

Prepared: Joanna MacDougall Approved: Bob Chapman

Course Code: Title	OPA109: PHYSICAL AGENTS
Program Number: Name	3022: OCCUP/PHYSIO/ASSIST
Department:	OTA/PTA ASSISTANT
Semester/Term:	17F
Course Description:	The purpose of this course is to provide the student with the opportunity to develop the ability required to safely and effectively apply therapeutic modalities used in physiotherapy and occupational therapy. The student will be expected to demonstrate competence in the areas of safety, patient and equipment set up and implementation of specific therapeutic modalities, as well as effective instruction, cuing and providing feedback of the client. The student will also be expected to demonstrate knowledge and accuracy regarding surface anatomy as it relates to the application of therapeutic modalities. The student will demonstrate the ability to perform aspects of documentation of the application of therapeutic modalities within the scope of the OTA and/or PTA.
Total Credits:	3
Hours/Week:	3
Total Hours:	45
Prerequisites:	OPA101, OPA103, OPA104, OPA116, OPA117, OPA118
This course is a pre-requisite for:	OPA203, OPA205
Vocational Learning Outcomes (VLO's): Please refer to program web page for a complete listing of program outcomes where applicable.	<ul> <li>#1. 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.</li> <li>#2. Participate in the effective functioning of interprofessional health care teams within the role of the therapist assistant.</li> <li>#3. Establish, develop, maintain, and bring closure to client-centred, therapeutic relationships within the role of the therapist assistant.</li> <li>#4. Ensure personal safety and contribute to the safety of others within the role of the therapist assistant.</li> <li>#5. Practice competently in a legal, ethical, and professional manner within the role of the therapist assistant.</li> </ul>



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<ul> <li>nonjudgmental manner within the role of the therapis</li> <li>#7. Develop and implement strategies to maintain, ir competence within the role of the therapist assistant</li> <li>#8. Perform effectively within the roles and responsil application of relevant knowledge of health sciences conditions.</li> <li>#9. Perform functions common to both physiotherapic contribute to the development, implementation and r under the supervision of and in collaboration with the physiotherapist.</li> <li>#11. Enable the client's optimal physical function by</li> </ul>	st assistant. nprove, and promote bilities of the therapis , psychosociological y and occupational the nodification of interve e occupational therap contributing to the de	e professional et assistant through the sciences, and health nerapy practices that ention/treatment plans, bist and/or evelopment,
<ul> <li>#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</li> <li>#2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.</li> <li>#6. Locate, select, organize, and document information using appropriate technology and information systems.</li> <li>#7. Analyze, evaluate, and apply relevant information from a variety of sources.</li> <li>#10. Manage the use of time and other resources to complete projects.</li> <li>#11. Take responsibility for ones own actions, decisions, and consequences.</li> </ul>		
Passing Grade: 60%, C		
As partial fulfillment of the OTA & PTA diploma, Performance Based Evaluations require a minimum of 60% in each category of performance.		
Evaluation Type	Evaluation Weight	1
Lab Demonstrations – Surface Anatomy	15%	-
Performance Based Evaluations – Physical Agents	30%	-
Quizzes	10%	
Term Project(s)	10%	
Written Tests	35%	
Essentials of Human Anatomy and Physiology by Ma	arieb, Elaine	
	nonjudgmental manner within the role of the therapis #7. Develop and implement strategies to maintain, ir competence within the role of the therapist assistant #8. Perform effectively within the roles and responsil application of relevant knowledge of health sciences conditions. #9. Perform functions common to both physiotherapi contribute to the development, implementation and r under the supervision of and in collaboration with the physiotherapist. #11. Enable the client's optimal physical function by implementation, and modification of intervention/treat in collaboration with the physiotherapist. #1. Communicate clearly, concisely and correctly in fulfills the purpose and meets the needs of the audie #2. Respond to written, spoken, or visual messages communication. #6. Locate, select, organize, and document information function systems. #7. Analyze, evaluate, and apply relevant information #10. Manage the use of time and other resources to #11. Take responsibility for ones own actions, decisi Passing Grade: 60%, C As partial fulfillment of the OTA & PTA diploma, Perf minimum of 60% in each category of performance. <b>Evaluation Type</b> Lab Demonstrations – Surface Anatomy Performance Based Evaluations – Physical Agents Quizzes Term Project(s) Written Tests	#9. Perform functions common to both physiotherapy and occupational the contribute to the development, implementation and modification of intervention of and in collaboration with the occupational therap physiotherapist.         #11. Enable the client's optimal physical function by contributing to the de implementation, and modification of intervention/treatment plans, under the normal physiotherapist.         #1. Communicate clearly, concisely and correctly in the written, spoken, a fulfills the purpose and meets the needs of the audience.         #2. Respond to written, spoken, or visual messages in a manner that ensition of systems.         #7. Analyze, evaluate, and apply relevant information using appropriate information systems.         #10. Manage the use of time and other resources to complete projects.         #11. Take responsibility for ones own actions, decisions, and consequent Passing Grade: 60%, C         As partial fulfillment of the OTA & PTA diploma, Performance Based Evaminimum of 60% in each category of performance.         Image the use of time and other resources to complete projects.         #12. Take responsibility for ones own actions, decisions, and consequent passing Grade: 60%, C         As partial fulfillment of the OTA & PTA diploma, Performance Based Evaminimum of 60% in each category of performance.         Image Performance Based Evaluations – Physical Agents 30%         Quizzes       10%         Term Project(s)       10%



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Course Outcomes and Learning Objectives:

Resources:

# Course Outcome 1.

Demonstrate an understanding and application of cellular biology.

# Learning Objectives 1.

- Identify basic cell structure and function including membrane transport mechanisms,
- electrical properties and cellular metabolism
- Identify the four categories of body tissues
- Identify the events of cellular injury and adaptations
- Identify the common causes of inflammation and factors which influence recovery (physical and psychological)
- List and describe the three phases of healing: inflammatory phase, proliferation phase, maturation phase

# Course Outcome 2.

Demonstrate an understanding of mechanisms and theories of pain.

# Learning Objectives 2.

- Recognize common attributes of acute and chronic pain
- · Recognize the gate control theory of pain versus opiate mediated control of pain

# **Course Outcome 3.**

Demonstrate effective, professional patient preparation for the application of physical agents.

# Learning Objectives 3.

· Identify with accuracy relevant bony and soft tissue landmarks on self and on another



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• Demonstrate appropriate positioning and draping skills while identifying surface anatomy and applying therapeutic agents required to apply therapeutic agents.

• Demonstrate the ability to verbally prepare a patient for a planned intervention that involves physical agents by explaining the purpose of the physical agent and gaining verbal consent

### Course Outcome 4.

Demonstrate an understanding of the roles/responsibilities of the OTA/PTA in the application of physical agents.

# Learning Objectives 4.

Demonstrate professional behaviour expected of an OTA/PTA while carrying out components of a treatment plan that includes the delivery of physical agents

• Perform the roles/responsibilities of the OTA/PTA in the application of physical agents

Observe and recognize significant departures from the expected patterns of patient
response to the physical agents and report immediately to the Registered Physiotherapist

### Course Outcome 5.

Demonstrate knowledge and skills related to body mechanics.

# Learning Objectives 5.

· Perform proper body mechanics during the set up and application of physical agents

### **Course Outcome 6.**

Demonstrate an understanding of the effects, benefits and indications for a variety of physical agents.

# Learning Objectives 6.

· Identify the role of physical agents in the physiotherapy management of motion restrictions



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 Identify the effects, benefits and indications for a variety of physical agents, including but not limited to:Thermal Agents – Ice Packs, Ice Massage, Hot Packs, Paraffin, Whirlpool, Contrast Baths

Ultrasound, Electrical Current – TENS, NMES, Interferential, Traction and Compression Bandaging

### **Course Outcome 7.**

Demonstrate knowledge of and describe the contraindications and precautions of various physical agents.

### Learning Objectives 7.

Identify the contraindications and precautions of a variety of physical agents, including but
not limited to those listed above

• Identify and implement common precautions (positioning, interfaces, monitoring during procedures, aseptic procedures)

· Recognize an adverse reaction and react appropriately

### **Course Outcome 8.**

Demonstrate the skills required to competently apply various physical agents, as required by a supervising Physiotherapist or Occupational Therapist.

## Learning Objectives 8.

• Safely and accurately carry out tasks related to the application of specific physical agents under the supervision of a Registered Physiotherapist or Occupational Therapist

Recognize liability issues and reimbursement issues that may arise with the application of
these modalities

### **Course Outcome 9.**

Demonstrate competence in the setup, care and maintenance of equipment.



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# Learning Objectives 9.

Correctly assemble/set up, prepare equipment, put away and clean for of each physical agent

• Explain and demonstrate an understanding of the care and maintenance of equipment, including physical agents (also include preventative maintenance plan and follow-up)

# **Course Outcome 10.**

Demonstrate documentation skills required of the OTA/PTA related to the application of therapeutic modalities.

# Learning Objectives 10.

• Accurately document the application of all physical agents, making note of any significant departures from the expected patterns of patient response, and any actions taken, and report immediately to the Registered Physiotherapist/Occupational Therapist

### Course Outcome 11.

Demonstrate the ability to communicate to and reassure patients/clients the effects, benefits and indications/contraindications for various physical agents.

# Learning Objectives 11.

information.

	<ul> <li>Describe in lay terms the effects and benefits of the physical agents listed above.</li> <li>List and describe in lay terms the indications of the physical agents listed above</li> <li>Appropriately inquire (in lay terms) regarding contraindications of the physical agents listed above</li> <li>Reassure patients regarding any feelings of anxiety regarding the receipt of the physical agents listed above</li> </ul>
Date:	Wednesday, August 30, 2017
	Please refer to the course outline addendum on the Learning Management System for further



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