both professionally and personally, is an art that requires conscious development. Students address the techniques related to interpersonal communication challenges in the diverse workplace. Focus is on communication barriers, verbal and non-verbal communication, listening, team work, and relational dynamics. Through role play, analysis, and case studies, students engage in simulated and authentic interpersonal communication situations.

Prerequisite(s): ENL1100 Corerequisite(s):none

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Prerequisite(s): ENL1100 Corerequisite(s):none

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Prerequisite(s): ENL1100 Corerequisite(s):none

#### **ENL4016 World Literature**

Exposure to broad sources of literature promotes an open-minded perspective on today's global society and encourages an appreciation of diversity and human differences. In World Literature, students explore key literary works from around the world and examine the socio-historical and cultural contexts in which authors wrote and set these texts. Students learn to identify common themes and apply literary and cultural theory to these works towards expanding critical thinking skills and developing an analytical vocabulary. Through seminar presentations, group discussions, debates, journaling, and creative writing, students grapple with literary representations of social, political, and cultural issues from around the world, gaining an appreciation of what it means to be responsible global citizens and possess the ability to listen to, question, and value diverse perspectives.

Prerequisite(s): ENL1100 Corerequisite(s):none

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Prerequisite(s): ENL1100 Corerequisite(s):none



# **ENL4100 Creative Writing**

Whether for personal or public consumption, many people enjoy writing short fiction to express their creative energy while improving upon their overall writing abilities. Working with professional short stories as models, students examine the stylistic components that contribute to the excitement, atmosphere, and overall readability of short fiction. Students share their work and provide formal feedback on the work of others.

Prerequisite(s): ENL1100 Corerequisite(s):none

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Whether for personal or public consumption, many people enjoy writing short fiction to express their creative energy while improving upon their overall writing abilities. Working with professional short stories as models, students examine the stylistic components that contribute to the excitement, atmosphere, and overall readability of short fiction. Students share their work and provide formal feedback on the work of others.

Prerequisite(s): ENL1100 Corerequisite(s):none

#### **ENL4200 New Worlds and Alternative Realities: Speculative Fiction**

Speculative fiction gathers together all those works of fiction in which new worlds or alternative realities are envisioned. Within this category of prose, students have the opportunity to explore the various sub-genres that present readers with new ways of thinking about some of the issues that face society. Students also develop skills in critical analysis using a variety of approaches and methodologies from literary studies.

Prerequisite(s): none Corerequisite(s):none

#### **ENL4200 New Worlds and Alternative Realities: Speculative Fiction**

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Prerequisite(s): none Corerequisite(s):none

# FLS3101 French as a Second Language-Beginner 1

The French language is an asset when communicating in the workplace. Students with no prior knowledge of French acquire basic forms and structures to interact and communicate in a simple way with French speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples support students to gain basic oral expression and comprehension using simple phrases that develop vocabulary, pronunciation, and comprehension. Students begin to appreciate cultural and linguistic differences when French is used in the workplace.

Prerequisite(s): none Corerequisite(s):none

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The French language is an asset when communicating in the workplace. Students with no prior knowledge of French acquire basic forms and structures to interact and communicate in a simple way with French speakers. Class instruction and practice, repeated feedback, and exposure to a



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Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### FLS3102 French as a Second Language-Beginner 2

The workplace benefits from having professionals with knowledge of the French language. Students with basic knowledge of French gain more control over forms and structures to interact and communicate in a simple way with French speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples provide students with opportunities to enhance their basic oral expression and comprehension using simple phrases that further develop vocabulary, pronunciation, and comprehension. Students deepen their knowledge of cultural and linguistic differences of French in the workplace.

Prerequisite(s): none Corerequisite(s):none

#### FLS3102 French as a Second Language-Beginner 2

The workplace benefits from having professionals with knowledge of the French language. Students with basic knowledge of French gain more control over forms and structures to interact and communicate in a simple way with French speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples provide students with opportunities to enhance their basic oral expression and comprehension using simple phrases that further develop vocabulary, pronunciation, and comprehension. Students deepen their knowledge of cultural and linguistic differences of French in the workplace.

Prerequisite(s): none Corerequisite(s):none

# FLS3102 French as a Second Language-Beginner 2

The workplace benefits from having professionals with knowledge of the French language. Students with basic knowledge of French gain more control over forms and structures to interact and communicate in a simple way with French speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples provide students with opportunities to enhance their basic oral expression and comprehension using simple phrases that further develop vocabulary, pronunciation, and comprehension. Students deepen their knowledge of cultural and linguistic differences of French in the workplace.

Prerequisite(s): none Corerequisite(s):none

#### **FOD0031 Culinary Arts Fundamentals**

The ability to participate in industry-scaled food production is contingent on knowledge of fundamental culinary techniques, knife handling skills and safe handling procedures. Students learn culinary terminology, ingredients, knife skills, food and plate presentation, evaluation and cooking



techniques. Students also learn how to use tools and equipment and to operate large and small commercial kitchen equipment. Sanitation and safety are practiced in all hands-on food preparation activities and assessments.

Prerequisite(s): none Corerequisite(s):none

#### **FOD0032 Culinary Arts**

Developing basic skills and knowledge in applied culinary arts is the first step in hands-on food preparation activities as well as an introduction to safe food handling and sanitation. Students participate in basic food preparation. Students have the opportunity to practice culinary skills and demonstrate knowledge of culinary arts in modern facilities. Demonstrations include sauces, stocks, poultry, meats, soups and fish.

Prerequisite(s): FOD0031 Corerequisite(s):none

#### **FOD0040 Baking and Pastry Fundamentals**

Pastry and baked goods play a significant role within the commercial food industry. Students learn the basic concepts, skills and techniques of baking, through preparing yeast breads, quick breads, pastries, pies, cakes, custards, creams and sauces. Students also prepare icing, properly handle chocolate, and apply a variety of decorating styles and techniques. Emphasis is placed on identification of products, the study of ingredients, weights and measures as applied to baking.

Prerequisite(s): FOD0031 Corerequisite(s):none

# **FOD0131 Advanced Culinary Arts**

Creativity comes alive in the advanced culinary application of food preparation activities. Students build on skills in previous culinary labs through preparing intricate recipes used in advanced a la carte applications with emphasis on color, taste, texture and presentation. Students develop advanced skills in culinary and food preparation through small batch assignments, ultimately preparing finished dishes fit for sale where presentation and taste are paramount.

Prerequisite(s): FOD0032 Corerequisite(s):none

# **FOD0231 Culinary Trends and Innovation**

Staying up to date with current literature and being able to disseminate knowledge to peers is a key component of food science and culinary arts. Whether on the shelf or in the restaurant, the success of food and beverage products in the marketplace are based on differentiation through meeting or exceeding consumer culinary needs. Students research current trends in the culinary world by critically reviewing major publications in culinary science and technology and present their findings to colleagues.

Prerequisite(s): none Corerequisite(s):none

#### **FOD0331 Regional and International Cuisine**

In today's global community, possessing knowledge of both regional and international cuisine is vital in meeting the demands of the food service industry. Students learn various recipes and traditions from different countries. Experiencing many of the world's finest foods leads students on a culinary and cultural adventure. Students explore the sensory experience of new ingredients and flavour by cooking food from different national and international ethnic groups.

Prerequisite(s): FSC0033 Corerequisite(s):none



# **FSC0031 Principles of Food Science and Nutrition**

Students examine the multidisciplinary nature of food science and nutrition and explore the major and minor food components and their nature, properties and characteristics. Students also discuss the quality and safe food handling, post-harvest handling of fresh foods, preparation and conversion of food commodities into high quality products. Other topics include food choices and the effect on personal health and nutritional needs, nutrients and relationships between diet and health through an assessment of their own food choices.

Prerequisite(s): none Corerequisite(s):none

# **FSC0032 Introduction to Culinology**

Culinology involves the blending of the science of food and creativity of culinary arts specializing in development of new food products. Students explore the opportunities made available in bringing together of two disciplines of culinary arts and food science. Focus is on the food preparation, cooking and food technology processes that lead to food product development and mass production. Guest speakers from the food and/or culinary industry provide insight into culinary careers and share authentic industry experience.

Prerequisite(s): none Corerequisite(s):none

#### **FSC0033 Food Production Fundamentals**

The quantity of food produced greatly influences the techniques and processes used in food production. Students develop a higher working knowledge of culinary skills needed for the mass production of food suitable for a commercial restaurant setting, production facilities and food services. In addition, students explore principles and procedures used in quantity food production management including: menu planning, food costing, work methods, food production systems, quality control, and service.

Prerequisite(s): FOD0032 Corerequisite(s):none

#### **FSC0130 Food Analysis**

The ability to analyze food is important to satisfy food regulations and to ensure food quality for consumers. Students practice the sampling and quantitative/qualitative analysis of foods through applying the theory of physical and chemical methods for the analysis of food constituents. Students analyze food using modern equipment and advanced spectroscopic technologies including HPLC, GC, atomic absorption and capillary electrophoresis for rapid analysis of food contaminating materials, moistures and both major and minor food constituents.

Prerequisite(s): CHEO231 Corerequisite(s):none

#### **FSC0132 Sensory Food Evaluation**

Consumers' food acceptance is critical to the application of sensory evaluation of foods. Students gain an understanding of the factors contributing to sensory perception of foods and the various test methods and procedures used to evaluate, measure, analyze, and interpret sensory reactions to food characteristics and consumer needs. Students are exposed to hands-on experience with implementation, panel training, product presentation, statistical analysis and interpretation of sensory data.

Prerequisite(s): none Corerequisite(s):none

#### **FSC0133 Food Product Development**

Blending culinary arts and food science knowledge is essential to successful product development.



Students apply knowledge gained in food chemistry, ingredient functionality, sensory evaluation, microbiology, food preparation and food processing courses to the theory and practice of developing new food product. Students explore idea generation to production of prototype using traditional and novel food ingredients and processes in the context of current and future regulatory, environmental and social limitations. Students incorporate factors and implications of nutrition, health, cost and marketing in the design and development of new food product.

Prerequisite(s): BIO0131 and CHE0231

Corerequisite(s):none

# **FSC0231 Food Quality Control Assurance**

Food products must be safe and meet government regulations. Food production processes must also adhere to Hazard Analysis Critical Control Point (HACCP) international standards and Good Manufacturing Practice (GMP). Students discuss theory and application of quality assurance practices for food processing industries and food services. In addition, students explore quality assurance, Hazard Analysis and Critical Control Points (HACCP), ISO quality and safety management systems and total quality management. Students apply statistics in the establishment of sampling plans, acceptance or rejection of lots, control charts, probability, distributions and applications to various food systems.

Prerequisite(s): BIO0131 Corerequisite(s):none

#### **FSC0232 Food Process Engineering**

Food processes and the relationship between chemistry, microbiology and engineering are essential to food technologists. Focus is on the operation of food processing units utilized for food production and preservation. Students analyze and practice using different food processing methods to manufacture different foods for consumption. Some of these methods include dehydration, chilling and freezing, microwave heating, high pressure processing, blanching, pasteurization, sterilization, evaporation, drying, extrusion, irradiation, fermentation and membrane separation.

Prerequisite(s): BIO0131 Corerequisite(s):none

#### FSC0233 Applied Research in Culinology

Blending culinary arts and food science knowledge is essential to successful product development. Students apply their individual professional Culinology? research experience to develop a product for commercial or retail food manufacturers from conception, market analysis, and sensory evaluation to production and packaging.

Prerequisite(s): FSC0231 Corerequisite(s):none

# **GED2300 Indigenous Self-Representation in Contemporary Canadian Culture**

Historically, Indigenous peoples and their cultures have been dramatically misrepresented and stereotyped in Canadian literature, music, visual arts, film, and television as a result of ongoing attempts to colonize, marginalize, romanticize, and assimilate them. Starting with an historical overview of the oppressive act of misrepresenting, appropriating, and stereotyping Indigenous peoples and their cultures in Canada, students explore how contemporary Indigenous artists have responded to these misrepresentations by subverting, critiquing, challenging, and changing the representations of Indigenous peoples and their cultures in their own artistic works. Significant works of contemporary literature, music, visual arts, film, and television created by contemporary Indigenous artists who give voice to their experiences in Canada serve as the basis for critical analysis and creative reflection on the processes of self-representation and cultural reclamation of Indigenous voices and identity in Canada.



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Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### **GEO2300 Principles of Urban Planning**

Increasingly cities and communities are feeling the pressure of expansion, and people from all walks of life feel disconnected from the processes, procedures, and decisions that are affecting everyday life. Students consider urban transformation with a focus on practicing sustainability by exploring innovations in land use, transportation, resource planning and economic development, resulting in employment opportunities, as well as healthy and vibrant cities. Students use local and regional activities as a starting point for developing a knowledge base for future social and community involvement. Research projects and assignments encourage students to identify the gaps between theoretical approaches to urban planning and the practical applications as evidenced in their local surroundings.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### **GEP1001 Cooperative Education and Job Readiness**

Students are guided through a series of activities that prepare them to conduct a professional job search and succeed in the workplace. Through a detailed orientation students learn the cooperative education program policies and procedures related to searching and securing a work term opportunity. Students identify their strengths and transferable skills and participate in workshop-style sessions that focus on cover letter and resume development, interview techniques and job search strategies. Students learn how to navigate a web-based resource centre, which is used to post employment and cooperative education job opportunities. Students reflect on workplace success, ethics and responsibilities.

Prerequisite(s): none Corerequisite(s):none

### **GEP2001 Co-Op Job Search 1**

Students are guided through a self-directed co-op job search using Algonquin's web-based resource centre, HireAC, as well as independent resources. Students will access information on key job search processes, including Co-op and Career Centre job search procedures and how to declare a self-developed job that meets co-op guidelines. Students will apply and further develop their knowledge on networking, interview techniques and job search strategies to improve their chances of success in securing co-op employment through a competitive job search process. Additional support is provided through individual coaching and group sessions, including job application reviews, mock interviews and assistance for students experiencing unique employment challenges.

Prerequisite(s): none Corerequisite(s):none

#### GEP2002 Co-Op Job Search 2

Students are guided through a second self-directed co-op job search using Algonquin's web-based resource centre, HireAC, as well as independent resources. Students will access information on key job search processes, including Co-op and Career Centre job search procedures and how to declare a self-developed job that meets co-op guidelines. Students will apply and further develop their knowledge on networking, interview techniques and job search strategies to improve their chances of success in securing co-op employment through a competitive job search process. Additional support is provided through individual coaching and group sessions, including job application reviews, mock interviews and assistance for students experiencing unique employment challenges.

Prerequisite(s): none Corerequisite(s):none

#### LAN3101 Spanish-Beginner 1

The Spanish language is an asset when communicating in the workplace. Students with no prior knowledge of Spanish acquire basic forms and structures to interact and communicate in a simple way with Spanish speakers. Class instruction and practice, repeated feedback, and exposure to a



variety of language samples support students to gain basic oral expression and comprehension using simple phrases that develop vocabulary, pronunciation, and comprehension. Students begin to appreciate cultural and linguistic differences when Spanish is used in the workplace.

Prerequisite(s): none Corerequisite(s):none

#### **LAN3101 Spanish-Beginner 1**

The Spanish language is an asset when communicating in the workplace. Students with no prior knowledge of Spanish acquire basic forms and structures to interact and communicate in a simple way with Spanish speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples support students to gain basic oral expression and comprehension using simple phrases that develop vocabulary, pronunciation, and comprehension. Students begin to appreciate cultural and linguistic differences when Spanish is used in the workplace.

Prerequisite(s): none Corerequisite(s):none

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The Spanish language is an asset when communicating in the workplace. Students with no prior knowledge of Spanish acquire basic forms and structures to interact and communicate in a simple way with Spanish speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples support students to gain basic oral expression and comprehension using simple phrases that develop vocabulary, pronunciation, and comprehension. Students begin to appreciate cultural and linguistic differences when Spanish is used in the workplace.

Prerequisite(s): none Corerequisite(s):none

#### LAN3102 Spanish-Beginner 2

The workplace benefits from having professionals with knowledge of the Spanish language. Students with basic knowledge of Spanish gain more control over forms and structures to interact and communicate in a simple way with Spanish speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples provide students with opportunities to enhance their basic oral expression and comprehension using simple phrases that further develop vocabulary, pronunciation, and comprehension. Students deepen their knowledge of cultural and linguistic differences of Spanish in the workplace.

Prerequisite(s): none Corerequisite(s):none

#### LAN3102 Spanish-Beginner 2

The workplace benefits from having professionals with knowledge of the Spanish language. Students with basic knowledge of Spanish gain more control over forms and structures to interact and communicate in a simple way with Spanish speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples provide students with opportunities to enhance their basic oral expression and comprehension using simple phrases that further develop vocabulary, pronunciation, and comprehension. Students deepen their knowledge of cultural and linguistic differences of Spanish in the workplace.

Prerequisite(s): none Corerequisite(s):none

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The workplace benefits from having professionals with knowledge of the Spanish language. Students with basic knowledge of Spanish gain more control over forms and structures to interact and communicate in a simple way with Spanish speakers. Class instruction and practice, repeated feedback, and exposure to a variety of language samples provide students with opportunities to



enhance their basic oral expression and comprehension using simple phrases that further develop vocabulary, pronunciation, and comprehension. Students deepen their knowledge of cultural and linguistic differences of Spanish in the workplace.

Prerequisite(s): none Corerequisite(s):none

# LAW0032 Food Laws and Regulation

The food industry is highly controlled by local, federal and international laws and regulations. Students examine some of these key laws and discuss how food laws and regulations are applied, interpreted and enforced. Students explore the impact of legislation and regulations on legal and regulatory issues relating to food safety, product development, labelling, packaging, nutrition and also discuss current regulatory trends, including those pertaining to biotechnology.

Prerequisite(s): none Corerequisite(s):none

#### **LAW2014 Law**

The reach of the rule of law extends into our lives on a daily basis. As much as it is present in our lives, very few people are aware of the processes, procedures and theories that guide and underpin the development and maintenance of a functional legal system. With attention to key historical figures and events, students explore the scope, jurisdiction, and key concepts of the subdisciplines within the field of law. Through an introduction to legal arguments and methodologies, students distinguish between various legal systems and wrestle with the difference between law and justice.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### **MAT0031 Mathematics for Food Science**

Foundations necessary for the application of mathematics in science, statistics and food units are an essential component in food science. Students acquire the essential mathematical skills needed to understand, analyze, and solve mathematical problems related to business, finance and economics. Topics covered include basic algebra, functions, finance, return on investment (ROI),



units of measure and conversion, as well as scientific and engineering notation. Students explore and apply exponential and logarithmic functions, sequences and series to financial applications.

Prerequisite(s): none Corerequisite(s):none

#### **MGT0131 Management of Food and Beverage**

Food and beverage businesses face challenges in the hospitality industry. Students prepare to meet these challenges by investigating models and tools to address changing labour conditions, evolving customer expectation, growing global uncertainty and the rapid technology changes. Basic economic concepts and theories, are examined to assess business and management requirements. Students explore the importance of food and beverage service, develop product knowledge, and discuss issues of sustainability, ethical and local food sources. Students develop practical management skills required to work within the beverage sector and examine various beverages in a bar laboratory, expanding their knowledge and understanding Students will complete the Ontario Smart Serve Program.

Prerequisite(s): none Corerequisite(s):none

# **MGT0231 Restaurant and Food Operations**

It is important to ensure food quality and customer satisfaction through cost-effective and efficient restaurant operations. Students explore the fundamentals of successful restaurant operations with emphasis on budget preparation, Return on Investment (ROI), food and labour cost controls, menu planning and pricing, customer satisfaction, purchasing, kitchen operations and quantitative management. In addition, students apply managerial skills in the design of marketing strategies, using research, product development, pricing, distribution structure and promotion.

Prerequisite(s): none Corerequisite(s):none

#### MGT0331 Menu Design and Service

Designing a menu based on customer demand, and within the limits of company resources, is an essential part of food service operations. Students explore a wide variety of food service operations and applications of menu design techniques including pricing strategies, ordering, converting recipes from small to large quantities, marketing strategies and food preferences of the public.

Prerequisite(s): none Corerequisite(s):none

#### **NTN0031 Human Nutrition**

Basic nutrition and diet are an integral part of culinary arts and food science. Students learn the principles of human nutrition with emphasis on the physiological roles of carbohydrates, lipids, proteins, minerals, vitamins and their dietary sources. Students study how these food components affect the relationship to health and well-being of the individual and family across the lifespan. Students explore current recommendations for nutrients intake, as well as cultural and health influences on diet, and how they apply towards food product and menu development.

Prerequisite(s): FSC0031 Corerequisite(s):none

#### **PHI1000 Logic and Critical Thinking**

Logic and critical-thinking skills play an important role in both daily life and ongoing academic studies. As foundational skills, they support both the development and assessment of ideas, concepts and courses of action that are presented on a daily basis. Approaching the subject from both a practical and theoretical perspective, students hone their skills in analysis, argumentation, reasoning and persuasion. A range of topics and thinkers provide material with which students can



exercise and apply their skills.

Prerequisite(s): none Corerequisite(s):none

#### **PHI2002 Ethical Decision Making**

To avoid potential prosecution, companies and their employees are well-advised to engage in ethical decision-making practices in all business situations. Students examine ethical concepts and principles, compare a variety of ethical decision-making models and utilize these principles and models to make ethically sound decisions in a variety of contexts. Students also design a code of ethics, practice making ethically- based decisions and develop the analytical skills required to recognize, evaluate and resolve ethical dilemmas in the workplace.

Prerequisite(s): PHI1000 Corerequisite(s):none

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Prerequisite(s): PHI1000 Corerequisite(s):none

#### PHI3000 Applied Research Methodology

Evolving fields in sciences and technology rely heavily on the ability of professionals to perform practical applications within industry. Academic research involves the identification of problems to study, the designing of research projects, the development and refining of hypothesis and research questions, the justification of methodological decisions through sampling and measurement, and the checking of the validity and reliability of studies. Emphasis is on the application of theoretical understanding to real-world situations in the specific industries. The final project involves the creation of a proposal to develop a strategic plan grounded in primary and secondary research.

Prerequisite(s): QUA2000 Corerequisite(s):none

#### PHI4000 Philosophy and Popular Culture

Many facets of today's popular culture engage, directly or indirectly, with the concerns of a variety of philosophical traditions. Drawing on a number of examples, students explore both the way popular culture permeates and spreads through society and the way it interprets and presents philosophical questions. Students develop skills and techniques for assessing the soundness and validity of thought experiments.

Prerequisite(s): PHI1000



Corerequisite(s):none

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Prerequisite(s): PHI1000 Corerequisite(s):none

# PHI4002 The Philosophy of Drugs

Drugs are everywhere: professionals prescribe them to us to make us "better"; we take them recreationally; we give them to our children, pets and other loved ones; we buy them on the streets and in grocery stores. What are "drugs"? Why are some drugs legal and others not? How do drugs get to market? What ethical issues are relevant in a global drug industry? Are current intellectual property regimes appropriate if the goal of drug research is to promote benefits to society? Students critically examine these, and other, questions through the lens of historical and contemporary ethical, philosophical and legal theories and arguments. Students engage in various peer-oriented learning activities throughout the course.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### PHI4003 The Philosophy of Love and Sex

Love and sex are central to the human condition, and have been topics of academic inquiry and controversy throughout history. Various practices surrounding love and sex are celebrated in Western culture, such as monogamy and marriage, while other practices, such as polygamy and pedophilia, are condemned. Why is this? Students critically explore these and other issues surrounding love and sex using examples from popular music, movies and literature, framing those issues with the help of historical and contemporary philosophical theories and arguments. Students engage in various peer-oriented learning activities throughout the course.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### PHI4004 Technology, Society and the Environment

Environmental issues have come to occupy a central place in the marketplace, politics, policy, and society at large. Owing largely to the many environmental consequences that have accompanied industrialization, we humans have been forced to rethink the complex relationship between technology, society and the environment. Students investigate philosophical concepts and theories surrounding technology, society and the environment including: the "naturalness" of technology, sustainability and animal rights. Students critically examine course material by focusing on questions such as: What is nature, and what role do/should humans occupy in it? What do we owe non-human organisms? What do we owe future generations? Students engage in various peer-oriented learning activities throughout the course.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### PHI4100 Survival in the Information Age: Risk and the Media

On an almost daily basis, the media, through its various outlets - television, radio, web sites, RSS, and podcasts - reports on issues that address our wellbeing. Through discussions, readings, and assignments, students enhance their ability to interpret and question information presented by the media by better understanding the inherent risks. Issues like alternative medicine (i.e. vaccinations) and socio-legal issues (i.e. bullying, hacking, surveillance, privacy) provide grounds for students to use principles from the social science as a means to think critically about real and perceived risks in daily life.

Prerequisite(s): PHI1000 Corerequisite(s):none

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Prerequisite(s): PHI1000 Corerequisite(s):none

# PHY4000 Black Holes, Big Bangs and the Cosmos

The dynamic and exciting field of Cosmology outlines our current understanding of the Universe



from its start, at the so-called Big Bang, through the ensuing 13 plus billion years to the present and beyond. Students learn how to discuss our present understanding of the three phases of the Universe as well as its five part make up, with matter making up only 4% of the whole. Students explain our knowledge of the various phases of evolution of the Cosmos and also the latest theories and experiments that are trying to address our uncertainties. Throughout the course, students evaluate and debate many of today's ideas and concepts revolving around cosmology.

Prerequisite(s): none Corerequisite(s):none

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Prerequisite(s): none Corerequisite(s):none

#### **PSI2000 Navigating Canada's Political Landscape**

A developed knowledge of government and politics is key to an effective participation in public life. Drawing on current events, students explore the societal, cultural and constitutional context along with the major political parties and institutions that shape the Canadian political landscape. Students develop skills and techniques that allow them to position politicians, parties, and policies, past and present, on the spectrum of political ideology and Canadian political traditions. Working together and individually, students analyze issues from the perspective of various political approaches.

Prerequisite(s): none Corerequisite(s):none

#### **PSI2000 Navigating Canada's Political Landscape**

A developed knowledge of government and politics is key to an effective participation in public life. Drawing on current events, students explore the societal, cultural and constitutional context along with the major political parties and institutions that shape the Canadian political landscape. Students develop skills and techniques that allow them to position politicians, parties, and policies, past and present, on the spectrum of political ideology and Canadian political traditions. Working together and individually, students analyze issues from the perspective of various political approaches.

Prerequisite(s): none Corerequisite(s):none

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With its applications to behaviour and personality, psychology extends its reach into many aspects of our personal lives. The broad applications of this social science in both an applied and theoretical context are premised on a number of fundamental principles. Students explore historical breakthroughs that define the current boundaries of the discipline and interact with a number of the foundational concepts that resonate throughout daily life and popular culture. Students develop an introductory knowledge in the various schools of thought within the discipline.

Prerequisite(s): none Corerequisite(s):none

#### **PSY2100 Introductory Psychology**

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Prerequisite(s): none Corerequisite(s):none

# **PSY2100 Introductory Psychology**

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Prerequisite(s): none Corerequisite(s):none

#### **QUA2000 Statistics**

Students explore fundamental statistical concepts and use statistical software to summarize, analyze and present both descriptive and inferential statistics. Topics include central tendency, variation, probability, central limit theorem, sampling, estimation, hypothesis testing and simple regression and correlation. These theoretical concepts are explained through practical examples from various sectors. Students develop the required background for further study related to research.

Prerequisite(s): none Corerequisite(s):none

#### **SAF0031 Food Safety and Sanitation**

One of the major concerns in food preparation, production, handling, packaging and distribution is the physical, chemical and microbiological safety of food. Students understand the sources of microbiological, chemical and physical contamination in order to minimize microbial growth and survival. Students apply Good Manufacturing Practice (GMP), cleaning and sanitation practices and Hazard Analysis Critical Control Point Programs (HACCP) in food processing and food service. In addition, students consider food safety aspects with respect to various industry-related professional organizations and governmental agencies such as the Dietitians Canada, Canada Food Agency and Health Canada.

Prerequisite(s): BIO0131 Corerequisite(s):none

#### **SAF1300 Biosafety**



biological materials, minimizing health risks. This course covers essential skills for working with Risk Group 1 and 2 (RG1 and RG2) organisms under Containment Level 2 (CL-2) conditions, including risk assessment, infectious agent handling, and biosafety compliance. Key topics include biosecurity, biological safety cabinets, decontamination, PPE, and emergency response. Through interactive lectures, practical exercises, safety protocol reviews, and biosafety certifications, students develop a comprehensive understanding of laboratory safety with biohazards.

Prerequisite(s): none Corerequisite(s):none

#### **SCI0008 Introduction to Chemistry and Physics**

Knowledge of the substances that make up matter provides an understanding of how material properties are affected by energy such as heat and pressure. Students examine states of matter, nomenclature, stoichiometry, concentration, periodicity, redox reactions, atomic structure, chemical bonding, molecular structure, valence bond and molecular orbital theories and symmetry. In addition, students explore the fundamental basics of organic chemistry, including chemical and solution equilibria (acids, bases and buffers), as well as topics in thermodynamics, heat, energy and the states of matter. Students also examine examples of important considerations related to food preparation and nutrition.

Prerequisite(s): none Corerequisite(s):none

#### SCI2000 Environmental Science

Environmental science is an interdisciplinary study of how the earth works, human interaction with the earth and how to address the existing environmental problems. Students explore natural capital and the degradation. Students engage in case studies, critical thinking and analysis of alternatives in exploring solutions and trade-offs in trying to address degradation.

Prerequisite(s): ENL1100 and PHI1000

Corerequisite(s):none

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Corerequisite(s):none

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Prerequisite(s): ENL1100 and PHI1000

Corerequisite(s):none

#### **SOC2000 Introduction to Sociology**

When working with individuals and groups it is important to understand both the background and influences present. Students develop a familiarity with sociological theories and methodological approaches used to study individual and group behaviours. Students also examine variables that include culture, social class, race, and gender and how these variables may impact work with diverse individuals and groups.

Prerequisite(s): ENL1100



Corerequisite(s):none

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Prerequisite(s): ENL1100 Corerequisite(s):none

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Prerequisite(s): ENL1100 Corerequisite(s):none

#### **SOC2001 Anti-Racism: Theory and Practice**

Anti-racism is the practice of identifying, challenging, and changing the values, structures, and behaviours that perpetuate systemic racism. Students explore concepts of anti-oppressive practice, anti-racist pedagogy, diversity, and inclusion at the personal, societal, and institutional levels. Students develop an understanding of historical and present-day groups and figures that challenge oppressive structures in Canadian society. Through various learning activities and discussion boards, students will develop the necessary knowledge, attitude, and skills to become an authentic ally within society.

Prerequisite(s): none Corerequisite(s):none

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# **SOC4000 Criminology**

The interdisciplinary study of social science examining the individual and social aspects of crime is known as criminology. Students work through an introduction to the social science perspective on crime. Presentations, discussions, and assignments allow students to investigate the various theoretical positions related to crime and criminal behaviour. Working forward from the types and definitions of crime, students trace some of the links between government policy and the impacts of these policies on both society and the individual.

Prerequisite(s): SOC2000 Corerequisite(s):none

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Prerequisite(s): SOC2000 Corerequisite(s):none

#### **SOC4001 Global Perspectives**

Sociology, through its exploration of the organization of society and the connections between people and their surroundings, provides new ways of looking at the world. Using fundamental knowledge in the field of sociology, students analyze globalization and its impact on Canadian society. Students take opposing views to debate the opportunities and challenges that come with globalization.

Prerequisite(s): SOC2000 Corerequisite(s):none

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Prerequisite(s): SOC2000 Corerequisite(s):none

#### WKT4000 Co-Op I: Culinary Arts

Immediately following academic term four, the first co-op placement provides students with experiential opportunities within the related industries. The first work term centres on attaining entry-level positions that immerse students in a variety of activities allowing them to apply principles and concepts developed over the first two years of study. Students returning from Co-op Work Term I bring additional practical considerations to their third year of study. Although centred with public and private organizations located in Eastern Ontario, co-op employment opportunities may be sought throughout Canada and abroad. Prerequisites: Satisfactory completion of all courses in semesters 1-4

Prerequisite(s): none Corerequisite(s):none

#### WKT6000 Co-Op 2: Food Science



provides students with experiential opportunities within the related industries. The second work term centres on applying knowledge and skills developed over the first three years of study and accepting increasing responsibilities. Students returning from Co-op Work Term II draw on their experience for a number of their final year seminars. Although centred with public and private organizations located in Eastern Ontario, co-op employment opportunities may be sought throughout Canada and abroad. Prerequisites: Satisfactory completion of all courses in semesters 5 and 6