

I. COURSE DESCRIPTION:

This course will enable the student to competently design and implement safe and appropriate intervention strategies for a Physiotherapy Treatment Plan. It is designed to develop the essential skills learned in Physiotherapy Clinical Skills I. The student will identify the role of the PTA in the rehabilitation process, and practice these skills in complex clinical scenarios. The emphasis will be on the application of therapeutic exercise, mobility and ambulation, and other modalities. Drawing on their knowledge of clinical pathology, the student will identify impairments expected for common conditions. The student will gain critical thinking skills required to identify appropriate interventions, implement and document components of a treatment plan as prescribed by and under the supervision of a Physiotherapist.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

In general, this course addresses Learning Outcomes of the Program Standards in: communication skills (1, 2, 8P, 9P, 10P, 11P, 12P, safety (1, 2, 4, 8P, 9P, 10P, 11P, 12P), professional competence (1, 2, 4, 5, 7, 8P, 9P, 10P, 11P, 12P), and application skills (1, 2, 4, 8P, 9P, 10P, 11P 12P). It addresses all of the Generic Skills Learning Outcomes.

Upon successful completion of this course, the student will:

1. **Demonstrate knowledge, comprehension and application of the clinical presentation of common disabling conditions managed in a physiotherapy setting.**

Potential Elements of the Performance:

- Identify and describe the clinical presentation of common conditions covered in Clinical Pathology II
- Identify probable impairments of these conditions and determine the goals of the Physiotherapy management of these
- Identify appropriate interventions and demonstrate the application of skills to implement these
- Describe the application of therapeutic exercise and mobility as it relates to each condition and the Physiotherapy management of each condition

2. **Demonstrate comprehension of the role of the Registered Physiotherapist and the Physiotherapist Assistant in the physiotherapy management of common disabling conditions.**

Potential Elements of the Performance:

- Demonstrate an understanding of the roles of the Registered Physiotherapist and the Physiotherapist Assistant in the rehabilitation process (referral, assessment, treatment planning, implementation and monitoring of the treatment plan, ongoing patient monitoring and re-assessment, discharge and documentation)

3. Demonstrate application, analysis, synthesis and evaluation of the basic physiological effects of exercise.

Potential Elements of the Performance:

- Identify different aspects of Physical Function (balance, cardiopulmonary fitness, coordination, flexibility, mobility, muscle performance, neuromuscular control, postural control and stability)
- Identify common physical impairments and describe appropriate management through therapeutic exercise interventions
- Identify, describe and apply different types of therapeutic exercise interventions aerobic conditioning, muscle performance (strength, power, endurance), stretching, neuromuscular control, postural control, stabilization, balance, relaxation, breathing, task-specific functional training
- Educate patients regarding the benefits and purposes of the different types of therapeutic exercise interventions and the environments where these activities may take place
- Appropriately select and apply different types of exercise: passive, active, active assistive, resistive (isometric, isotonic, eccentric and concentric)

4. Demonstrate application and synthesis of concepts in the implementation, maintenance and monitoring of therapeutic exercise programs in complex clinical situations, as prescribed by and under the supervision of the Registered Physiotherapist.

Potential Elements of the Performance:

- Demonstrate skill in progressing exercise routines and educate patients about the risks of over-loading or under-loading their exercises
- Instruct patients in functional activities that may be used to increase strength
- Using a variety of equipment, implement and maintain a range of motion program prescribed by a Registered Physiotherapist
- Using a variety of equipment, implement and maintain a strengthening program prescribed by a Registered Physiotherapist
- Demonstrate communication skills that help reinforce the Physiotherapist's instructions (alternate ways of teaching the same exercise, motivating patients)
- Demonstrate skill in the operation, care and maintenance of equipment such as mobility aids, exercise equipment, assessment tools etc.

5. Demonstrate skill in the application of knowledge while evaluating changes in clients' progress.

Potential Elements of the Performance:

- Demonstrate competence in the recognition and reporting of changes in behaviour patterns (eg. signs of distress) and identify the actions to be taken
- Demonstrate competence in the recognition and reporting of variances from expected patient performance (eg. exercise completion, ambulation etc.)
- Demonstrate competence in gathering and reporting of common data measurement methods

6. Demonstrate knowledge, comprehension and application of contraindications, precautions, and safety issues in the application of therapeutic exercise.

Potential Elements of the Performance:

- Demonstrate competence in the recognition and reporting of precautions/contraindications to therapeutic exercise
- Demonstrate competence in the recognition and reporting of safety concerns as they relate to the application of therapeutic exercise

7. Demonstrate application, synthesis of concepts and evaluation, in the design and implementation of therapeutic exercise, as prescribed by a Registered Physiotherapist, to individuals and groups.

Potential Elements of the Performance:

- Demonstrate competence in the design and implementation of exercise routines as prescribed by a Registered Physiotherapist
- Using appropriate equipment, design and implement a range of motion program established by a Registered Physiotherapist,
- Using appropriate equipment, design and implement a strengthening program established by a Registered Physiotherapist
- Under the supervision of a Registered Physiotherapist, modify a therapeutic exercise program according to the needs of the individual, group or the setting
- Under the supervision of a Registered Physiotherapist, design and implement a group exercise class

8. Demonstrate application, synthesis of concepts and evaluation and in the safe use of assistive devices, transfer techniques and bed mobility in complex clinical situations.

Potential Elements of the Performance:

- Demonstrate competence in the selection and use of assistive devices and equipment used in exercise programs/facilitation techniques
- Appropriately select and perform safe transfers accommodating different impairments
- Demonstrate competence in the identification and selection of levels of assistance and safety procedures that maybe required for therapeutic activities and forms of mobility (shoes, surfaces, risks of falling, client's with IV's, ostomy bags, catheters etc.)
- Demonstrate skill in the selection, set-up, and instructions regarding safe use of assistive ambulation devices
- Demonstrate competence in the performance of safely portering a client: selection and performance of safe transfers, taking and giving a verbal report, monitoring client responses
- Demonstrate competence in handling skills related to bed mobility, safe transfer techniques, use of a mechanical lift
- Demonstrate communication skills that reinforce the Registered Physiotherapist's instructions
- Demonstrate competence in the recognition of significant departures from the expected patterns in patient response, and report them accurately to the Registered Physiotherapist

9. Demonstrate application, synthesis of concepts and evaluation in the safe and appropriate handling skills in specific disabling conditions.

Potential Elements of the Performance:

- Demonstrate competence in the identification of different types of muscle tone and appropriate handling techniques
- Under the supervision of a Registered Physiotherapist, adapt activities and handling for clients with specific conditions and for the elderly and very young

10. Demonstrate application, synthesis of concepts and evaluation in the measurement of joint range of motion.

Potential Elements of the Performance:

- Demonstrate competence in the measurement of joint range of motion selecting appropriately from a variety of techniques (goniometry, tape measure etc) given different clinical situations
- Explain the essential components of reliable, valid goniometry
- Demonstrate competence in goniometry and identification of normal range of movement for all synovial joints

11. Demonstrate knowledge and comprehension of cardio-respiratory conditions and application of 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
- Demonstrate competence in the application of therapeutic exercise and mobility as it relates to each condition and the Physiotherapy management of each condition
- Demonstrate competence in the performance of: postural drainage, deep breathing and coughing, manual percussion, mechanical vibration, breathing exercises (diaphragmatic, pursed lip)
- Recognize signs of respiratory distress, when and to whom to report this to, and appropriate management by the PTA
- Recognize changes in sputum production and when to report this to the Registered Physiotherapist

12. Demonstrate application, synthesis of concepts and evaluation during objective problem solving and decision making related to the implementation of a treatment plan as prescribed by a Physiotherapist.

Potential Elements of the Performance:

- Recognize variances in patient populations and individuals and adapt therapeutic interventions appropriately
- Demonstrate competence in identification of problems, including incongruence between prescribed intervention and appropriate environment, safety concerns, and client response to intervention.
- Demonstrate skill in reporting problems and making decisions under the supervision of a Registered Physiotherapist

III. TOPICS:

1. Common Conditions (covered in Clinical Pathology I and II) as they relate to the learning outcomes listed above
2. The role of the Reg. PT and the PTA in the rehabilitation process
2. The role of the PTA in the physiotherapy management of the common disabling conditions
3. Handling skills
4. Therapeutic Exercise for common conditions
 - Range of Motion
 - Resistance Exercise
 - Aerobic Exercise
 - Stretching
5. Assistive ambulation
6. Transfers and Bed Mobility
7. Goniometry
8. Chest Physiotherapy
9. Observing and Reporting
10. Problem Solving and Decision Making

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Kisner and Colby. (2002) Therapeutic Exercise. Foundations and Techniques (4th edition). F.A. Davis Company (from 2nd semester)

Lippert, L. Clinical Kinesiology for Physical Therapist Assistants (from 1st semester)

Frazier, M and Drzymkowski, J. (2000). Essentials of Human Diseases and Conditions (2nd ed.), W.B. Saunders Company (from 2nd semester)

Garrison, S. (1995). Handbook of Physical Medicine and Rehabilitation Basics. Lippincott-Raven (from 2nd semester)

Norkin, C. and White, D. (2003). Measurement of Joint Motion. A Guide to Goniometry. (3rd ed.). F.A. Davis Company. (from 2nd semester)

V. EVALUATION PROCESS/GRADING SYSTEM:

1. A combination of tests and assignments will be used to evaluate student achievement of the course objectives. A description of the evaluation methods follows and will be discussed by the teacher within the first two weeks of class.
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.
6. A supplemental exam/assignment may be written by students who meet the following criteria. The student must achieve at least a grade of 45% in the course. The student must have attended at least 80% of the classes. The supplemental exam/assignment will then cover the entire course and will be worth 100% of the student's final mark.

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%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	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.

Note: For such reasons as program certification or program articulation, certain courses require minimums of greater than 50% and/or have mandatory components to achieve a passing grade.

It is also important to note, that the minimum overall GPA required in order to graduate from a Sault College program remains 2.0.

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in the *Student Code of Conduct*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

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

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.