# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ONTARIO



## **COURSE OUTLINE**

COURSE TITLE: Applied Human Movement

CODE NO.: OPA107 SEMESTER: 2

**PROGRAM:** Occupational Therapist Assistant/Physiotherapist

Assistant

AUTHOR: Joanna MacDougall

DATE: Jan16 PREVIOUS OUTLINE DATED: Jan15

**APPROVED:** "Marilyn King" Jan. 2016

CHAIR OF HEALTH PROGRAMS DATE

TOTAL CREDITS: 3

PREREQUISITE(S): OPA 101, OPA 103, OPA 104

**HOURS/WEEK:** 3hrs/wk

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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<br>That | The graduate has reliably demonstrated the ability to:   |
|-------------------|--|
| Apply             |  |
| X                 | 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        |
| X                 | 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.  |
| X                 | practice competently in a legal, ethical, and professional manner within the role of the therapist assistant.  |
|                   | 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.   |
|                   | perform effectively within the roles and responsibilities of the therapist assistant through<br>the application of relevant knowledge of health sciences, psychosociological sciences,<br>and health conditions.   |
|                   | 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  | The graduate has reliably demonstrated the ability to:  |
|------------|---|
| That Apply |   |
| X          | communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. |
| X          | respond to written, spoken, or visual messages in a manner that ensures effective communication.  |
|            | execute mathematical operations accurately.   |
|            | apply a systematic approach to solve problems.  |
|            | use a variety of thinking skills to anticipate and solve problems.  |
| X          | locate, select, organize, and document information using appropriate technology and information systems.  |
| X          | analyze, evaluate, and apply relevant information from a variety of sources.  |
|            | show respect for the diverse opinions, values, belief systems, and contributions of others.   |
|            | interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.                    |
| X          | manage the use of time and other resources to complete projects.  |
| Χ          | take responsibility for one's own actions, decisions, and consequences.   |

## I. COURSE DESCRIPTION:

This course will consolidate and expand the student's knowledge base of human anatomy and human movement. Using a regional anatomy approach, students will focus on joint structure and function as well normal and abnormal human movement throughout the lifespan. The student will explore abnormal movement patterns, posture and gait, as well as underlying principles of soft tissue mobility. The course prepares the student for the clinical application of practice considerations of motor learning and skill acquisition.

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

Upon successful completion of this course, the student will:

1. Demonstrate and apply knowledge of motor learning and practice conditions.

## Potential Elements of Performance:

- Identify and describe the stages of motor learning, and characteristics of the learner in each stage of learning
- Identify and describe appropriate instructional strategies for effective exercise and task-specific instruction
- Identify and describe different types of feedback and its role in motor learning
- Identify and describe different practice conditions (part practice, whole practice, blocked vs. random practice)
- 2. Demonstrate and apply knowledge of anatomy as it relates to functional movement.

## Potential Elements of the Performance:

- Identify skeletal muscles and classify by action
- Identify functional actions of muscles
- Name and identify ligaments of the body and explain the function of each
- Integrate knowledge of anatomy through the analysis of normal functional movements of the upper and lower extremity
- 3. Demonstrate and apply knowledge related to muscle and soft tissue mobility.

## Potential Elements of the Performance:

- Integrate knowledge of anatomy with the principles of soft tissue stretching
- Explain key concepts of soft tissue stretching
- Explain the implications of age as it relates to soft tissue stretching

- 4. Demonstrate knowledge of normal versus abnormal postures and the effect of these on movement related to body alignment and positioning <a href="Potential Elements of the Performance">Potential Elements of the Performance</a>:
  - Describe and demonstrate the ability to assist and educate others regarding normal body alignment and positioning
  - Identify common abnormal postures and age related postures, and the consequence of these in terms of tightness, weakness and elongation of soft tissues
- 5. Demonstrate knowledge of normal and abnormal gait patterns with and without of assistive devices.

## <u>Potential Elements of the Performance</u>:

- Identify and describe normal and abnormal gait patterns
- Review parameters of gait (step length, stride length, width of base of support)
- Describe normal age-related changes of gait
- Identify gait patterns of common disabling conditions (CVA, Parkinson's, antalgic gait of the lower extremity)
- Identify factors affecting gait (abnormal tone, cognition, sensory and perceptual deficits)
- Describe and demonstrate basic gait patterns using assistive devices

### III. TOPICS:

- 1. Applied Kinesiology
- 2. Motor Learning and Principles of Practice
- 3. Muscle and Soft Tissue Mobility
- 4. Normal and Abnormal Posture and Body Alignment and Positions
- 5. Normal, Abnormal and Assistive Gait Patterns

## IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Johansson, C. and Chinworth, S. (2012). <u>Mobility in Context. Principles of Patient Care Skills.</u> F.A. Davis Company.

Kisner and Colby. (2007) <u>Therapeutic Exercise</u>. Foundations and Techniques (5th edition). F.A. Davis Company.

Lippert, Lynn. (2011). <u>Clinical Kinesiology for Physical Therapist Assistants.</u> (5<sup>th</sup>. ed.) F.A. Davis Company. (from 1<sup>st</sup> semester)

Lippert, Lynn. (2011). <u>Laboratory Manual for Clinical Kinesiology and Anatomy.</u> (3<sup>rd</sup> . ed.) F.A. Davis Company. (from 1<sup>st</sup> semester)

Marieb, Elaine. (2012). <u>Essentials of Human Anatomy and Physiology</u>. (10<sup>th</sup> ed.) Benjamin Cummings/Addison Wesley Longman, Inc.

## 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. Course Evaluation:

| In Class Assignments/Labs | 30%  |
|---------------------------|------|
| Tests                     | 40%  |
| Final Exam                | 30%  |
| Total                     | 100% |

- 2. All tests/exams are the property of Sault College.
- 3. Students missing any of the tests or exams (written or practical), must notify the professor <u>BEFORE</u> the test or exam. The professor reserves the right to request documents to support the student's request and to determine whether the student is eligible to write the test or exam at another time. <u>Those STUDENTS WHO DO NOT NOTIFY the professor of their absence prior to the test or exam will receive a zero for that test or exam.</u>
- 4. 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 per day for every school day late with the permission of an extension. For example if a written extension was requested, and an extension for 5 school days (1 week) was granted, 5 percentage points will be deducted from the final grade.
- 5. Supplemental Exams/Assignments are generally not provided in the OTA/PTA program. In the event of a failing grade in the course, however, there may be exceptional circumstances where a supplemental exam/assignment may be considered. In all circumstances, this decision remains at the discretion of the professor and/or coordinator.

The following semester grades will be assigned to students in postsecondary courses:

| <u>Grade</u> | <u>Definition</u>                            | Grade Point<br>Equivalent |
|--------------|--|---------------------------|
| A+           | 90 – 100%                                    | 4.00                      |
| Α            | 80 – 89%                                     | 4.00                      |
| В            | 70 - 79%                                     | 3.00                      |
| С            | 60 - 69%                                     | 2.00                      |
| D            | 50 – 59%                                     | 1.00                      |
| 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.                    |                           |

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

## 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.

Substitute course: information is available in the Registrar's office.

## VII. COURSE OUTLINE ADDENDUM:

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