Ontario eSecondary School
Course Outline
2024-2025

Ministry of Education Course Title: Nutrition and Health	
Ministry Course Code: HFA4U	
Course Type: University Preparation	
Grade: 12	
Credit Value: 1.0	
Prerequisite(s): Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies	
Department: Social Science and Humanities	
Course developed by: Samantha Campbell	**Date:** June 1st, 2019
Length: One Semester	**Hours:** 110
This course has been developed based on the following Ministry documents: 1. *Social Sciences and Humanities, The Ontario Curriculum, Grades 9 and 12*, 2013, (revised) 2. *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools (2010)* 3. *Learning for All (2013)*	

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

Unit	*Length*
Unit: Research and Inquiry Skills	Throughout term
Unit 1: Food Preparations Skills	22 hours
Unit 2: Nutrition and Health	22 hours
Midterm Assessment	7 hours
Unit 3: Eating Patterns and Trends	24 hours
Unit 4: Local and Global Issues	32 hours
Final Exam	3 hours
Total	**110 Hours**

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 good 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

In this course, students will experience the following activities.

Presentations with embedded videos are utilized to outline concepts, explain theory with the use of examples and practice questions, and incorporate multi-media opportunities for students to learn more (e.g. online simulations, quizzes, etc.).

End of unit conversations and Poodlls are opportunities for students to express their ideas, problem solving, and thought processes with a teacher who provides timely feedback.

Reflection is an opportunity for students to look back at concepts and theories with new eyes, to relate theory to practice, and to align learning with their own values and beliefs.

Discussions with the instructor are facilitated through video conferencing, discussing the concepts and skills being studied. This enables two-way communication between the student and the instructor, to share ideas and ask questions in dialogue. This also helps to build a relationship between the student and instructor.

Instructor demonstrations (research skills, etc.) are opportunities for the instructor to lead a student through a concept or skill through video conferencing, videos, or emailing with the student.

Discussion forums are an opportunity for students to summarize and share their ideas and perspectives with their peers, which deepens understanding through expression. It also provides an opportunity for peer-to-peer feedback.

Practical extension and application of knowledge are integrated throughout the course. The goal is to help students make connections between what they learn in the classroom and how they understand and relate to the world around them and their own lives. Learning becomes a dynamic opportunity for students to be more aware that their learning is all around them and enable them to create more meaning in their lives.

Individual activities/assignments assessments are completed individually at a student's own pace and are intended to expand and consolidate the learning in each lesson. Individual activities allow the teacher to accommodate interests and needs and to assess the progress of individual students. For this reason, students are encouraged to discuss IEPs (Individual Education Plans) with their teacher and to ask to modify

assessments if they have a unique interest that they feel could be pursued in the assessment. The teacher plays an important role in supporting these activities by providing ongoing feedback to students, both orally and in writing.

Research is an opportunity to apply inquiry skills to a practical problem or question. Students perform research to gather information, evaluate quality sources, analyze findings, evaluate their analysis, and synthesize their findings into conclusions. Throughout, students apply both creative thinking and critical thinking. New questions are also developed to further learning.

Writing as a learning tool helps students to think critically about course material while grasping, organizing, and integrating prior knowledge with new concepts. Good communication skills are important both in and out of the classroom.

Brainstorming, charts, and graphs are a great way for students to synthesize their knowledge of subject matter visually through graphic organizers, pictures, and texts.

Readings are an opportunity for students to gain insight from a variety of texts online and further develop literacy skills. Students may print out the reading material to use it to highlight, take notes, and have with them when a computer is not available.

Articles are examples of concepts and theories being discussed in the public realm and with respect to current events. They are snapshots not only of why theories/concepts/applications are relevant but also provide a window into the broader context of subject matter knowledge and understanding. Students learn through reading and analysis that the subject matter is deeply related to, and intertwined with, society and the diverse perspectives of lived experience.

Oral presentations in an online environment are opportunities for students to present live or record presentations, expressing their ideas and understanding orally.

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.

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. The teacher is encouraged to involve students in the discussion, modification, or creation of rubrics, and teach students to use rubrics as a learning tool.

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	
Course Work	**70**
Knowledge/Understanding (K)	17.5
Thinking/Inquiry (T)	17.5
Communication (C)	17.5
Application (A)	17.5
Final	**30**
Final Exam (7.5K, 7.5T, 7.5C, 7.5A)	30

TERM WORK EVALUATIONS (70%)

Evaluation Item	Description	Category	Weight
Unit 1: Food Brochure and Unit 1 Assessment	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, T, C, A	11
Unit 2: Presentation Analyzing Nutrition Project Cook and Nutrition Guide (Midterm Assessment)	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, T, C, A	24
Unit 3: Nutritional Trends Paragraph Cooking for Nutrition	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, T, C, A	17
Unit 4: Essay PSA Project	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, T, C, A	18

FINAL EVALUATIONS (30%)

Evaluation Item	Description	Category	Weight
Final Exam	An exam to cover the major units studied through this course.	K, T, C, A	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.