



## Ontario eSecondary School Course Outline 2022-2023

<b>Ministry of Education Course Title:</b> Nutrition and Health	
<b>Ministry Course Code:</b> HFA4U	
<b>Course Type:</b> University Preparation	
<b>Grade:</b> 12	
<b>Credit Value:</b> 1.0	
<b>Prerequisite(s):</b> Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies	
<b>Department:</b> Social Science and Humanities	
<b>Course developed by:</b> Samantha Campbell	<b>Date:</b> June 1st, 2019
<b>Length:</b> One Semester	<b>Hours:</b> 110
This course has been developed based on the following Ministry documents: <ol style="list-style-type: none"><li>1. <i>Social Sciences and Humanities, The Ontario Curriculum, Grades 9 and 12, 2013, (revised)</i></li><li>2. <i>Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools (2010)</i></li><li>3. <i>Learning for All (2013)</i></li></ol>	

## **COURSE DESCRIPTION/RATIONALE**

This course examines the relationships between food, energy balance, and nutritional status; the nutritional needs of individuals at different stages of life; and the role of nutrition in health and disease. Students will evaluate nutrition-related trends and will determine how food choices can promote food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and develop their social science research skills by investigating issues related to nutrition and health.

## **OVERALL CURRICULUM EXPECTATIONS**

### ***Research and Inquiry Skills:***

By the end of this course, students will:

1. Exploring: explore topics related to nutrition and health, and formulate questions to guide their research
2. Investigating: create research plans, and locate and select information relevant to their chosen topics, using appropriate social science research and inquiry methods
3. Processing Information: assess, record, analyse, and synthesize information gathered through research and inquiry
4. Communicating and Reflecting: communicate the results of their research and inquiry clearly and effectively, and reflect on and evaluate their research, inquiry, and communication skills.

### ***Nutrition and Health:***

By the end of this course, students will:

1. Nutrients: demonstrate an understanding of nutrients and their connection to physical health
2. Food Guides: demonstrate an understanding of Canada's Food Guide and its role in promoting physical health
3. Energy Balance: demonstrate an understanding of the physical processes involved in maintaining energy balance
4. Nutritional Status: demonstrate an understanding of their nutrient intake and of factors that affect the nutritional status of individuals and groups.

### ***Eating Patterns and Trends:***

By the end of this course, students will:

1. Nutrition throughout the Lifespan: demonstrate an understanding of food- and nutrition-related issues at different stages in the lifespan
2. Nutrition and Disease: demonstrate an understanding of the relationships between nutrition, health, and disease
3. Trends and Patterns in Food and Nutrition: demonstrate an understanding of current Canadian trends and patterns in nutritional guidelines and in food production and consumption.

### ***Local and Global Issues:***

By the end of this course, students will:

1. Food Security: demonstrate an understanding of various factors involved in achieving and maintaining food security
2. Food Production and Supply: demonstrate an understanding of various factors that affect food production and supply
3. Food Production and the Environment: demonstrate an understanding of the impact of food production on the environment.

### **Food Preparations Skills:**

By the end of this course, students will:

1. Kitchen Safety: demonstrate an understanding of practices that ensure or enhance kitchen safety
2. Food Safety: demonstrate an understanding of practices that ensure or enhance food safety
3. Food Preparation: demonstrate skills needed in food preparation.

## **COURSE CONTENT**

<i>Unit</i>	<i>Length</i>
Unit: Research and Inquiry Skills	Throughout term
Unit 1: Food Preparations Skills	22 hours
Unit 2: Nutrition and Health	22 hours
Mid-Year Assessment	10 hours
Unit 3: Eating Patterns and Trends	24 hours
Unit 4: Local and Global Issues	32 hours
<b>Total</b>	<b>*110 Hours</b>
	<b>*Plus 3-Hour exam</b>

### **UNIT DESCRIPTIONS**

To develop an understanding of Nutrition and Health we will explore the processes, methods, and theory behind food preparations. Exploring the science behind healthy nutrition including the role of nutrients, water and energy balance, and the relationship between nutrient intake and the factors that affect nutritional status of individuals and groups. We will have the opportunity to investigate trends and patterns in food and nutrition included the relationship between nutrition, health and disease. Concluding by course by relating course concepts to the student of food security and production at the local and global level.

#### **UNIT: RESEARCH AND INQUIRY SKILLS**

Students will apply the skills and concepts of this unit throughout the course, demonstrating strong research and inquiry skills through a variety of tasks, and assessments. Students will demonstrate the ability to explore topics by formulating questions to guide research, creating research plans, locating, selecting and applying relevant information to form conclusions. Students will communicate their understanding in a variety of formats.

#### **UNIT 1: FOOD-PREPARATION SKILLS**

Students will apply the concepts of kitchen, and food safety and food preparation to identify methods of ensuring safety with the kitchen, preventing food borne illnesses and preventing the contamination of food. They will demonstrate the ability to select and safely use tools and equipment in the preparation of food, including the accurate measuring of quantities. Students will investigate methods of adapting recipes to accommodate specific dietary needs and demonstrate the ability to plan, prepare and serve food item(s) according to set criteria and safety standards.

#### **UNIT 2: NUTRITION AND HEALTH**

In this unit, students will learn about the sources and functions of the nutrients and elements essential to healthy nutrition, identify various impacts and factors on digestion, absorption and metabolism within the human body. They will examine and analyze the Canadian Food Guide, its food groups and recommended

nutrient intake for change, and impact on health and compare the Food Guide and its elements to similar guidelines within other countries and for special groups. Students will apply their knowledge to analyze their own nutrient intake, compare this intake to other groups within Canada, and plan, create, and analyse a meal which meets recommendations in the Canadian Food Guide and accommodates a nutrient deficient.

### **UNIT 3: EATING PATTERNS AND TRENDS**

In this unit, students will examine the human lifespan for impacts on nutritional needs, appropriate and popular food choices; applying this knowledge to plan and prepare a food item(s) which meet nutritional needs at a specific age and for the nutritional needs of people with specific illness or disease. They will examine the connection, including the role of extenuating factors, between eating practices nutritional needs and prevention and management of health conditions, including physical, mental health and social conditions. Students will complete the unit by examining trends within Canada regarding products and services, eating patterns, government policy regarding food and nutrition, planning and preparing a food item(s) using current patterns and trends.

### **UNIT 4: LOCAL AND GLOBAL ISSUES**

In this unit, students will examine a variety of issues related to food and nutrition, including food security, food production and supply and food production and the environment. Students will investigate how various social, political, cultural and economic factors impact the achievement and maintenance of food security, forming conclusions on the relationship between poverty, food insecurity, poor nutrition and poor health at the local and global level. Students will continue to determine how food production varies across the globe and how variations, geographic factors and trends impact yields and supply. Students will complete the unit by investigating the relationship between the environment agricultural trends, consumer food choices and health and safety issues.

## **TEACHING AND LEARNING STRATEGIES**

**The students will experience a variety of activities:**

### **Whole-Class Activities**

Whole class activities are designed to introduce concepts and skills that are directly applicable to the workplace and to build on the content being studied during small group and individual activities. These activities include the following:

**Class discussions** that are facilitated through video conferencing and telephone conversations with their subject teacher or discussions with other students concerning the concepts and skills being studied. This is done with the use of Socratic circles for discussions.

**Teacher demonstrations** (research skills, etc.) through video conferencing, email, or telephone conversations with subject teacher, or videos provided of a teacher or student demonstrating the concepts and skills being studied. This helps the student and teacher create an atmosphere of trust and respect to aid in the online learning environment.

**Video presentations** and technological aids (research) with videos embedded to enrich the course content and clarify concepts and skills being studied. Also the use of online pre-approved quizzes and games to help a student become more familiar with the concepts and skills being studied.

**Diagnostic and review activities** (audio and video taping) can be student-lead or teacher lead to work as a review for students through audio and video made to share among each other to help reinforce the concepts and skills being studied.

**Brainstorming, charts and graphs** are a great way for students to demonstrate their knowledge of subject matter through graphic organizers, pictures, and texts. This is communicated through assignments in Moodle.

### **Small Group Activities**

The teacher sets up small group activities to provide opportunities for active and oral learning as well as to bolster practical communication and teamwork skills. The teacher plays a critical role during group activities by monitoring group progress as well as answering questions that arise and using questions to assist students in their understanding. In this way, the teacher also facilitates student understanding of effective learning, communication, and team building during group activities.

**The small group activities include the following:**

**Comparison and evaluation of written work** is very important in this course. This course focuses on giving many examples of correct work, and helping students build the skills needed to peer-correct and self-correct. Students are given a variety of texts to read through embedded links, to make comparisons with different texts, real life situations, and their own writing.

**Practical extension and application of knowledge** is used as an effective learning strategy in this course because it allows the students to read and listen to the texts and stories and reflect back with connections to themselves, other texts and the world. Students are encouraged to share their understandings through work submitted each day, phone conversations about course work, or videoconferencing.

**Charts and graphs** are used to present effective learning opportunities of concepts and skills to students who would benefit from visual objects to learn. Every student learns differently, and it is used to help students discover another way to present their information such as graphic organizers, lists, and pictures.

### **Individual Activities**

The teacher should provide a variety of individual assignments to expand and consolidate the learning that takes place in the whole-class and small group activities. Individual activities allow the teacher to accommodate interests and needs and to assess the progress of individual students. The teacher plays an important role in supporting these activities through the provision of ongoing feedback to the students, both orally and in writing. Teachers are encouraged to include individual activities such as the following in the course:

**Research** is completed in an online environment by teaching the students first about plagiarism rules and giving examples of good sources to use. The students are not only limited to the online search for information, but have the resources available by links on the Moodle page of information that has been scanned and uploaded.

**Individual assignments** are worked on at a student's own pace. The teacher can support the student in these activities with ongoing feedback.

**Oral presentations** are facilitated through the use of video conferencing and video recording.

**Practical extension and application of knowledge** helps students develop their own voice, and gives them the ability to make personal connections, and connections to the world throughout their course. Students are given a variety of reading and viewing texts to give them many chances to apply their new concepts, skills, and knowledge.

**Ongoing project work** is something that is valued in the earning of an English credit. The ongoing project can be submitted to the teacher for ongoing feedback in both written and oral work.

**Reading** students are able to read a variety of texts online. The students may print out the reading material to use it to highlight, take notes, and have with them when a computer is not available.

**Written assignments** are used to allow students to develop their skills in writing, comprehension, and communication. With the online format students submit their work, and have a chance to get feedback from the teacher, and submit their best work. This can be demonstrated with reading responses, personal

writing, report writing, essay writing, script writing, business and technical writing, and individual research assignments.

**Journals** are used in which the student can self-reflect on their subject matter, and see their progress over time. It allows students a different medium of presenting their thoughts and skills learned.

**Reflective/Comparative analysis** for students working in their portfolios, giving them an opportunity for self-reflection on their accomplishments, skills, and concepts learned over the year. This can be accomplished with student and teacher conferences as well.

We grow up thinking of reading and writing as two of the classic ‘three Rs’, and once we learn how to do them well, many assume that there’s no need to think more of them. However, there are nuances to both.

This course explores what writers have known for centuries: there are many, many ways to write and read.

## ASSESSMENT, EVALUATION, AND REPORTING

**Assessment:** The process of gathering information that accurately reflects how well a student is achieving the identified curriculum expectations. Teachers provide students with descriptive feedback that guides their efforts towards improved performance.

**Evaluation:** Assessment of Learning focuses on Evaluation which is the process of making a judgement about the quality of student work on the basis of established criteria over a limited, reasonable period of time.

**Reporting:** Involves communicating student achievement of the curriculum expectations and Learning Skills and Work Habits in the form of marks and comments as determined by the teacher’s use of professional judgement.

## STRATEGIES FOR ASSESSMENT

Assessment practices can nurture students’ sense of progress and competency and information instruction. Many diagnostic tools, e.g. checklists and inventories, are used at regular intervals throughout the units to encourage students’ understanding of their current status as learners and to provide frequent and timely reviews of their progress. Assessment of student acquisition of listening and talking, reading and viewing and writing skills also occurs regularly through unobtrusive teacher observation and conferencing.

Units conclude with performance tasks, e.g., interviews and from essays that build towards and prepare students for the end-of-course culminating task in Unit Five. Teachers are encouraged to share goals with students early in the course and to connect unit learning experiences frequently and explicitly with big ideas, overall expectations, and performance tasks, i.e. check bricks; teacher-adapted generic rubrics available in many sources, including the *Ontario Secondary School Literacy Course (OSSLC) Profile*, so that they are more task-specific. The teacher might ask: “What does the criteria look like for this particular task?” Or “What does limited effectiveness look like?” The teacher could involve students in the discussion, modification, or creation of rubrics, and teach students to use rubrics as a learning tool that can support the writing process and practice.

## ASSESSMENT ACTIVITIES

- ☐ Homework assignments
- ☐ Individual conference meetings
- ☐ Discussion Forums
- ☐ Diagnostic tests and writing tasks

- ☐ Outlining and planning sheets
- ☐ Completed Templates & Graphic Organizers
- ☐ Reflections
- ☐ Oral presentations & Active Listening
- ☐ Tests & Exam
- ☐ Essay Writing
- ☐ Evaluations

## EVALUATION

The final grade will be determined as follows:

- ☐ Seventy percent of the grade will be based on evaluation conducted throughout the course. This portion of the grade should reflect the student's most consistent level of achievement throughout the course, although special consideration will be given to more recent evidence of achievement.
- ☐ Thirty percent of the grade will be based on a final evaluation administered at or towards the end of the course. This evaluation will be based on evidence from one or a combination of the following: an examination, a performance, an essay, and/or another method of evaluation suitable to the course content. The final evaluation allows the student an opportunity to demonstrate comprehensive achievement of the overall expectations for the course.

(*Growing Success: Assessment, Evaluation and Reporting in Ontario Schools*. Ontario Ministry of Education Publication, 2010 p.41)

WEIGHTINGS	
<b>COURSE WORK</b>	<b>70</b>
<b>KNOWLEDGE/UNDERSTANDING</b>	<b>17.5</b>
<b>THINKING/INQUIRY</b>	<b>17.5</b>
<b>COMMUNICATION</b>	<b>17.5</b>
<b>APPLICATION</b>	<b>17.5</b>
<b>FINAL</b>	<b>30</b>
<b>FINAL EXAM</b>	<b>30</b>

### TERM WORK EVALUATIONS (70%):

Evaluation Item	Description	Category	Weight
Process Assignments	These assignments will be based on units of study to be determined by the teacher (mid-unit assignments)	K, I, C, A	10
Unit 1:	Students will demonstrate knowledge of health and safety as it relates to food and nutrition through the creation of a cooking show which emphasizes safe food preparation.	K, I, C, A	15
Unit 2:	Through an analysis of their own eating patterns and nutrient intakes and the habits of other groups international and domestically, students will highlight their knowledge of the requirements for healthy nutrition.	K, I, C, A	15
Unit 3:	Students will demonstrate their ability to use safe food preparation techniques, in the preparation of food items which makes accommodations for the nutritional needs of specific life stages, nutrient deficiencies/excess.	K, I, C, A	15
Unit 4:	Students will create a Public Service Announcement which education the audience about a specific issue associated with food production and supply. Addressing laws which seek to regulate, or fix the issue.	K, I, C, A	15

### FINAL EVALUATIONS (30%):

Evaluation Item	Description	Category	Weight
Final Exam	An exam to cover the major units studied through this course.	SUM	30



## AFL/AAL/AOL Tracking sheet:

### Type of Submission

**W = written**

**C = conversation**

**V = video**

**D = discussion post**

### Unit 1:

AAL	AFL	AOL
1.2 Discussion Post - Important to Remember for First Aid	1.1 Kitchen Safety Worksheet (W)	1.3 Food Borne Illness Brochure Assignment (W)
1.53 Measurement Abbreviation Worksheet (W)	1.55 Measurement Worksheet (W)	1.6 Unit 1 Assessment (V) (W) (C)

### Unit 2:

AAL	AFL	AOL
2.64 Discussion Board Post - Energy Balance (D)	2.32 Micronutrients, Macronutrients and Water Worksheet (W)	2.41 Nutrient Deficiency and Excess Presentation (V)
2.62 Digestion, Absorption and Metabolism (W)	2.53 Investigating Food Guide (W, C)	2.71 Analyzing Nutrition and Health (C, W)
		2.8 Mid-Year Assignment (W)

### Unit 3:

AAL	AFL	AOL
3.1 Discussion Board Post - Food choice and their influencers (D)	3.21 Nutritional Needs at Stages of Life Quiz	3.3 Nutritional Trends Write-Up (W)
3.42 Discussion Post - Government Policy and Nutrition (D)	3.6 Unit 3 Reflection (C)	3.5 Unit 3 Assessment: Cooking for Nutrition (AOL) (V/W)

### Unit 4:

AAL	AFL	AOL
4.3 Factors that affect food supply and production reflection (W)	4.4 Combating Food Insecurity - Personal Reflection (W)	4.23 Methods of Food Supply and Production Mini Essay
4.5 The impact of consumers discussion board posts (D)	Unit 4 Reflection Conversation (C)	4.73 The Law and Food PSA Project

### Finals

AOL
Final Exam

## CONSIDERATION FOR PROGRAM PLANNING

### PLANNING PROGRAMS FOR STUDENTS WITH SPECIAL EDUCATION NEEDS

Classroom teachers are the key educators of students who have special education needs. They have a responsibility to help all students learn, and they work collaboratively with special education teachers, where appropriate, to achieve this goal. Special Education Transformation: The Report of the Co-Chairs with the Recommendations of the Working Table on Special Education, 2006 endorses a set of beliefs that should guide program planning for students with special education needs in all disciplines. Those beliefs are as follows: All students can succeed. Universal design and differentiated instruction are effective and interconnected means of meeting the learning or productivity needs of any group of students. Successful instructional practices are founded on evidence-based research, tempered by experience.

### PROGRAM CONSIDERATIONS FOR ENGLISH LANGUAGE LEARNERS

Ontario schools have some of the most multilingual student populations in the world. The first language of approximately 20 percent of the students in Ontario's English language schools is a language other than English. Ontario's linguistic heritage includes several Aboriginal languages; many African, Asian, and European languages; and some varieties of English, such as Jamaican Creole. Many English language learners were born in Canada and raised in families and communities in which languages other than English were spoken, or in which the variety of English spoken differed significantly from the English of Ontario classrooms. Other English language learners arrive in Ontario as newcomers from other countries; they may have experience of highly sophisticated educational systems, or they may have come from regions where access to formal schooling was limited. When they start school in Ontario, many of these students are entering a new linguistic and cultural environment.

### THE ROLE OF TECHNOLOGY IN THE PROGRAM

Information and communications technologies (ICT) provide a range of tools that can significantly extend and enrich teachers' instructional strategies and support students' language learning. ICT tools include multimedia resources, databases, Internet websites, digital cameras, and word-processing programs. Tools such as these can help students to collect, organize, and sort the data they gather and to write, edit, and present reports on their findings. Information and communications technologies can also be used to connect students to other schools, at home and abroad, and to bring the global community into the local classroom. Whenever appropriate, therefore, students should be encouraged to use ICT to support and communicate their learning.

### ACCOMMODATIONS

Accommodations will be based on meeting with parent, teachers, administration and external educational assessment report. The following three types of accommodations may be provided:

- ☐ **Instructional accommodations:** such as changes in teaching strategies, including styles of presentation, methods of organization, or use of technology and multimedia.
- ☐ **Environmental accommodations:** such as preferential seating or special lighting.
- ☐ **Assessment accommodations:** such as allowing additional time to complete tests or assignments or permitting oral responses to test questions.

Other examples of modifications and aids, which may be used in this course, are:

- ☐ Provide step-by-step instructions.
- ☐ Help students create organizers for planning writing tasks.
- ☐ Record key words on the board or overhead when students are expected to make their own notes.
- ☐ Allow students to report verbally to a scribe (teacher/ student) who can help in note taking.
- ☐ Permit students a range of options for reading and writing tasks.
- ☐ Where an activity requires reading, provide it in advance.
- ☐ Provide opportunities for enrichment.