

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**SAULT  
COLLEGE**

**COURSE OUTLINE**

**COURSE TITLE:** Fitness and Wellness Principles and Applications

**CODE NO. :** OPA101                      **SEMESTER:** 1

**PROGRAM:** Occupational Therapist Assistant and Physiotherapist  
Assistant Program

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**DATE:** Sept/2011      **PREVIOUS OUTLINE DATED:** Sept/2010

**APPROVED:**    "Marilyn King"    July 2011

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	<b>CHAIR OF HEALTH PROGRAMS</b>	<b>DATE</b>
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**TOTAL CREDITS:** 3

**PREREQUISITE(S):**

**LENGTH OF COURSE:** 3 Hrs/Wk  
(Lecture 1hr/Lab 2hr)

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*For additional information, please contact the Chair, Health Programs*  
*School of Health and Community Services*  
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**I. COURSE DESCRIPTION:**

This course deals with the pursuit of fitness and wellness. Topics include (but are not limited to): dimensions of wellness, positive lifestyle choices, self-management and behaviour change techniques, exercise prescription, fitness training methods, nutrition, injury prevention and body fat management. Through participation in hands-on learning experiences, students gain the knowledge and skills necessary to make positive lifestyle changes for themselves and others. Students will demonstrate knowledge and gain skill in the application of techniques relevant to physical fitness and wellness.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

In general, this course addresses generic outcomes in: communication (1,2,7,13), interpersonal skills (5), analytical skills (12), outcome (10,11) and analysis (8).

Upon successful completion of this course, the student will demonstrate the ability to:

1. Demonstrate an understanding of the concept of wellness.

Potential Elements of the Performance:

- Contrast the past definition of health with the contemporary concept of wellness
- Explore the validity of the statement “health is a matter of choice”
- Describe how over reliance on our health care system impacts us as individuals and as a society
- Identify seven dimensions of wellness and behaviour choices which enhance each of them
- Describe and demonstrate self-management strategies which allow one to adopt healthy lifestyle behaviours

2. Demonstrate knowledge and skills related to the fitness dimension of wellness.

Potential Elements of the Performance:

- Describe the development of the fitness movement and explain how it impacts our leisure and work lives
- Differentiate between health-related and performance-related fitness
- Define each of the five components of health-related fitness
- Outline the minimum exercise requirements necessary to improve each component of fitness applying the “FITT Formula” of exercise prescription
- Explain the importance of a warm-up and cool-down and describe the critical elements of both
- Identify examples of aerobic activities which have the potential to increase cardiorespiratory endurance
- Determine appropriate exercise intensities using the Karvonen formula and “Borg’s Rate of Perceived Exertion” scale
- Explain the following principles of training: progressive overload, rest and specificity
- Identify the many health benefits of regular physical activity
- Compare aerobic and anaerobic training

3. Demonstrate knowledge and skills related to the development of muscular strength, endurance and flexibility as well as cardiovascular fitness.

Potential Elements of the Performance:

- Describe the many ways that muscular strength and muscular endurance training and cardiovascular fitness enhance wellness
- Demonstrate skill in manual muscle testing
- Identify and apply safe exercise practices with weight training, stretching and cardiovascular exercise
- Describe how to establish an ideal training weight for a beginner and for an experienced weight trainer
- Identify weight training exercises for the major muscle groups
- Demonstrate the use of weight training machines, free weights, and other small resistive equipment (tubing, bands, balls etc.) and aerobic equipment
- Instruct a peer in the safe use of equipment and proper exercise technique
- Describe and demonstrate the concentric and eccentric phases of dynamic muscular contractions
- Identify common fallacies related to weight training and aerobic fitness training.
- Design and follow a program to achieve improvement or maintenance of cardiovascular fitness.
- Design and follow a weight training program to achieve improvement or maintenance of muscular strength and/or muscular endurance
- Describe how flexibility training enhances wellness
- Describe the factors which limit flexibility
- Compare the effects of static (passive) and dynamic (ballistic) stretching techniques
- Demonstrate safe and effective exercises which enhance flexibility for each area of the body
- Instruct a peer in correct passive and PNF stretching techniques for major muscles of the body
- Identify some common unsafe exercise and their safer alternatives

4. Identify, administer, evaluate and interpret results of fitness tests for the five components of health related fitness.

Potential Elements of the Performance:

- Describe fitness assessment methods for each of the five components of health-related fitness
- Perform various fitness assessment procedures on a classmate
- Evaluate fitness assessment results and make appropriate training recommendations

5. Identify important exercise considerations, safety and care of the lower back.  
Potential Elements of the Performance:
  - Identify the safe exercises from a list of safe and contraindicated exercises
  - Identify recommendations for safe exercise in hot and cold weather.
  - Identify major contributors to injury risk and how to reduce risk
  - Explain general recommendations for common injuries (R.I.C.E.)
  - Describe recommendations to reduce risk of lower back injury
  
6. Describe the essential elements of sound nutrition and heart-smart eating.  
Potential Elements of the Performance:
  - Describe three ways dietary habits of Canadians have changed in the past 75 years and explain how these changes have affected our nutritional wellness
  - Identify the six major nutrients and describe their main functions in the body
  - Identify the percentage of calories recommended in the diet for carbohydrates, proteins and fats
  - Describe the dietary guidelines for North Americans
  - Differentiate between complex and simple carbohydrates
  - Describe the health benefits of soluble and insoluble fibre and list good sources of each
  - List examples of saturated, monounsaturated and polyunsaturated fats and explain their relationship to coronary heart disease
  - Identify foods high in cholesterol
  - Identify the key concepts promoted in “Canada’s Food Guide for Healthy Eating”
  - Analyze meals for dietary fat and fibre content
  - Examine one’s own nutritional behaviour and outline strategies for improvement
  
7. Evaluate the effectiveness of various fat-management techniques and differentiate between those which are health-enhancing and those which are health diminishing.  
Potential Elements of the Performance:
  - Describe the relationship between body composition and wellness
  - Explain the concept of weight and body size preoccupation and describe how this trend negatively impacts us
  - Explain how exercise influences body composition and contributes greatly to body fat management
  - Compare the effectiveness of exercise combined with healthy eating versus dieting alone, as weight/fat loss strategies
  - Describe strategies which promote healthy weight gain for those who are underweight
  - Identify activities which have the potential to improve body composition through fat reduction and/or muscle gain
  - Identify several myths related to fat management

8. Identify and apply the concepts related to stress and stress management to one's personal life.  
Potential Elements of the Performance:
- Define the terms stress and stressor
  - Describe the three stages of the General Adaptation Syndrome (the stress response)
  - Define and give examples of eustress, distress and optimal stress
  - Explain how perception and control are related to the experience of stress
  - Explain the relationship of life changes and susceptibility to stress-related illnesses
  - Describe the harmful effects of too much stress
  - Contrast Type A, Type B and Type C behaviour patterns
  - Identify Type A behaviour modification techniques
  - Explain why exercise is an ideal strategy for managing stress
  - Experience and critique several relaxation techniques as stress management strategies
  - Explain how the following lifestyle behaviours/characteristics impact our experience of stress: eating habits, time management, alcohol, drugs and cigarette use, sleeping habits, satisfying relationships, seeking help and support of others, balancing work and play
9. Describe the important issues to consider when making the pursuit of wellness a lifetime endeavour.  
Potential Elements of the Performance:
- Define quackery and identify the common characteristics of quackery
  - Discriminate between a credible health product/discovery and a bogus or flimsy finding
  - Give examples of wellness programs that can be offered in the workplace
  - Describe ways to foster wellness habits in children
  - Describe several precautions to enhance personal safety
  - Describe trends which will affect our wellness in the future
  - Describe future challenges related to wellness
  - List environmental concerns that may impact our wellness
10. Identify cancer risk and prevention strategies.  
Potential Elements of the Performance:
- Identify how cancer deaths rank in overall death statistics
  - List primary and secondary risk factors for cancer
  - Give guidelines for preventing sun over exposure; selecting foods that reduce cancer risk; and self screening practices
  - Identify health hazards related to smoking
11. Identify the problems associated with substance abuse and addictive behaviour.  
Potential Elements of the Performance:
- Describe issues related to alcohol abuse
  - Identify the side effects of marijuana, cocaine

**III. TOPICS:**

1. Understanding Health-Related Physical Activity and Wellness
2. Introduction to Fitness
3. Fitness Assessment
4. Training Methods and Safe Exercise Practices for Each Component of Fitness
5. Exercise Considerations
6. Nutrition
7. Body Composition and Body Fat Management
8. Stress
9. Lifelong physical activity and physical fitness
10. Cancer
11. Substance Abuse

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

Powers, Dodd, Jackson. (2011) Total Fitness and Wellness (5<sup>th</sup> ed)

Vella, Mark. Anatomy for Strength and Fitness Training.

**V. EVALUATION PROCESS/GRADING SYSTEM:**

**Students in the OTA/PTA program must successfully complete this course with a minimum C grade (60%) as partial fulfillment of the OTA/PTA diploma.**

1. A combination of tests and assignments will be used to evaluate student achievement of the course objectives.

Written test #1	20%
Written test #2	20%
Labs	30%
Assignments	30%

2. All tests/exams are the property of Sault College.
3. Students missing any of the tests or exams because of illness or other serious reason must notify the professor **BEFORE** the test or exam. The professor reserves the right to request documents to support the student's request.
4. Those students who have notified the professor of their absence that day will be eligible to arrange an opportunity as soon as possible to write the test or exam at another time. Those students who **DO NOT NOTIFY** the professor will receive a zero for that test or exam.

5. For assignments to be handed in, the policies of the program will be followed. For assignments not handed in by the due date, the mark received will be zero. Extensions will be granted if requested in writing at least 24 hours before the due date. There will be a deduction of one percent (of final grade) per day for every school day late with the permission of an extension. This means that an extension for 5 school days (1 week), will result in 5 percentage points deducted from the final grade.

The following semester grades will be assigned to students in post-secondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

**VI. SPECIAL NOTES:**

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session. *It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not be guaranteed admission to the room.*

**VII. COURSE OUTLINE ADDENDUM:**

The provisions contained in the addendum located on the portal form part of this course outline.