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



COURSE OUTLINE

COURSE TITLE: Physiotherapy I: Therapeutic Skills/Clinical Support

CODE NO.: RSP107 SEMESTER: 2

PROGRAM: OTA/PTA

AUTHOR: Multi-Discipline Team

DATE: Jan/02 **PREVIOUS OUTLINE DATED:** Jan/01

APPROVED:

DEAN DATE

TOTAL CREDITS: 3

PREREQUISITE(S): RSP100, RSP101, RSP102, RSP103, RSP113

CONCURRENT: RSP105

HOURS/WEEK: 3

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For additional information, please contact Judi Maundrell, Dean

School of Health and Human Services

(705) 759-2554, Ext. 689/603

I. COURSE DESCRIPTION:

Students will learn basic skills which are performed by a physiotherapy assistant. The focus will be on the areas of mobility, exercise and ambulation. Lab sessions will provide students with the opportunity to practise handling skills related to bed mobility, more complex transfers, ambulating and an introduction to other modalities. Students will gain an appreciation for the rationale for and use of therapeutic exercise, and learn the necessary skills for providing assistance with this type of treatment. Patient/client and staff safety and hygiene will be stressed at all times.

II. LEARNING OUTCOMES:

Upon successful completion of this course the student will be able to:

- 1. Demonstrate responsibility in maintaining the knowledge, skills and attitudes required from Semester I courses, specifically:
 - maintaining medical asepsis
 - maintaining client rights to be treated with respect and dignity
 - ability to keep all client information confidential
 - maintain safe handling skills with client, self
 - maintains CPR, First Aid and WHMIS
- 2. Demonstrate skill in maintaining and monitoring exercise programmes for individuals and small groups established by the physiotherapist.
- 3. Demonstrate skill in assisting with ambulation safety (including gait aids).
- 4. Identify variances from expected patient performance in exercise completion and ambulation and report these accurately to the supervising physiotherapist.
- 5. Explain and follow therapist direction for client's safe use of various transfer techniques, hydro modalities and care and maintenance of equipment, medicine and aids.
- 6. Demonstrate postural drainage, deep breathing and the sequence of coughing for pulmonary conditions.
- 7. Identify basic indications and contraindications to completion of physiotherapy treatment.

II. LEARNING OUTCOMES (Continued)

- 8. Provide accurate and timely reports of observations, orally and in writing, to the Registered Physiotherapist.
- 9. Participate fully in all practicum settings using sound knowledge base acquired to date, carrying out skills safely and with a positive attitude within the accepted role of Rehabilitation Assistant.

III. TOPICS:

- 1. Review of appropriate/required knowledge/skills and attitudes from Semester I:
 - Confidentiality
 - Body Mechanics
 - Respect and Dignity for Each Client
 - Medical Asepsis
- 2. Range Of Motion and Exercise Programs for Individual Clients and Groups
- 3. Ambulation and Mobility Aids
- 4. Introduction to Therapeutic Modalities:
 - Lifts and Transfers
 - Hydrotherapy
 - Care of Equipment, Mediums, Aids
- 5. Respiratory Skills for Pulmonary Clients
- 6. Communication Skills: Observing and Reporting Skills
 - -Indications/Contraindications for Clients Completing Therapy
- 7. Practicum Experiences

IV. LEARNING ACTIVITIES:

A: Review of Semester 1 Skills

1. Review course material required as prerequisites.

RSP100 RSP101

RSP102 RSP103

RSP113

- 2. Demonstrate responsibility in maintaining the knowledge skills/attitudes required as Rehabilitation Assistant:
 - a) maintains confidentiality
 - b) maintains medical asepsis
 - c) maintains respect and dignity of each client
 - d) demonstrates safe handling skills (Body mechanics, safe transfers, positioning):
 - assist exercise, position in bed or chair, assist gross motor function

B: Maintaining and Monitoring Exercise Programs

- 3. Explain/demonstrate risk management in the work environment (fire, disaster safety, unusual incidents).
- 4. Explain the benefits and purposes of exercise, range of motion and stretching, and the environments where these activities may take place. (i.e. strength, mobility, relaxation)
- 5. Define and demonstrate the types of exercises: active, active assisted and passive; and isometric, isotonic, isokinetic, eccentric and concentric (application of each relevant to all joints). Able to set up, prepare and monitor exercises.
- 6. Recognize progression in exercise routines and explain the risks of over-loading or under-loading the client's exercises. Ex. Cardiac Client Step Down Exercises, Cardiac Stress Testing)
- 7. Identify precautions/contraindications to exercise, range of motion (active and passive), and stretching. Eg. Precautions after surgery, support hose, helmets, clients with seizures)
- 8. Demonstrate functional activities that may be used to increase strength.
- 9. Identify and demonstrate assistive devices and equipment used in exercise programs/ facilitation techniques.
- 10. Describe the principles of work hardening activities. Be able to apply correct body mechanics to ensure increasing strength and endurance.

- 11. Explain the types of tone and the effects of improper handling techniques on their presence.
- 12. Demonstrate skill in maintaining a ROM (Range of Motion) program established by a physiotherapist.
- 13. Demonstrate skill in supervising general strengthening and ROM (Range of Motion) exercise established by a physiotherapist.
- 14. Under the supervision of the physiotherapist, modify appropriately the acquired skills according to the needs of the individual, the group or the setting.
- 15. Demonstrate ability to structure and lead a group exercise class.
- 16. With therapist direction, adapt the activity and the handling for clients with specific conditions, and for elderly and young clients.

C: Ambulation and Mobility

- 17. Explain the benefits and purpose of mobility.
- 18. Demonstrate the normal functional sequences of ambulation and going up and down stairs, and recognize simple, abnormal patterns.
- 19. Identify and demonstrate levels of assistance and safety procedures that may be required for therapeutic activities and forms of mobility (shoes, surfaces, risks of falling, clients with IV's, ostomy bags, urinary drainage bags, etc)
- 20. Demonstrate an understanding of the difference between gait re-education, walking to increase endurance, and walking to maintain functional ability; and identify the items to be observed in each of these instances.
- 21. Demonstrate skill in assisting with ambulation.

- 22. Recognize changes in behaviour patterns. Describe signs of distress and identify the action(s) to be taken. Ex. Changes in colour, breathing patterns, Ex. Incontinence
- 23. Identify basic indications and contraindications to completion of physiotherapy treatment.
- 24. Identify the care/consideration of portering a client safely between departments.
 - a) safe transfers
 - b) taking and giving verbal report
 - c) monitoring client responses
- 25. Identify ambulatory aids, levels of weight bearing, and environmental and architectural risk factors to ambulation. Note modifications for disabling conditions.
 - appropriate aids -selection, fit, adjust, cutting (crutches, canes, walkers, braces, orthotics)
 - preventative foot care and foot exercises,
 - decreased vision, decreased balance, declining memory, etc.)
- 26. Demonstrate how to teach crutch walking non weight bearing and partial weight bearing, including stairs.
- 27. Demonstrate how to reinforce the therapists instructions. (Practice alternate ways of teaching the same exercise)
- 28. Demonstrate basic skills in completion of stump bandaging for above-knee and below-knee amputees -pre-prosthesis, post prosthesis.
- 29. Describe basics of stump care for amputees.
 -gather equipment, check skin condition, application of prosthesis

D: Introduction to Therapeutic Modalities

Transfers

29. Demonstrate basic bed mobility handling skills.

- 30. Complete safe transfers, one person and two person, with patients, adjusting for varying physiotherapist requests appropriately.
- 31. Identify and explain biomechanical techniques for safe transfer of clients:
 - Hover lifts

- Continuous Passive Motion machine
- Traction Apparatus Casting
- Balkan Frames
- Application of tensors
- 32. Demonstrate skill in use of springs/slings/weights.
- 33. Assist therapist/client in selection, instruction, preparation and application of transfer techniques.

Care of Pulmonary Clients:

- 34. Describe the anatomy and function of the lungs as they pertain to pulmonary patients.
- 35. Identify and demonstrate the use of devices that may be used in bronchial hygiene.
- 36. Recognize the changes in sputum production and when to report this to the Physiotherapist.
- 37. Define and demonstrate: postural drainage, deep breathing, and the sequence of coughing/ clapping vibrations, sitting positions, lip pursing...
- 38. Recognize signs of distress that may arise in bronchial hygiene treatments, and when to report these to the Physiotherapist and/or the Registered Nurse.
- 39. Recognize different oxygen delivery systems in different settings, hospital, home....

Care of Equipment, Mediums:

40. Demonstrate competence in the operation, care and maintenance of equipment and mediums such as mobility aids and exercise equipment, testing tools.

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IV. LEARNING ACTIVITIES (Continued)

E: Communication Skills: Observing and Reporting

- 41. Identify variances from expected patient performance in exercise completion and ambulation and report these accurately to the supervising physiotherapist.
 Ex. How to measure Blood Pressure, report changes in BP, Reporting C/O pain Confrontational, abusive talk
- 42. Describe common data measurement methods used in gathering and reporting for O.T./P.T. and demonstrate how to record statistics correctly.

F: Practicum Experience

- 43. Safely and accurately carry out specific tasks related to exercise, ambulation, transfers and hydrotherapy, as specific by the physiotherapist.
- 44. Observe and recognize significant departures from the expected patterns in patient response to exercise and ambulation, and report them accurately to the physiotherapist.
- 45. Demonstrate understanding of the indications, contraindications and benefits of exercises and activities as studied.
- 46. Demonstrate support activities:
 - maintain clean/tidy work environment -set up assessment rooms
 - ordering supplies

-help prepare client for therapy

- taking inventory
- reception/clerical duties
- 47. Demonstrate organizational skills to:
 - manage time
 - reduce stress in the work environment
- 48. Demonstrate basic computer skills in practicum as allowed.

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V. REQUIRED RESOURCES/TEXTS/MATERIALS:

Garrison, S. (1995). *Handbook of physical, medicine and rehabilitation basics*. Lippincott.

Kisner and Colby (1996). *Therapeutic exercises foundations and techniques* (3rd ed.). F.A. Davis

Pierson, F.M. (1999). *Principles and techniques of patient care*. (2nd ed.). W.B. Saunders, Philadelphia. *(from 1st Semester)*

Additional Resource Materials:

Available in the College Library. See teacher resources - booklets in class.

VI. EVALUATION PROCESS/GRADING SYSTEM:

A combination of tests and assignments will be used to evaluate student achievement of the course objectives. A description of the evaluation methods will be provided and discussed by the teacher within the first two weeks of class.

	100%
Final – Lab	20%
Final – Written	30%
Mid Term	30%
4 Quizzes	20%

All tests/exams are the property of Sault College.

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

		Grade Point
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+	90 - 100%	4.00
Α	80 - 89%	3.75
В	70 - 79%	3.00
С	60 - 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been	
	awarded.	

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S	Satisfactory achievement in field placement
	or non-graded subject areas.
U	Unsatisfactory achievement in field
	placement or non-graded subject areas.
X	A temporary grade. This is used in limited
	situations with extenuating circumstances
	giving a student additional time to complete
	the requirements for a course (see Policies &
	Procedures Manual – Deferred Grades and
	Make-up).
NR	Grade not reported to Registrar's office. This
	is used to facilitate transcript preparation
	when, for extenuating circumstances, it has
	not been possible for the faculty member to
	report grades.

VII. 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 E1204 or call Extension 493, 717, or 491 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 *Student Rights and Responsibilities*. 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.

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VIII. 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.

IX. 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.