

Ontario eSecondary School Course Outline 2023-2024

| Ministry of Education Course T | itle: Introduction to Kinesiology |
|------------------------------------|--|
| Ministry Course Code: PSK4U | |
| Course Type: University Prepar | ration |
| Grade: 12 | |
| Credit Value: 1.0 | |
| | university or university/college preparation e 11 or 12 course in health and physical |
| Department: Health and Physic | cal Education |
| Course developed by: Asif Saleh | Date: February 1, 2019 |
| Length: One Semester | Hours: 110 |
| | on the following Ministry documents: : Health and Physical Education, 2015 - revised uation, and Reporting in Ontario Schools (2010) |

3. Learning for All (2013)

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.

OVERALL CURRICULUM EXPECTATIONS

Physical Activity and Sport in Society

By the end of this course, students will:

- 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

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.

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

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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.

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.

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

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- 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 (K) | 17.5 |
| Thinking/Inquiry (T) | 17.5 |
| Communication (C) | 17.5 |
| Application (A) | 17.5 |
| Final | 30 |
| Culminating Activity (0K, 5T, 5C, 5A) | 15 |
| Final Exam (7.5K, 3.8T, 1.7C, 2A) | 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, T, C, A |
| Skeletal System Quiz | Students will be assessed on their knowledge and understanding of the human skeletal system. | К |
| Motor Development Activity | Students will develop a program to facilitate the acquisition of sport-specific skills. | T, 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. | К, А |

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| Develop a Training Program | Students will develop a training plan based on a number of pre-assessment factors. | K, T, C, A |
|-------------------------------|---|------------|
| Unit Test(s) | The Unit tests are designed to test student understanding of key unit concepts and functions. | K, T, 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. | T, C, A |
| Final Exam | A final exam based on the units covered throughout the course. | K, T, 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 | Lesson 1.3 Sport for Fun Charter | Unit 1 Test |
| Entertainment T-Chart | | |
| Lesson 1.5 Oscillococcinum | Live Chat: Inequalities in Sport | |
| Research | Case Study | |

Unit 2: Anatomy and Physiology – 32 hours

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

Unit 3: Human Performance and Biomechanics – 30 hours

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

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

| AAL | AFL | AOL |
|-----------------------|--------------------------|----------------------------|
| Lesson 4.2 Food Guide | Basic Nutrition Exercise | Develop a Training Program |
| Confusion | | |

| 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

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 parents, teachers, administration and external educational assessment reports. 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.
- Assessment accommodations: such as allowing additional time to complete tests or assignments or permitting oral responses to test questions.

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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.
- □ 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.
- U Where an activity requires reading, provide it in advance.
- □ Provide opportunities for enrichment.