



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***

<b>Check All That Apply</b>	<b>The graduate has reliably demonstrated the ability to:</b>
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.
X	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.
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:***

<b>Check All That Apply</b>	<b>The graduate has reliably demonstrated the ability to:</b>
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.
X	take responsibility for one's own actions, decisions, and consequences.

**I. COURSE DESCRIPTION:**

The purpose of this course is to provide the student with the ability to perform basic skills performed by a Physiotherapist Assistant. The student is introduced to essential competencies related to handling skills, therapeutic exercise, measurement of joint motion, bed mobility, transfers and assistive ambulation. The student will be expected to demonstrate competence in areas of safety, guarding, handling skills, set up and fit of assistive devices, as well as effective instruction, cuing and providing feedback to the client.

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

Upon successful completion of this course, the student will:

1. Demonstrate an understanding of the role of the PT and PTA in the development and implementation of the treatment plan.  
Potential Elements of the Performance:
  - Identify the role of the Registered Physiotherapist in the initial and ongoing assessment of a client's condition and the implementation and monitoring of a treatment plan
  - Identify the role of the Physiotherapist Assistant in assisting the Registered Physiotherapist to implement and monitor the treatment plan
  
2. Demonstrate knowledge of the basic physiological effects of different types of exercise.  
Potential Elements of the Performance:
  - Define "Therapeutic Exercise" and describe aspects of Physical Function (balance, cardiopulmonary fitness, coordination, flexibility, mobility, muscle performance, neuromuscular control, postural control and stability)
  - Define and classify different types of therapeutic exercise: passive, active, active assisted, resistive (isometric, isotonic, isokinetic, eccentric and concentric), endurance, aerobic etc.
  - Identify common physical impairments managed with therapeutic exercise
  - Identify and describe impairment training versus functional/purposeful exercise
  - Identify and describe different therapeutic exercise interventions to address aerobic conditioning, muscle performance (strength, power, endurance), range of motion and stretching (passive, active, active-assisted), neuromuscular control, postural control, stabilization, balance, relaxation, breathing

3. Demonstrate knowledge and skill in the implementation, maintenance and monitoring of physiotherapy programs involving therapeutic exercise.  
Potential Elements of the Performance:
  - Recognize progression in exercise routines and explain the risks of over-loading or under-loading the client's exercises
  - Describe and demonstrate functional activities that may be used to maintain or improve aspects of Physical Function
  - Demonstrate the ability to implement and monitor a therapeutic exercise program (ie. range of motion) established by a Registered Physiotherapist
  - Demonstrate the ability to instruct, cue and provide feedback to a client thereby reinforcing the Physiotherapists' initial instructions to the client
  - Describe and demonstrate competence in the operation, care and maintenance of equipment such as mobility aids, exercise equipment, assessment tools etc.
  
4. Demonstrate skill in the safe application of therapeutic exercise.  
Potential Elements of the Performance:
  - Describe and explain grading versus progression in exercise routines
  - Recognize changes in behaviour patterns: describe signs of distress and identify the actions to be taken (for example, changes in colour, breathing patterns, incontinence)
  - Identify variances from expected patient performance in exercise completion and ambulation and report these accurately to the supervising Physiotherapist (respiratory distress, complaints of pain, non-compliance, difficult patients)
  - Describe common data measurement methods used in gathering and reporting to the Physiotherapist
  
5. Demonstrate knowledge of and describe contraindications, precautions, and safety issues in the application of therapeutic exercise.  
Potential Elements of the Performance:
  - Identify precautions/contraindications to therapeutic exercise
  - Demonstrate the ability to safely implement patient transfers, assistive ambulation and range of motion exercise.
  
6. Demonstrate an understanding of techniques for instruction of therapeutic exercise to individuals and groups.  
Potential Elements of the Performance:
  - Identify the key components and structure of a group exercise class
  - Participate in a therapeutic group exercise class and observe and report on the instructional techniques of the class leader
  - Observe and report on methods to modify the instructional technique according to the needs of the individual, group or the setting
  
7. Demonstrate skill in the safe use of assistive ambulation devices, transfer techniques and bed mobility in clinical situations.  
Potential Elements of the Performance:
  - Identify and demonstrate levels of assistance and strategies to improve safety during therapeutic activities, transfers and ambulation

- Identify assistive ambulation devices and varying levels of weight bearing
  - Demonstrate the ability to appropriately select, fit and adjust of crutches, canes and walkers
  - Demonstrate the ability to instruct a client to employ a variety of assistive ambulation patterns (including ascending and descending stairs), depending on the assistive device, weight bearing status and level of assistance required
  - Identify environmental and architectural risk factors to ambulation as well as strategies to prevent falls and decrease the risk of injury in a fall
  - Observe and recognize client response, including significant departures from the expected patterns in patient response to therapeutic activities, mobility and ambulation, and report them accurately to the Physiotherapist
  - Explain the benefits and purpose of mobility and the consequence of immobilization (pressure ulcers, edema, DVT, contractures)
  - Describe the management and consequences of short term and long term positioning
  - Explain and demonstrate preventative exercises (ie. For DVT)
  - Demonstrate clinical reasoning and skill with respect to patient positioning and bed mobility
8. Demonstrate knowledge and skill related to the assessment of joint motion.  
Potential Elements of the Performance:
- Define and describe goniometry
  - Explain the essential components of reliable, valid goniometry
  - Identify normal ranges of movement and the concepts of 'end-feel' for most synovial joints
  - Demonstrate the ability to measure joint range of motion using a goniometer
9. Demonstrate an understanding of cardio-respiratory conditions and the role of the PTA in the physiotherapy management of these conditions.  
Potential Elements of the Performance:
- Identify the impairments of common cardio-respiratory conditions and the goals of treatment in the Physiotherapy management of these
  - Describe the application of therapeutic exercise and mobility as it relates to the Physiotherapy management of cardio-respiratory conditions
  - Define and demonstrate: postural drainage, deep breathing and coughing, manual percussion, mechanical vibration, breathing exercises (diaphragmatic, pursed lip)
  - Recognize signs of respiratory distress and the appropriate management by the PTA
  - Recognize changes in sputum production and when to report this to the Registered Physiotherapist

10. Demonstrate the ability to describe and document physiotherapy interventions carried out by the PTA

Potential Elements of the Performance:

- Describe and draw therapeutic exercises prescribed by the Physiotherapist for use by a client in a home exercise program
- Demonstrate the ability to select appropriate exercises from a database/software program
- Produce instructional information for a client's home exercise program, both written and electronically

### III. TOPICS:

1. Aspects of Physical Function
2. Therapeutic Exercise Interventions
  - Range of Motion
  - Muscle Performance (strength, power, resistance)
  - Aerobic Conditioning
  - Stretching
  - Neuromuscular Control
  - Postural Control and Stability
3. Types of Exercise: passive, active, active assistive resistive (isometric, isotonic – concentric, eccentric, isokinetic)
4. Bed Mobility
5. Transfers and Lifts
6. Assistive Ambulation
7. Assessment of Joint Movement
8. Cardio-Respiratory Techniques

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

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

Lippert, L. (2011) Clinical Kinesiology for Physical Therapist Assistants (5<sup>th</sup> ed.). F. A. Davis Company

Norkin, C.C., (2003). Measurement of Joint Motion: A Guide to Goniometry. (3<sup>rd</sup> ed.). F. A. Davis Company.

Students must obtain clinical resources including a goniometer, personal protective equipment kit (both available at the bookstore), at least two tensor bandages ( 2 inch and 4 inch), and a retractable tape measure.

## 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. Performance Based Evaluations require a minimum of 60% in each category of performance.

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

### Course Evaluation:

Required Reading	10%
Lab Assignments	10%
Quizzes	20%
Midterm Exam - Written	20%
Final Exam - Written	20%
<u>Practical Exams</u>	<u>20%</u>
<b>Total</b>	<b>100%</b>

Remediation for practical skills is mandatory for any single competency score of less than 3/5 and for patient safety related issues.

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 BEFORE 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. 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.
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>	<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.	

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 arrivals 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.