

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

AUTHOR: Joanna MacDougall/Allan Kary

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APPROVED: *“Marilyn King”* *Aug. 2014*

	CHAIR OF HEALTH PROGRAMS	DATE
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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
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This course addresses the following Vocational Learning Outcomes, Essential Employability Skills and General Education Requirements in the approved program standard (2008) for Occupational Therapist Assistant and Physiotherapist Assistant program of instruction leading to an Ontario College Diploma delivered by the Ontario Colleges of Applied Arts and Technology. (MTCU code 51502)

Vocational Learning Outcomes

Check All That Apply	The graduate has reliably demonstrated the ability to:
	communicate appropriately and effectively, through verbal, nonverbal, written and electronic means, with clients, their families and significant others, occupational therapists, physiotherapists, other health care providers and others within the role of the therapist assistant participate in the effective functioning of interprofessional health care teams within the role of the therapist assistant.
X	establish, develop, maintain, and bring closure to client-centred, therapeutic relationships within the role of the therapist assistant.
	ensure personal safety and contribute to the safety of others within the role of the therapist assistant.
	practice competently in a legal, ethical, and professional manner within the role of the therapist assistant.
X	document and complete client records in a thorough, objective, accurate, and nonjudgmental manner within the role of the therapist assistant.
X	develop and implement strategies to maintain, improve, and promote professional competence within the role of the therapist assistant.
X	perform effectively within the roles and responsibilities of the therapist assistant through the application of relevant knowledge of health sciences, psychosociological sciences, and health conditions.
X	perform functions common to both physiotherapy and occupational therapy practices that contribute to the development, implementation and modification of intervention/treatment plans, under the supervision of and in collaboration with the occupational therapist and/or physiotherapist.
X	enable the client's occupational performance* by contributing to the development, implementation, and modification of intervention/treatment plans, under the supervision of and in collaboration with the occupational therapist.
X	enable the client's optimal physical function by contributing to the development, implementation, and modification of intervention/treatment plans, under the supervision of and in collaboration with the physiotherapist.

Essential Employability Skills:

Check All That Apply	The graduate has reliably demonstrated the ability to:
X	<i>communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</i>
X	<i>respond to written, spoken, or visual messages in a manner that ensures effective communication.</i>
X	<i>execute mathematical operations accurately.</i>
	<i>apply a systematic approach to solve problems.</i>
X	<i>use a variety of thinking skills to anticipate and solve problems.</i>
X	<i>locate, select, organize, and document information using appropriate technology and information systems.</i>
X	<i>analyze, evaluate, and apply relevant information from a variety of sources.</i>
X	<i>show respect for the diverse opinions, values, belief systems, and contributions of others.</i>
X	<i>interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.</i>
X	<i>manage the use of time and other resources to complete projects.</i>
X	<i>take responsibility for one's own actions, decisions, and consequences.</i>

General Education Requirements are addressed for the objective of Personal Development.

I. COURSE DESCRIPTION:

This course considers the impact of the determinants of health on the well-being of individuals. 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, the student gains the knowledge and skills necessary to make positive lifestyle changes for themselves and others. The student will gain knowledge and skill in the application of techniques relevant to lifelong health and wellness.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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
- 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
- Describe 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. **Demonstrate an understanding of major risk factors related to injury during exercise and injury prevention and management.**
Potential Elements of the Performance:
 - Identify the safe exercise techniques and modifications
 - Identify recommendations for safe exercise practices among special populations (eg. Elderly population, pregnant women, asthma, etc.)
 - Explain the management of exercise related injuries using R.I.C.E.
 - Describe recommendations to reduce risk of lower back injury during exercise

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. **Demonstrate an understanding of factors that influence body composition.**
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 has a negatively impacts on individuals
 - Explain how exercise influences body composition and contributes 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
 - Evaluate the effectiveness of various fat-management techniques and differentiate between those which are health-enhancing and those which are health diminishing.

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 stress response (ie. General Adaptation Syndrome)
- Explain how perception and control are related to the experience of stress
- Describe the harmful effects of too much stress
- Contrast Type A, Type B and Type C behaviour patterns
- Identify and explain stress modification techniques
- Experience and reflect on specific 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:

- Distinguish between a credible health product/discovery and one that is not credible
- 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 and future challenges which will affect personal wellness
- List physical environmental factors that may influence personal wellness
- Identify aspects of health and wellness related to prevention strategies and making healthy choices.

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 Health and Wellness

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Hoeger, Hoeger, Locke and Lauzon (2008). Principles and Labs for Fitness and Wellness (1st Canadian Edition)

Manocchia, P. (2009) Anatomy of Exercise: A Trainer's Inside Guide to Your Workout. Firefly Books.

V. EVALUATION PROCESS/GRADING SYSTEM:

Students in the OTA/PTA program must successfully complete this course with a minimum C grade (60%), for subsequent courses in the OTA/PTA program which this course is a pre-requisite, and also 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.

Midterm	20%
Final	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	0.00

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.