Ontario eSecondary School
Course Outline
2020-2021

Ministry of Education Course Title: Introduction to Kinesiology
Ministry Course Code: PSK4U
Course Type: University Preparation
Grade: 12
Credit Value: 1.0
Prerequisite(s): Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 course in health and physical education
Department: Health and Physical Education

Course developed by: **Asif Saleh**	**Date: February 1, 2019**
Length: **One Semester**	**Hours:** **110**

This course has been developed based on the following Ministry documents:
 1. *The Ontario Curriculum, Grades -12: Health and Physical Education, 2015 - revised*

COURSE DESCRIPTION/RATIONALE

This course introduces students to the world of human movement. Kinesiology can be studied from a wide variety of lenses: from the cellular level of physiology to the social factors that influence participation in sport and physical activity. This course focuses on the systems, factors, and principles involved in the development of human movement. Students will observe the impact of socioeconomic factors on physical activity participation rates and relationships with nutrition. Students will learn about the basic anatomy and cellular functions of the body related to movement, the mechanics behind movement, and the measured effects of training on the body. The course prepares students for university programs in physical education and health, kinesiology, health sciences, health studies, recreation, and sports administration.

Prerequisite: Any Grade 11 university or university/college preparation course in science, or any Grade 11 or 12 course in health and physical education

OVERALL CURRICULUM EXPECTATIONS

Physical Activity and Sport in Society

By the end of this course, students will:

1. Demonstrate an understanding of how the social and cultural significance of physical activity and sport has evolved historically, and analyse current social issues relating to physical activity and sport;
2. Demonstrate an understanding of the individual and social benefits of participation in physical activity and sport and the factors that enable and constrain participation.

The Basis of Movement

By the end of this course, students will:

1. Describe the structure and function of major body systems involved in human movement, and demonstrate an understanding of related anatomical and physiological concepts and theories;
2. Demonstrate an understanding of and assess factors that affect performance during human movement.

Biomechanics and Motor Development

By the end of this course, students will:

1. Demonstrate an understanding of the phases of movement and of physical laws and biomechanical principles related to improving movement;
2. Demonstrate an understanding of human growth and motor development and apply it to the design of age-appropriate movement activities and to the enhancement of movement skills.

COURSE CONTENT

Unit	Length
Unit 1: Society, Physical Activity, and Sport	20 hours
Unit 2: Anatomy and Physiology	32 hours
Unit 3: Human Performance and Biomechanics	30 hours
Unit 4: Nutrition, Training, and Ergogenic Aids	20 hours
Final Culminating Assignment	5 hours
Final Exam	3 hours
Total	**110 Hours**

UNIT DESCRIPTIONS

UNIT 1: SOCIETY, PHYSICAL ACTIVITY, AND SPORT

In this unit, students will be able to demonstrate an understanding of the history of sport and the cultural significance of physical activity. Students will explore content related to the struggles faced by minority groups in sport and the evolution of sport for social benefit. A key distinction between what is considered amateur and professional will become clear by the end of the unit.

UNIT 2: ANATOMY AND PHYSIOLOGY

In this unit, students will be able to describe the structure and function of the major anatomical systems of the human body, and their related physiological processes. We will take a deep dive into the world of blood and respiration, and observe the exchange of materials at the cellular level. This micro-assessment will help explain athletic performance at the macro level.

UNIT 3: HUMAN PERFORMANCE AND BIOMECHANICS

In this unit, students will demonstrate an understanding of physical movement and biomechanic principles that drive movement. Movement will be broken down into phases as well as age-appropriate blocks in which movement can be studied. Students will look to improve and enhance movement skills for athletic performance.

UNIT 4: NUTRITION, TRAINING, AND ERGOGENIC AIDS

In this unit, students will investigate the effects of nutrition on athletic performance. The effects of different types of training will be assessed and evaluated. As a capstone to the course, students will deep dive into the world of technology, with its ever-increasing relationship with sport and training.

TEACHING AND LEARNING STRATEGIES

The students will experience a variety of activities:

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.

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.

Oral presentations in an online environment we have the equipment to have student either live video conference oral presentations or make videos and submit them for their oral presentations. These oral presentations can be viewed by fellow students (when appropriate) and the teacher. Students can learn from one another, and from their teacher. Such activities include dramatic readings and performances.

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 access 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 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 or 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.

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
- ❑ Reflections
- ❑ Oral presentations & Active Listening
- ❑ Tests & Exam
- ❑ Evaluations

EVALUATION
The final grade will be determined as follows:

- ❑ Seventy per cent 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 per cent 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	17.5
Thinking/Inquiry	17.5
Communication	17.5
Application	17.5
Final	**30**
Culminating Activity	15
Final Exam	15

TERM WORK EVALUATIONS (70%):

Evaluation Item	Description	Category
Advertisement in Sport	Students will write a research report on commercials aired during a sporting event to identify underlying messages and interests.	K, I, C, A
Skeletal System Quiz	Students will be assessed on their knowledge and understanding of the human skeletal system.	K
Motor Development Activity	Students will develop a program to facilitate the acquisition of sport-specific skills.	I, C, A
Principles of Biomechanics Quiz	Students will be assessed on their knowledge and application of the principles of biomechanics relative to the human body.	K, A
Develop a Training Program	Students will develop a training plan based on a number of pre-assessment factors.	K, I, C, A
Unit Test(s)	The Unit tests are designed to test student understanding of key unit concepts and functions.	K, I, C, A

FINAL EVALUATIONS (30%):

Evaluation Item	Description	Category
Culminating Project: ISU Essay	Students will be required to research a topic relevant to the course and provide supporting evidence to a thesis statement.	K, I, C, A
Final Exam	A final exam based on the units covered throughout the course.	K, I, C, A

AFL/AAL/AOL Tracking sheet:

Unit 1: Society, Physical Activity, and Sport – 20 hours

AAL	AFL	AOL
Lesson 1.1 The Rise of Sport	Lesson 1.2 Equity in Sport	Advertising in Sport
Lesson 1.4 Sports as Entertainment T-Chart	Lesson 1.3 Sport for Fun Charter	Unit 1 Test
Lesson 1.5 Oscillococcinum Research	Live Chat: Inequalities in Sport Case Study	

Unit 2: Anatomy and Physiology – 32 hours

AAL	AFL	AOL
Lesson 2.12 Fiber Types	Lesson 2.1 Anatomical Worksheet	Skeletal Systems Quiz
Lesson 2.14 Cardiovascular System Journey	Lesson 2.2 The Musculoskeletal System	Unit 2 Test
Live Chat: The Respiration Process	Lesson 2.6 Muscular Systems Lab	

Unit 3: Human Performance and Biomechanics – 30 hours

AAL	AFL	AOL
Lesson 3.1 Stages of Development	Lesson 3.2 Growth and Development	Lesson 3.6 The FUNdamentals
Lesson 3.3 Piaget's 4 Stages of Cognitive Development	Lesson 3.4 Stages of Motor Learning	Principles of Biomechanics Quiz
Live Chat: Newton's Forces and Motion		Unit 3 Test

Unit 4: Nutrition, Training, and Ergogenic Aids – 20 hours

AAL	AFL	AOL
Lesson 4.2 Food Guide Confusion	Basic Nutrition Exercise	Develop a Training Program
Lesson 4.3 Harris-Benedict	Lesson 4.5 Training Principles	Unit 4 Test
Lesson 4.6 – Training Methods	Lesson 4.9 – Thinking and Inquiry	

Finals

AOL
Culminating Project
Final Exam

CONSIDERATION FOR PROGRAM PLANNING

Students learn best when they are engaged in a variety of ways of learning. Guidance and career education courses lend themselves to a wide range of approaches in that they require students to research, think critically, work cooperatively, discuss relevant issues, and learn through practice in a variety of settings. Helping students become self-directed, lifelong learners is a fundamental aim of the guidance and career education curriculum. When students are engaged in active and experiential learning strategies, they tend to retain knowledge for longer periods and develop meaningful skills. Active and experiential learning strategies also enable students to apply their knowledge and skills to real-life issues and situations.

ANTIDISCRIMINATION EDUCATION IN GUIDANCE AND CAREER EDUCATION

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 per cent 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 ENGLISH 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.